





## Article

# Perceived Achievement of Social Entrepreneurship Competency: The Influence of Age, Discipline, and Gender among Women in Higher Education

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**Abstract:** The complexity of today's world demands a shift in education from knowledge acquisition to competency development for students to effectively address profession-related challenges. In particular, there is a need for social entrepreneurs who can act as catalysts for change in complex environments. Understanding the elements that shape students' perception of themselves as social entrepreneurs allows us to grasp their capacity as catalysts for transformative action. The main purpose of this research is to showcase the findings of a diagnostic investigation carried out on a group of Mexican university students, assessing their perceived proficiency in social entrepreneurship and its sub-competencies. The study examined whether age or discipline influenced the perception of entrepreneurship in 328 students. The results revealed that age and study discipline played a crucial role in shaping students' perception of their competency achievement. Younger students tended to perceive their abilities better, while advanced semester students were more cautious in assessing their entrepreneurial competencies. The trend also extended to sub-competencies, with younger students tending to perceive their social skills positively, while older students focused more on practical knowledge such as the economic and administrative aspects of entrepreneurship. Students in business also tended to view their skills more positively compared to students in other disciplines. The findings highlight the need to promote women's social entrepreneurship and emphasize the importance of considering these relevant elements that are crucial to the concrete reality of potential female entrepreneurs. The study has significant implications for policymakers, educators, and researchers interested in promoting social entrepreneurship among women, particularly in the Latin American context.

**Keywords:** professional education; educational innovation; future of education; social entrepreneurship; quality education; higher education; complex environments



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## 1. Introduction

In today's complex world, educating future professionals can no longer be based exclusively on acquiring knowledge but also on the skills students must develop to face specific problems in their profession and daily lives. Therefore, universities have increasingly been paying more attention to competency-based education, considering that providing skills implies a higher level of cognitive development than just acquiring knowledge [1]. On the other hand, contemporary educational institutions have adopted a dual profile of social responsibility, ensuring their work as trainers of professionals and as social agents that contribute to resolving current and future challenges and problems [2]. Thus, students develop competencies and skills that allow them to achieve professional excellence and make them responsible citizens of the world who are aware of the needs of their environment [3].

In this sense, the international organization Ashoka, with its university program Ashoka U, has emphasized the relevance of leveraging students' skills and competencies to address local problems by generating social entrepreneurship, which allows them to have a vision for the community [4]. Therefore, training in social entrepreneurship has become strategic for competencies and skills linked to commitment, change, and social responsibility [5]. However, for an optimal level of development of the social entrepreneurship competency and its sub-competencies, it is necessary to sow in students a positive perception of their skills, i.e., an entrepreneurial spirit [6].

In this sense, it is important to consider how the characteristics of each student can influence their formative processes, which are then also transferred to the acquiring and developing of valuable competencies or skills throughout their lives. Thus, aspects such as the discipline being studied, age, or gender, can be relevant elements to be able to propose a truly full formative reality according to the students. Hence, the main purpose of this research is to showcase the findings of a diagnostic investigation carried out on a group of Mexican university students, assessing their perceived proficiency in social entrepreneurship and its sub-competencies.

This study pays special attention to the female participants, in particular, examining the variables of age and disciplinary study, considering that these elements can influence the perception of university entrepreneurship in a region such as Latin America. Based on a multivariate descriptive statistical analysis (boxplot, principal component analysis, and cluster analysis), this work measured the perception of 328 students on their level of mastering social entrepreneurship competency and those skills valued as relevant from a gender and age profile. This article contributes to the previous knowledge on competency measurement as well as examines the impact of students' gender on their educational processes. The original contribution of this study lies in the scarcity of information available on both dimensions in the Latin American region.

### *1.1. Social Entrepreneurship in Mexico*

When talking about entrepreneurship, it is usually regarded as the attitude that people have to plan, organize, and propose new projects while seeking to establish a structured process that allows them to achieve their goals [7]. Entrepreneurship has a clear relationship with innovation, since, in both cases, the aim is to develop ideas that fulfill a purpose, which may be social, economic, or political, among others. Currently, entrepreneurship has become a prominent topic in educational and university settings, driven by the recognition that professional training and the cultivation of leadership skills remain incomplete without the ability to transform ideas into tangible projects [8].

However, it is not possible to believe that entrepreneurship is only motivated by economic purposes since in the last decade it has become increasingly common to find innovative and entrepreneurial projects that aim to contribute to solving a social or human problem [9]. Social entrepreneurship is a business approach that focuses on addressing social and environmental problems through innovative and sustainable solutions. Unlike traditional businesses, which primarily seek to generate profits for their owners, social entrepreneurship aims to create a positive impact on society and the planet.

Social entrepreneurs work in areas such as education, health, poverty, social justice, and the environment, including many other important issues. They seek to identify social and environmental problems and develop innovative and sustainable solutions to address them. Often, social entrepreneurs work in collaboration with non-profit organizations, governments, and businesses to maximize their impact [10].

Entrepreneurship in Mexico has been characterized by growth over the past five years. The Global Entrepreneurship Monitor [11] indicates that Mexico is characterized by the fact that its economy is based on manufacturing, like several other Latin American countries, which means that, unlike other countries, it is based on efficiency. This means that most entrepreneurs are driven by the opportunities they see in context rather than by necessity and, consequently, the opportunity to innovate is left behind [12].

However, from 2015 to 2020, the Global Entrepreneurship Monitor (GEM) reported a significant 11.4% rise in early entrepreneurial activity, indicating an increase in the number of individuals embarking on business ventures. Despite 45% of the adult population recognizing favorable business prospects, the prevailing uncertain and unstable global and national conditions led to a decline in the percentage of people who felt confident in seizing these opportunities. In this same sense, the outlook was considered favorable for the development of social enterprises. According to the GEM data, international organizations such as Ashoka Mexico or Promotora Social, as well as some universities, paid more attention to the promotion of social entrepreneurship among their students, which triggered strong ecosystems for the development of social innovation [13].

Thus, from 2015 to 2020, there was an 18% growth in the number of social enterprises, with the key objective of addressing social and environmental problems in the region, legally incorporated in the country. However, despite these numbers, social entrepreneurship is still underrepresented in the country's economy since, according to data from the Mexican Institute of Finance Executives (IMEF), by 2020 there was a record of only 305 social enterprises which generated no more than 10 million pesos per year [14]. This shows the clear need to promote this type of entrepreneurship in Mexico and the Latin American region, especially because of the clear opportunities for development that can occur in a region experiencing an increase in innovation projects focused on addressing local problems.

### *1.2. About Social Entrepreneurship Training*

Talking about social entrepreneurship is not new, as several academic studies have been conducted since the 1980s [15,16]. What is innovative, however, is the attention paid in the last decade to research focused on social entrepreneurship training in consideration of the decisive role that educational institutions have in developing entrepreneurial spirit and providing future entrepreneurs with the skills and tools necessary to materialize their social projects [17].

As previously mentioned, the international organization Ashoka specializes in the work performed by universities and educational institutions in social entrepreneurship training, paying particular attention to entrepreneurial development with the perspective that all people, with the proper support, can become agents of change [4]. Its university program, AshokaU, seeks to promote social entrepreneurship through the development of competencies, skills, and training tools by considering that an agent of change, regardless of their previous experience, sex, gender, age, and economic, social, or geographical reality, can revolutionize their environment when they exercise their skills and capacity for action to solve social problems [12].

In this sense, studies such as those by Light [18] or Lackéus [19] pointed out that the profile of social entrepreneurs, although similar to traditional entrepreneurs, includes personal and cognitive values and preferences beyond professional skills. To Saenz and Lopez [20], social entrepreneurs tend to have more in-depth personal and social bonding skills than commercial entrepreneurs, which also aligns with Velasco-Martínez et al. [21] who proposed that social entrepreneurship competency responds to instrumental, systematic, and interpersonal aspects.

Complementing the above, Shapovalov et al. [22] indicated that social entrepreneurs must have a vision that includes the environment and all those who are a part of the system surrounding the problem or challenge to be addressed. Thus, the entrepreneur must identify, create, and develop opportunities without losing sight of people. García-González et al. [23] proposed that social entrepreneurship competency includes five sub-competencies with 22 indicators which consider personal, leadership, social innovation, social value, and entrepreneurial management elements. This proposal suggests that, beyond focusing on developing social entrepreneurship competency, one should measure the participants' level of perception of their achievement, which aligns with Ashoka's vision [4] of developing entrepreneurship beyond social entrepreneurial projects.

From this perspective, this paper shines the light on people and not so much on ventures, seeking to identify whether individual characteristics such as gender, age, and disciplinary area of study can influence the institutional objectives for a satisfactory level of students' perceived social entrepreneurial competency. In addition, it is noteworthy that this paper considers gender and not the sex of the participants because assessing perception requires focusing on the students' emotions and sensitivities and not so much on their corporeality.

### *1.3. Gender and Its Influence on Social Entrepreneurship*

Based on studies conducted in the United Kingdom by Levie and Hart [24], the gender of entrepreneurs is relevant when deciding the objective of entrepreneurial projects. This was corroborated by Lerner and Schwartz [25] who found a tendency on the part of women to carry out social and environmental ventures above traditional projects. Likewise, Anggahegari et al. [26] indicated that female entrepreneurship tends to go beyond generating economic value and considers aspects of sustainability and social benefits to the community.

According to Gupta and colleagues [27], traditional entrepreneurship exhibits a significant gender disparity, with a higher proportion of men than women. However, this gap is not as apparent in social entrepreneurship as female entrepreneurs participate equally with their male counterparts. According to Dickel and Eckardt's [28] study of 600 students, women tend to desire social entrepreneurship more, corresponding to competencies traditionally linked to their gender.

However, somewhat arguably, a dangerous relativism in the studies on the tendencies or perceptions of women at the time of entrepreneurship may exist. If, as pointed out by Dickel and Eckardt [28] and Chell et al. [29], the values attributed to gender influence the perception and decisions concerning entrepreneurship, it opens the possibility that there is also an influence of morality and regional imaginary or in the opportunities in the environment to accept and invest in ventures led by women.

Gilmartin et al. [30] analyzed the entrepreneurial intention of a group of university men and women, discovering that the personal sphere becomes a determining influence when proposing a business idea or organization. This had already been pointed out by Arredondo et al. [31] when they recognized that the low participation of women in technological entrepreneurship did not respond to the capacity of women entrepreneurs but to the low participation they had in STEM areas (science, technology, engineering, and mathematics) and the regional situations that influenced their perception; their choice becomes more a response to their environment's reality than an argued personal interest.

Mensiez and Tatoff [32] and Peterson and Limbu [33] pointed out that women tend to be underrepresented as participants and collaborators in many entrepreneurial training programs, which is reflected in the absence of gender-focused metrics, the majority of male content, the use of entrepreneurial language and images that exclude women, and program administrators' limited knowledge about equity, diversity, and inclusion. This helps to construct the invisible barriers limiting young female students' training [34].

Beyond the university environment, according to a study conducted by the Escuela Superior de Administración y Dirección de Empresas [35], entrepreneurial intention in economic and technological areas already shows a clear gap between men and women in universities and it potentially widens when attempting to materialize the venture, i.e., while 46% of the ventures led by men received the economic support they needed, only 26% of female entrepreneurs had the same luck.

For all the above reasons, studies should emphasize the perception of female students, beginning with their first desire to become entrepreneurs, and pay particular attention not only to the gap between them and their male peers but also to the strengths and opportunities they perceive in their sub-competencies, indicators, and skills necessary at the time of materializing a social venture. Thus, it would be possible to identify whether, beyond a

desire or tendency for social entrepreneurship, women may be adapting their projects to areas in which they are believed to be more apt due to stereotypes or social imaginary.

## 2. Materials and Methods

The researchers selected a convenience sample of 328 students from a private university in Mexico, composed of 165 men and 163 women, from six disciplines: social science, humanities, health science, engineering, art and design, and business. A random sample was taken from different semesters. The response rate of the sample was 100% since we had the support of facilitators for the implementation process. The sampling technique used was by convenience, since, according to the guidelines of the ethics committee, the intervention was authorized only for specific groups. The selection of these groups was based on choosing a sample that was proportional to the number of students in each discipline since representing all disciplines with the same number of students was not representative of the reality of the educational institution. It was very relevant for this study to have representation from all the disciplines offered by the institution in order to have a complete picture of how the disciplinary area of study could influence the perceived achievement of social entrepreneurship competency (See Table 1).

**Table 1.** Data on the participants.

	Men		Women		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Age						
18–20	65	47	74	53	139	42
21–22	82	53	72	47	154	47
23–24	18	51	17	49	35	11
Discipline	Men		Women		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Humanities	6	34	12	66	18	6
Social science	3	27	8	73	11	3
Business	39	49	41	51	80	24
Engineering	99	68	47	32	146	45
Art and design	15	25	44	75	59	18
Health science	3	21	11	79	14	4

Source: Own creation.

The investigation was carried out between October and November 2021 at a private technological university, and the participants were recruited from courses unrelated to entrepreneurship or social entrepreneurship. The data collection method involved the use of a self-administered questionnaire via Google Forms, which was completed voluntarily by the students.

It is recognized that there is a difference between each discipline, however, this is proportional to the number of students per area of study. Since it is a technological university, the predominant area is related to engineering. This research was regulated by an institutional ethics committee, which, being an exploratory study, limited the number of participants as well as the information that was requested from them. It was considered that if the study yielded valuable data, it would justify further implementation.

The study used an instrument called the “Profile of the Social Entrepreneur” [23] to measure the perception of the mastery of social entrepreneurship competency and its associated indicators. The instrument comprised 28 items or questions that were evaluated using a Likert scale ranging from “Strongly disagree” to “Strongly agree”. The instrument measured five sub-competencies: personal, leadership, social innovation, social value, and entrepreneurial management. The personal sub-competency included six items, while the leadership, social innovation, and social value sub-competencies each had between four and eight items. Finally, the entrepreneurial management sub-competency had five items.



Overall, the instrument provided a comprehensive measure of social entrepreneurship competency and its sub-competencies. Each sub-competency and its items had the same value on the scale. The value of each sub-competency was determined by taking the average of the sum of the items that comprise it. For validation, the authors calculated Cronbach's alpha, which yielded the overall reliability of the instrument to be 0.86. The values for each dimension were: leadership for change, 0.76; social innovation, 0.60; social value, 0.72; and management for change, 0.77.

The study's data was analyzed using the computational software R [36] and Rstudio [37]. The analysis included various statistical techniques, including means and standard deviations by gender, a boxplot analysis, and a principal component analysis (PCA). The boxplot analysis identified the dispersion and symmetry of the students' distribution by gender and sub-competencies, as well as outliers and perception behavior by quartiles [38,39]. The PCA helped avoid collinearity problems by observing the behavior of the sample in terms of new uncorrelated independent variables called principal components, which were described and ordered according to the amount of variance [15,40]. The researchers used biplots to analyze the behavior of the students' sub-competencies by gender and age range [41]. The biplot graph allowed them to visualize the behavior of the observations as per the principal components and the existing correlation of the variables. The analysis presented a biplot (of shape  $\alpha = 1$ ), which enabled the researchers to observe the students' behavior by age range in the different sub-competencies. Overall, the statistical techniques employed in the analysis allowed for a comprehensive understanding of the data and insights into the behavior of the students' perceived competency development.

Finally, a cluster analysis was performed to identify and characterize the behavior of the female students by group. This analysis made it possible to group similar observations according to certain criteria. In this sense, the observations classified in a cluster would be very similar and differentiated from those in other clusters [15,42]. For the analysis, a hierarchical analysis (bottom-up agglomerative clustering) was performed using Ward's method, which uses the minimum-variance least-squares sum criterion [43]. This analysis allowed for identifying patterns in the groups of female students (student profile) per sub-competency developed.

### 3. Results

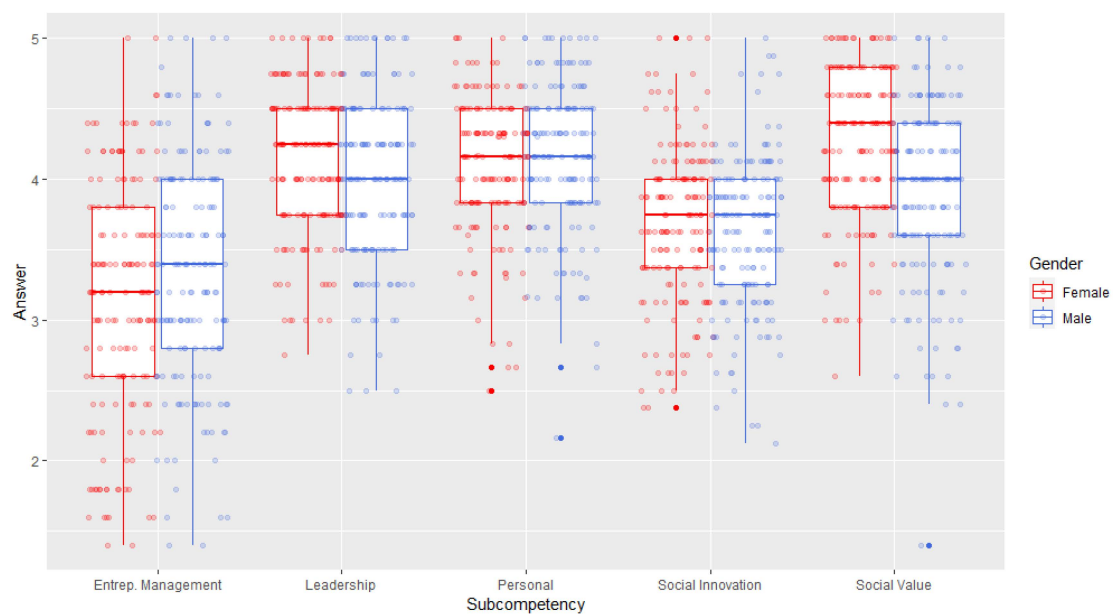
The overall arithmetic means for each item that assessed the total social entrepreneurship competency by gender was calculated. Regarding the complete analysis, the mean obtained in response to the perception of entrepreneurship competency was 3.81, with a deviation (s) of 0.51. Regarding the analysis by gender, the mean male perception of social entrepreneurial competency was 3.78, with a deviation of 1.03, and among women, 3.84, with a deviation (s) of 1.04. Table 2 shows the means and standard deviations for each social entrepreneurial sub-competency by gender.

Figure 1 illustrates the Boxplot analysis of students' perception of the social entrepreneurship competency for each sub-competency by gender. The results show that the perception of female students is higher than male students in the leadership, personal, and social value sub-competencies. On the other hand, the perception of male students is higher in the entrepreneurial management sub-competency. It should be noted that most of the low outliers in the different sub-competencies corresponded to male students.

**Table 2.** The mean values of indicators by sub-competencies for males and females.

Sub-Competency	Indicator	Item	Men		Women	
			M	Sd	M	Sd
Personal	Communication	4, 5	3.9	0.9	3.8	0.8
Personal	Knowledge of the other	2	4.1	0.7	4.1	0.6
Personal	Motivation	1	4.6	0.4	4.6	0.5
Personal	Perseverance	3	4.3	0.7	4.3	0.7
Personal	Persuasion	6	3.9	0.7	3.7	0.7
Leadership	People management	7	3.8	0.9	3.8	0.9
Leadership	Time management	8	3.5	0.9	3.8	0.9
Leadership	Collaborative work	9, 10	4.3	0.7	4.4	0.7
Social Innov.	Learning and adaptability	12, 13	4.3	0.8	4.3	0.7
Social Innov.	Generation of creative ideas	14	3.4	0.9	3.4	0.9
Social Innov.	Limited resource management and risk models	18	3.1	1.0	3.1	1.0
Social Innov.	Identify new opportunities in the face of problems	11	3.5	0.9	3.6	0.8
Social Innov.	Social involvement	16	3.4	0.9	3.9	0.9
Social Innov.	Tolerance, uncertainty, and ambiguity	15	3.6	0.8	3.4	1.0
Social Innov.	Assessment of ideas, results, and impacts	17	3.1	1.0	3.0	0.9
Social Value	Code and ethical sense	20, 21	4.2	0.7	4.5	0.6
Social Value	Empathy with the unmet needs of others	19	3.9	0.9	4.2	0.8
Social Value	Sustainability-oriented and ecological comp.	22	3.6	0.8	3.8	0.8
Social Value	Passion and entrepreneurial identity	23	3.4	1.0	4.0	0.8
Entrepreneurial Management	Basis for the generation of value in social organizations	24, 25, 26	3.1	1.1	2.9	1.1
Entrepreneurial Management	Strategic development	28	4.0	0.8	3.9	0.8
Entrepreneurial Management	Financing and administration	27	3.1	1.0	2.9	1.1

Source: Own creation.

**Figure 1.** Boxplot analysis of the distribution of the mean values of students by the type of sub-competency and gender. Source: Own creation.

From the principal component analysis performed on the perception of social entrepreneurship competency in male students, we observed that PC1 and PC2 explain 53% and 15%, respectively, of the variability in our data, thus 68% of the total variability (Table 3). Likewise, PC1 and PC2 show a correlation with the original variables. Table 3 shows that PC1 had a high positive correlation with the social innovation sub-competency, so this component explains the aspects related to the student's ability to identify new opportunities in the face of problems, generate creative ideas, and manage resources, and their social involvement, tolerance of uncertainty, and valuation of ideas. On the other hand, PC2 mainly correlated with the social value sub-competency, so this component explains the perception of male students in aspects of their entrepreneurial passion and identity, code and ethical sense, empathy for others' unmet needs, and orientation toward sustainability.

**Table 3.** Principal component (PC) matrix: social entrepreneurship competency—male students.

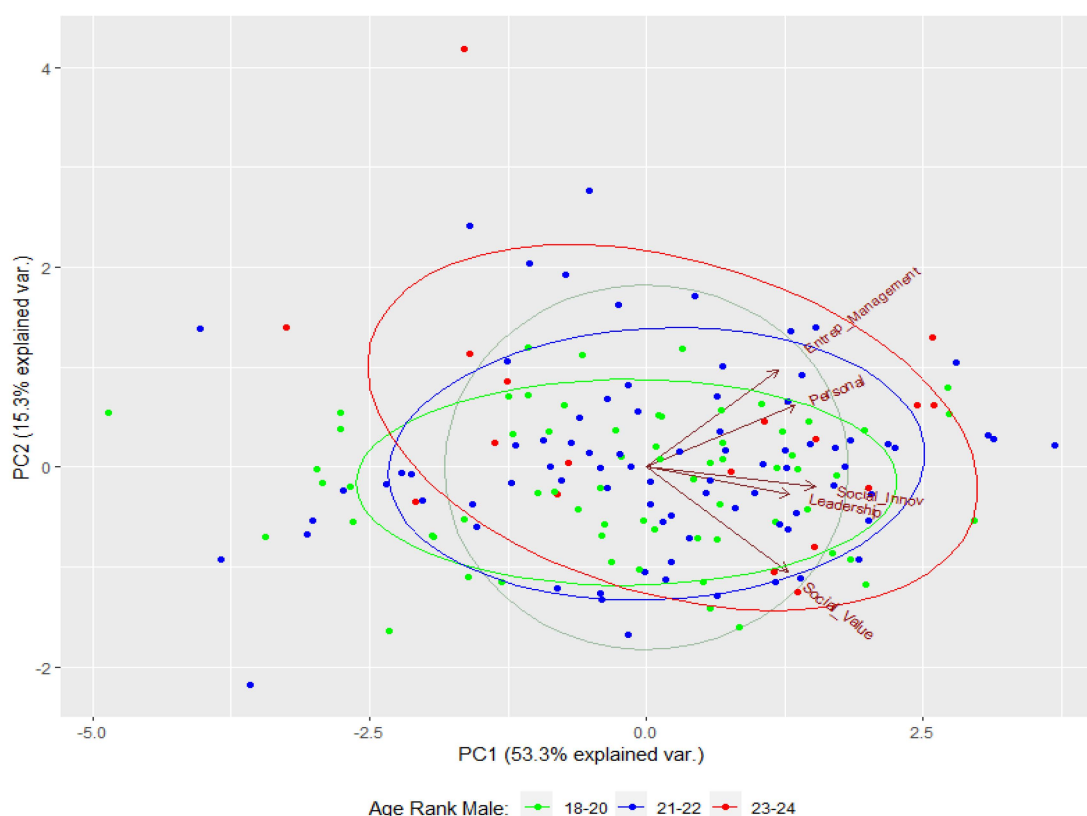
	PC1	PC 2	PC 3	PC 4	PC 5
Entrepreneurial management	0.40	0.61	0.51	−0.43	0.10
Social innov.	0.51	−0.12	0.20	0.35	−0.74
Leadership	0.43	−0.17	−0.62	−0.60	−0.13
Personal	0.45	0.38	−0.42	0.55	0.39
Social value	0.42	−0.65	0.35	0.013	0.50
Standard deviation	1.63	0.87	0.83	0.71	0.59
Variance ratio	0.53	0.15	0.14	0.10	0.07
Cumulative ratio	0.53	0.68	0.82	0.92	1.00

Source: Own creation.

Figure 2 shows the biplot graph corresponding to the principal component analysis performed on male students by age range. The biplot was made with  $\alpha = 1$  to facilitate visualizing the observations (students). The biplot analysis showed that males of different ages generally exhibited dispersed behavior around the mean values. The high perception of some students aged 18–22 in the personal and social innovation sub-competencies stands out. On the other hand, students 23–24 years of age stand out negatively, perceiving themselves with low development in the personal, social value, social innovation, leadership, and entrepreneurial management sub-competencies. Likewise, the biplot showed a correlation between the social innovation and leadership sub-competencies, as there was a reduced angle between them. On the contrary, there was no correlation between the sub-competencies of entrepreneurial management and social value, as there was a greater angle between them and their vertex.

On the other hand, Table 4 shows the principal component analysis of the women by age range. The analysis showed that PC1 and PC2 explain 52% and 15%, respectively, of the variability in our data. Together, PC1 and PC2 explained 68% of the variability. It was also observed that PC1 had a high correlation with the social innovation sub-competency, so it explains the female students' perception of their learning and adaptability, generation of creative ideas, management of limited resources, social involvement, identification of new opportunities in the face of social problems, tolerance to uncertainty and ambiguity, and valuation of ideas. On the other hand, PC2 correlated to the sub-competency of social value. Thus, PC2 explains the women's perception regarding aspects related to their entrepreneurial passion and identity, their ethical code and sense of ethics, empathy with the unmet needs of others, and orientation towards sustainability.





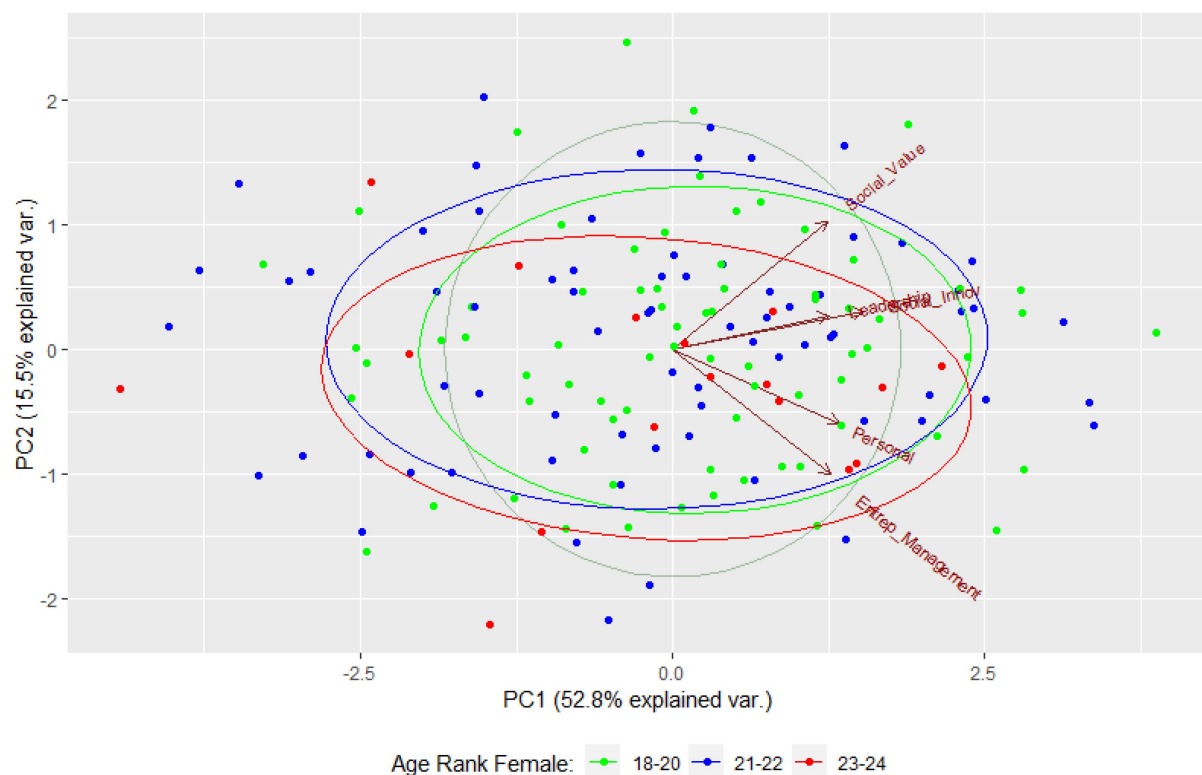
**Figure 2.** Principal component (PC) biplot explaining 68% of the data variability. Biplot of shape  $\alpha = 1$ —male students. Source: Own creation.

**Table 4.** Principal component (PC) matrix: social entrepreneurship competency—female students.

	PC1	PC 2	PC 3	PC 4	PC 5
Entrepreneurial Management	0.42	−0.62	0.36	0.35	0.40
Social Innov.	0.51	0.18	0.12	0.40	−0.72
Leadership	0.42	0.16	−0.79	0.22	0.33
Personal	0.45	−0.36	−0.15	−0.76	−0.23
Social Value	0.41	0.63	0.44	−0.26	0.39
Standard Deviation	1.62	0.88	0.83	0.74	0.57
Variance Ratio	0.52	0.15	0.14	0.11	0.06
Cumulative Ratio	0.52	0.68	0.82	0.93	1.00

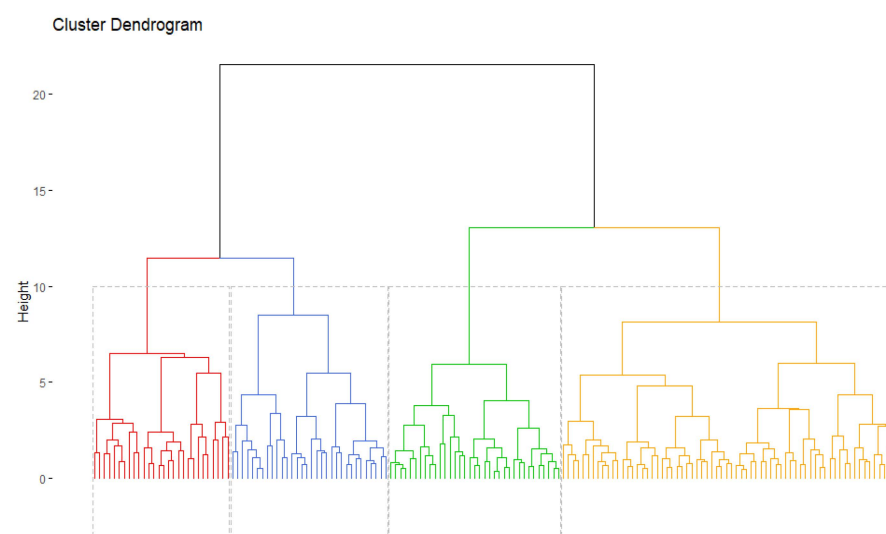
Source: Own creation.

Figure 3 shows the biplot performed of the principal component analysis of the perception of social entrepreneurship competency by age ranges in female students. In it, women's behavior is much more dispersed and mainly in the opposite direction to the direction of the sub-competencies. This means that their perception of competency is not good. It stands out that some students aged 18–22 years perceived themselves with high leadership, social inclusion, and personal sub-competencies.



**Figure 3.** Principal component (PC) biplot explaining 68% of the variability in our data. Biplot of shape  $\alpha = 1$ —female students. Source: Own creation.

Concerning the cluster analysis, the women were characterized into four groups according to the hierarchical ascending cluster analysis performed using Ward's method (sum of least squares). Figure 4 illustrates the groups formed and their similarity level based on a dendrogram. Table 5 shows the percentage of undergraduate female students in the clusters in which they were categorized.



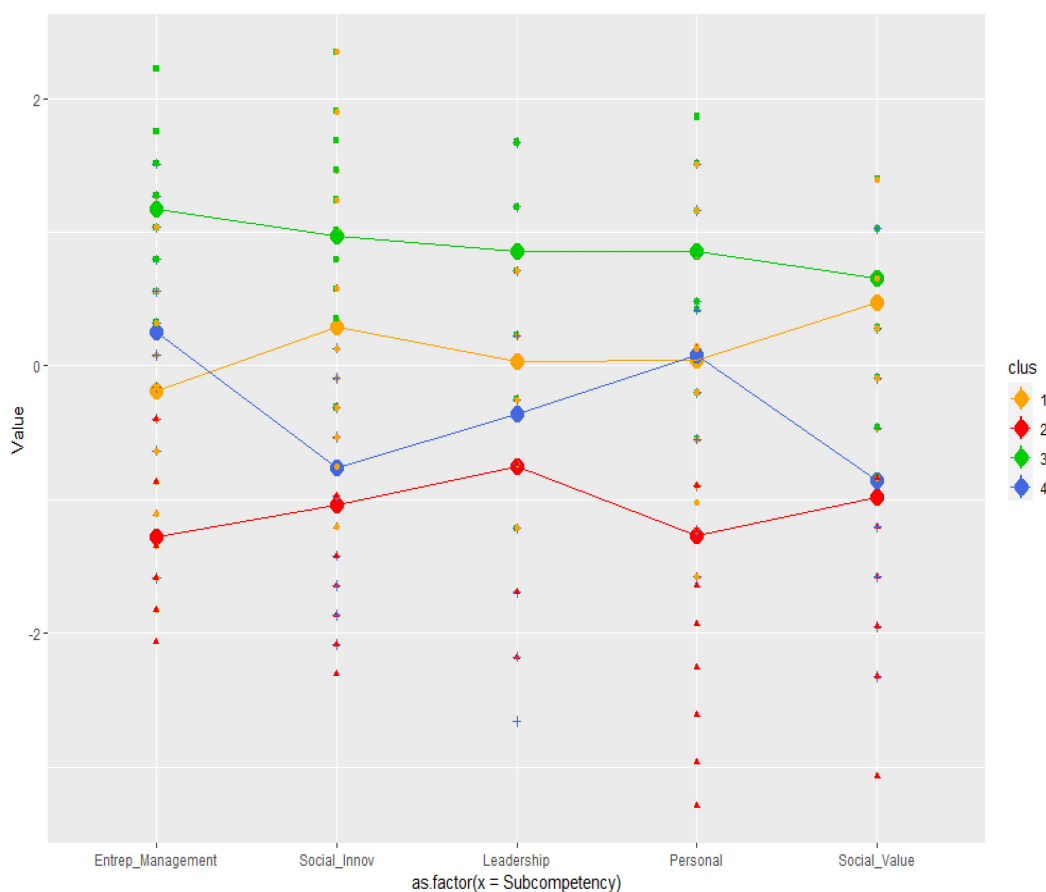
**Figure 4.** Hierarchical clustering dendrogram. Observations are color-coded to represent their respective clusters: orange (Cluster 1), red (Cluster 2), green (Cluster 3), and blue (Cluster 4). Source: Own creation.

**Table 5.** Percentage of female students by cluster and discipline area.

Discipline Area	Cluster 1 (%)	Cluster 2 (%)	Cluster 3 (%)	Cluster 4 (%)
Architecture and design	27.94	39.29	28.57	12.50
Health science	5.88	7.14	8.57	6.25
Social science and government	4.41	3.57	5.71	6.25
Humanities and education	7.35	10.71	2.86	9.38
Engineering and science	41.18	32.14	14.29	15.63
Business	13.24	7.14	40.00	50.00
Total	100	100	100	100

Source: Own creation.

Finally, Figure 5 shows the characterization of each of the four color-coded clusters. The analysis shows that Cluster 3 had higher mean values than the other clusters, indicating that female students in Cluster 3 perceived themselves with high social entrepreneurship competency. Cluster 2, on the other hand, shows negative behavior in all sub-competencies. This indicates that the students in this cluster had a low perception of their social entrepreneurship competency.

**Figure 5.** Characterization of clusters: four groups—female students. Source: Own creation.

#### 4. Discussion

Figure 1 allows us to appreciate how a population of men and women perceive their sub-competencies. The sub-competency with the best average for men was related to personal aspects, while the best evaluated for women was related to social value. It should be noted that the results in the sub-competency of personal values showed a balance

between both genders, so it can be concluded that the population generally perceived itself with a good level of achievement in these indicators.

However, the behavior of the data in the other four aspects showed two interesting trends. On the one hand, the sub-competencies of social innovation and leadership, which seem to show a similar trend between men and women, could be falsely visualized because the dispersion from the mean shows a more significant negative trend among women. Although it might seem that women have more development, the difference was not statistically significant because men tended to have low means; those with a high perception managed to compensate for the sample average.

On the other hand, two sub-competencies did show statistically significant differences. Women perceived their skills in entrepreneurial management as the lowest, which shows a significantly lower difference than the group of men. This can be seen not only in the means of the two groups but also in the dispersion in general: women had a greater tendency toward low scores.

In contrast, the social value sub-competency showed a greater tendency in the group of women, being the sub-competency with their best results. In this case, there was a statistically clear trend in which the average of the women's group achieved scores similar to the higher average of the men, making clear the positive perception of women in this aspect and its indicators.

These first results shed light on the fact that, although there is no statistically significant difference in the perception of the overall achievement of social entrepreneurship competency, it is possible to appreciate the differences in performance between the male and female populations. The results showed that, although women performed better in most of the indicators, their negative data were significantly lower than men's, causing the mean to drop and the results to balance. On the other hand, the men's group means were more compact than the women's, who demonstrated a greater dispersion in both positive and negative averages, as seen in Figures 2 and 3.

Table 2 shows that although women perceive themselves with clear strengths in indicators such as empathy (4.2), orientation to sustainability and ecological behavior (3.8), adoption of codes and ethical sense (4.5), and entrepreneurial passion and identity (4.0), they strongly question their level of mastery in skills such as strategic development (3.9), financial and administrative knowledge (2.9) and having the necessary foundations for the generation of organizational value (2.9). Figure 2 shows that social value and entrepreneurial management are the sub-competencies with the largest differences in this group—their data were opposite to the sample of men.

Figure 3 allows us to examine the participant age data to understand the trend of women's perceptions better. As can be seen, there was a clear tendency on the part of the 18–20-year-old segment to have a better perception of competency in general, achieving the highest results on the scale. In contrast, the 23–24-year-olds ended up with the lowest results. Two possible situations influenced this trend. First, the institution where the survey was conducted implemented a competency-based educational model for a couple of years. It was adopted during the more recent semesters and had little impact on students in the advanced semesters. This may have led the young women to be more sensitive to the development of their competencies and sub-competencies, in contrast to the 23–24-year-old women who were trained with more focus on acquiring knowledge. A second factor that could have influenced these tendencies is that evaluating perception may vary according to the stage of the training process, i.e., a positive and hopeful perception in the first third of the course, a perception of focus in the second third, and a perception of the need to achieve in the final third. Students close to graduation may be aware of the need to feel that they have sufficient tools to meet the demands of their profession very soon, which may make them more critical of what they perceive they know how to do and what they do not know how to do.

In addition, Figure 3 shows the trends by age in terms of the perception of each sub-competency, showing a balanced trend between the 18–20 and 21–22 age groups in

social value, leadership, social innovation, and personal. Notably, the entrepreneurial management sub-competency has a positive trend in the 23–24 age group who have a more significant presence at the bottom of the graph. This tendency could be because the training in these subjects occurs in the last semesters of their university careers. The difference in the number of 23–24-year-old participants compared to the other groups was large, so this conclusion could not be considered significant. This limitation could be remedied in future research which would allow us to appreciate how the sub-competencies are evolving and allow program designs that genuinely impact the sub-competencies in a balanced manner throughout the training process.

To develop an in-depth analysis, we created clusters of participants who showed similar characteristics or results (Figure 4). Thus, four clusters were identified in the women with a similar trend in their results (Figure 5). The first followed the trend of the averages per sub-competency, the second group had low means in all sub-competencies, the third showed high results in all sub-competencies, and the fourth had results opposite to the general mean per sub-competency. The value of these results is that it was possible to identify the disciplinary areas in which the participants in each group studied (Table 5).

Notably, the groups reflected high and low values corresponding to the disciplinary areas of their members. Group 1 showed the highest results for architecture and design and engineering and science students, while Group 2 had the lowest results in these same populations. Similarly, Groups 3 and 4 had the highest and lowest means in populations predominantly studying business. As for the health sciences, social sciences and government, and humanities and education participants, their representation in the sample was low, so the results were statistically insignificant.

Interestingly, this analysis identified a negative trend among Groups 1 and 2 of architecture and design and engineering and science students, in contrast to Groups 3 and 4 in the business area. While the best-evaluated group (Group 1) of architecture and design and engineering and science students narrowly exceeded the overall sample average, the best-evaluated group (3) of business attained the highest values in the survey. The same was true for low scores: the worst-evaluated group (4) of business students was very close to the overall average and the worst-evaluated group (2) of architecture and design and engineering and science students included the lowest values of the entire population.

Thus, the groups predominantly comprised of business students (3 and 4) provided the highest averages in the sample, while the architecture and design and engineering and science groups (1 and 2) produced the lowest averages. Although not all the students in the business area presented outstanding values, as a group, their results showed behavior closer to the average and, thus, they can be considered the sample population with the best results. However, when selecting the sample, we sought a population that would not have direct experience in entrepreneurship, so the results allow us to appreciate that when students feel knowledgeable in certain related areas, it influences their perception, i.e., they then feel capable and have better entrepreneurial tools.

The present study gave us a complete view of how the perception of achievement and development of social entrepreneurship competency developed in the sample group of women, not only compared with their male peers but also their differences as women of different ages and disciplinary experiences. In this sense, it can be understood how age or a discipline of study impact the perception of achievement in female students by providing different life experiences which boost confidence or uncertainty at the time of entrepreneurship.

At a theoretical level, these results support several studies [14,15,44–46] which had previously investigated how discipline or other personal factors can influence the process of competence formation and, specifically, the formation of social entrepreneurs. This has also been assessed by research with a gender perspective such as that by Teasdale et al. [47], Le Loarne, Maalaoui, and Dana [48], and Bernardino, Santos, and Ribeiro [49] who studied the significant differences that exist between men and women in the formative processes, ideation, and development of social entrepreneurship projects. Thus, this article joins this

relevant academic discussion, providing findings that support these previous studies but with a gender perspective.

## 5. Conclusions

This paper aimed to showcase the findings of a diagnostic analysis conducted on a cohort of Mexican tertiary-level students who were surveyed regarding their perceived level of attainment of social entrepreneurship competency and its subsidiary competencies. Specifically, this study focused on female students and considered how variables such as age or disciplinary area could influence their perception when beginning entrepreneurship in Mexico. The sample results confirmed our hypothesis that age and the discipline of study influence the perception of achievement.

Based on the results, it can be noted that while younger female students tended to perceive their capabilities better, students more advanced in their studies were more cautious when assessing their entrepreneurial competencies. The same occurred with the sub-competencies because, while the younger group of women had a greater tendency toward a positive perception of their social value skills, the older students focused on more practical knowledge, which highlights the economic and administrative aspects necessary for the ideation and development of an entrepreneurial venture. Furthermore, this work confirmed that the area of study (discipline) influenced the perception of the female students because, although we ensured that none of the participants had direct experience in social entrepreneurship, there was a more positive tendency of the students in the business career compared to their peers in other disciplinary areas.

These results allow us to reach some conclusions. First, they shed light on the relevance of age in terms of the perception of one's own capabilities. Considering that this article is based on a measurement of self-perception, its results are valuable when considering other research using similar instruments. In this sense, and as a second lesson learned, we find the relevance of self-perception on people's objective capacity, since a young woman may be less competent than an older woman, but her self-confidence may lead her to seek work or entrepreneurial opportunities that the other woman would be cautious about pursuing. Finally, considering the existing relationship between indicators, sub-competencies, and population differences, the relevance of intersectionality in this type of perception study should be considered since, as it is so subjective, there are personal characteristics that can strongly influence the notion of capacity and the perception of one's own abilities.

However, this study had some limitations. The first limitation is that, as it is an exploratory study, the ethics committee only authorized it to be carried out in a single institution and with a certain number of students, which could be considered restrictive of the results. Even so, we tried to ensure that the number of students was representative of the population of that institution, both in terms of age and disciplinary areas, which means that the findings, although not exhaustive or generalizable, are valuable as a first approach to the subject and indicate the need for future studies.

Another limitation is the relevance of educational institutions to take into account the impact of age and disciplinary experiences on the perceived development of social entrepreneurship competencies in female students, which is subject to future study. On the other hand, the inclusion of participants who started their education under a distinct educational model raises concerns that should be addressed. As highlighted in the discussion, these findings are significant because of the differentiation and highlight the necessity for further studies to compare samples of students who graduated from both models. Unfortunately, the absence of graduates from the new model restricted the precision of the current investigation. Thus, this article provides a starting point for future research that could help refine and improve program designs to better support the development of social entrepreneurship competencies in students.

In conclusion, this paper's practical implications emphasize the urgency for universities and public policies to foster women's social entrepreneurship in nations such as Mexico and to consider the population's unique differences, rather than solely focusing



on gender as a decisive factor. Considering the previous existing studies, there are no data from other countries in the Latin American region that can be compared with those presented here, which gives originality and a special value to the study. In addition, it is not advisable to make a comparison with results from Anglo-Saxon countries since their vision of gender is different, which leads to the fact that women's perception of their capabilities and competencies may vary.

As future lines of research, it is necessary to consider that age or disciplinary areas show unique strengths and needs, requiring specific proposals to improve the perception of female students. The empowerment and participation of women in solving local problems can be triggered by social entrepreneurship; however, their individuality should not be omitted from consideration since, to make realistic and sustainable proposals, it is not only necessary to consider the social value of the enterprises but also how they are conceived and developed by the entrepreneur before materializing.

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## References

1. Silber-Varod, V.; Eshet-Alkalai, Y.; Geri, N. Tracing Research Trends of 21st-century Learning Skills. *Br. J. Educ. Technol.* **2019**, *50*, 3099–3118. [CrossRef]
2. Vázquez Parra, J.C.; Ortiz Meillón, V. Innovación Educativa Como Elemento de La Doble Responsabilidad Social de Las Universidades. *IE Rev. Investig. Educ.* **2018**, *9*, 133–144. [CrossRef]
3. Huang, Y.-F.; Do, M.-H. Review of Empirical Research on University Social Responsibility. *Int. J. Educ. Manag.* **2021**, *35*, 549–563. [CrossRef]
4. Ashoka Social Entrepreneurship. Available online: <https://www.ashoka.org/en-us/focus/social-entrepreneurship> (accessed on 18 July 2022).
5. Solesvik, M.Z. Entrepreneurial Competencies and Intentions: The Role of Higher Education. *Forum Sci. Oeconomia* **2019**, *7*, 9–23.
6. Hockerts, K. The Effect of Experiential Social Entrepreneurship Education on Intention Formation in Students. *J. Soc. Entrep.* **2018**, *9*, 234–256. [CrossRef]
7. Marulanda Valencia, F.Á.; Morales Gualdrón, S.T. Entorno Motivaciones Para Emprender. *Rev. Esc. Adm. Neg.* **2016**, *12*, 12–28. [CrossRef]
8. Rodríguez Garnica, G. Educación Informal En Emprendimiento y Creatividad En Escuelas Innovadoras. *Opción* **2016**, *32*, 425–443.
9. Padilla Martínez, M.P.; Quispe Otacoma, A.L.; Nogueira Rivera, D.; Hernández Nariño, A. Diagnóstico y Perpecticas de Fomento Del Emprendimiento Como Instrumento de Desarrollo. *Ing. Ind.* **2016**, *37*, 91–103.

10. García-Cabrera, A.M.; García-Soto, M.G.; Díaz-Furtado, J. Emprender En Economías Emergentes: El Entorno Institucional y Su Desarrollo. *Innovar* **2015**, *25*, 133–156. [\[CrossRef\]](#)
11. Global Entrepreneurship Monitor. *GEM Mexico 2019 Regional Report 2019*; Global Entrepreneurship Monitor: London, UK, 2019.
12. Vázquez-Parra, J.C.; Amézquita-Zamora, J.A.; Ramírez-Montoya, M.S. Student Perception of Their Knowledge of Social Entrepreneurship: Gender Gap and Disciplinary Analysis of an Ashoka Changemaker Campus in Latin America. *J. Appl. Res. High. Educ.* **2022**, *14*, 1224–1241. [\[CrossRef\]](#)
13. Vázquez-Parra, J.C.; Ortiz, V. Educational innovation as an element of the dual social responsibility of universities. *IE Rev. Investig. Educ.* **2018**, *9*, 133–144.
14. Vázquez-Parra, J.C.; Alonso-Galicia, P.E.; Cruz-Sandoval, M.; Suárez-Brito, P.; Carlos-Arroyo, M. Social Entrepreneurship, Complex Thinking, and Entrepreneurial Self-Efficacy: Correlational Study in a Sample of Mexican Students. *Adm. Sci.* **2023**, *13*, 104. [\[CrossRef\]](#)
15. Cruz-Sandoval, M.; Vázquez-Parra, J.C.; Carlos-Arroyo, M. Complex Thinking and Social Entrepreneurship. An Approach from the Methodology of Compositional Data Analysis. *Heliyon* **2023**, *9*, e13415. [\[CrossRef\]](#)
16. Vázquez-Parra, J.C.; Cruz-Sandoval, M.; Carlos-Arroyo, M. Social Entrepreneurship and Complex Thinking: A Bibliometric Study. *Sustainability* **2022**, *14*, 13187. [\[CrossRef\]](#)
17. Roslan, M.H.H.; Hamid, S.; Ijab, M.T.; Yusop, F.D.; Norman, A.A. Social Entrepreneurship in Higher Education: Challenges and Opportunities. *Asia Pac. J. Educ.* **2022**, *42*, 588–604. [\[CrossRef\]](#)
18. Light, P.C. *Social Entrepreneurship Revisited*; Stanford Social Innovation Review: Stanford, CA, USA, 2009; Volume 7, pp. 21–22.
19. Lackéus, M. An Emotion Based Approach to Assessing Entrepreneurial Education. *Int. J. Manag. Educ.* **2014**, *12*, 374–396. [\[CrossRef\]](#)
20. Sáenz Bilbao, N.; López Vélez, A.L. Las Competencias de Emprendimiento Social, COEMS: Aproximación a Través de Programas de Formación Universitaria En Iberoamérica. *Rev. De Estud. Coop.* **2015**, *115*, 159–182. [\[CrossRef\]](#)
21. Velasco Martínez, L.C.; Estrada Vidal, L.I.; Pabón Figueras, M.; Tójar Hurtado, J.C. Evaluar y Promover Las Competencias Para El Emprendimiento Social En Las Asignaturas Universitarias. *Rev. De Estud. Coop.* **2019**, *131*, 199–223. [\[CrossRef\]](#)
22. Shapovalov, V.; Igropulo, I.; Arutyunyan, M. Practices of Defining the Notion of Social Entrepreneurship. *Int. J. Innov. Technol. Explor. Eng.* **2019**, *9*, 3790–3794. [\[CrossRef\]](#)
23. García-González, A.; Ramírez-Montoya, M.S.; De León, G.; Aragón, S. El Emprendimiento Social Como Una Competencia Transversal: Construcción y Validación de Un Instrumento de Valoración En El Contexto Universitario. *Rev. De Estud. Coop.* **2020**, *136*, e71862. [\[CrossRef\]](#)
24. Levie, J.; Hart, M. Business and Social Entrepreneurs in the UK: Gender, Context and Commitment. *Int. J. Gend. Entrep.* **2011**, *3*, 200–217. [\[CrossRef\]](#)
25. Pines, M.A.; Lerner, M.; Schwartz, D. Gender Differences Among Social vs. Business Entrepreneurs. In *Entrepreneurship—Gender, Geographies and Social Context*; InTech: London, UK, 2012.
26. Anggahegari, P.; Yudoko, G.; Rudito, B. Female Social Entrepreneurship Movement in Indonesia. *Int. J. Entrep.* **2018**, *22*, 1–13.
27. Gupta, V.K.; Wieland, A.M.; Turban, D.B. Gender Characterizations in Entrepreneurship: A Multi-Level Investigation of Sex-Role Stereotypes about High-Growth, Commercial, and Social Entrepreneurs. *J. Small Bus. Manag.* **2019**, *57*, 131–153. [\[CrossRef\]](#)
28. Dickel, P.; Eckardt, G. Who Wants to Be a Social Entrepreneur? The Role of Gender and Sustainability Orientation. *J. Small Bus. Manag.* **2021**, *59*, 196–218. [\[CrossRef\]](#)
29. Chell, E.; Spence, L.J.; Perrini, F.; Harris, J.D. Social Entrepreneurship and Business Ethics: Does Social Equal Ethical? *J. Bus. Ethics* **2016**, *133*, 619–625. [\[CrossRef\]](#)
30. Gilmartin, S.K.; Thompson, M.E.; Morton, E.; Jin, Q.; Chen, H.L.; Colby, A.; Sheppard, S.D. Entrepreneurial Intent of Engineering and Business Undergraduate Students. *J. Eng. Educ.* **2019**, *108*, 316–336. [\[CrossRef\]](#)
31. Arredondo-Trapero, F.G.; Vázquez-Parra, J.C.; Velázquez-Sánchez, L.M. STEM y Brecha de Género En Latinoamérica. *Rev. Col. San Luis* **2019**, *9*, 137–158. [\[CrossRef\]](#)
32. Menzies, T.V.; Tatroff, H. The Propensity of Male vs. Female Students To Take Courses and Degree Concentrations in Entrepreneurship. *J. Small Bus. Entrep.* **2006**, *19*, 203–223. [\[CrossRef\]](#)
33. Peterson, R.T.; Limbu, Y. Student Characteristics and Perspectives in Entrepreneurship Courses: A Profile. *J. Entrep. Educ.* **2010**, *13*, 65–83.
34. Orser, B.; Elliott, C.; Cukier, W. *Strengthening Ecosystem Supports for Women Entrepreneurs*; Telfer School of Management, University of Ottawa: Ottawa, ON, Canada; Ted Rogers School of Management, Diversity Institute: Toronto, ON, Canada, 2019.
35. ESADE. Ramon Llull University Gender Lens Investment Grows—But Funds Lacking for Firms Led by Women in Latin America and the Caribbean. *ESADE and BID Invest Launch First Latin American Study on Gender Lens Investing*. Available online: [www.idbinvest.org/genderlensinvesting](http://www.idbinvest.org/genderlensinvesting) (accessed on 31 January 2023).
36. R Core Team. *A Language and Environment for Statistical Computing*; R Core Team: Vienna, Austria, 2017.
37. R Studio Team. *R Studio: Integrated Development for R*; R Core Team: Vienna, Austria, 2022.
38. McLeod, S. What Does a Boxplot Tell You? Available online: [https://www.simplypsychology.org/boxplots.html#:~:text=Indescriptivestatistics%2Cabox,\(orpercentiles\)andaverages](https://www.simplypsychology.org/boxplots.html#:~:text=Indescriptivestatistics%2Cabox,(orpercentiles)andaverages) (accessed on 25 March 2019).
39. Williamson, D.F. The Box Plot: A Simple Visual Method to Interpret Data. *Ann. Intern. Med.* **1989**, *110*, 916. [\[CrossRef\]](#)

40. O'Sullivan, D.; Unwin, D. Reducing the Number of Variables: Principal Component Analysis. In *Geographic Information Analysis*; John Wiley & Sons: Hoboken, NJ, USA, 2002; pp. 343–355. ISBN 0471211761.
41. Gabriel, K.R. The Biplot Graphic Display of Matrices with Application to Principal Component Analysis. *Biometrika* **1971**, *58*, 453–467.
42. Szekely, G.J.; Rizzo, M.L. Hierarchical Clustering via Joint Between-Within Distances: Extending Ward's Minimum Variance Method. *J. Classif.* **2005**, *22*, 151–183. [\[CrossRef\]](#)
43. Murtagh, F.; Legendre, P. Ward's Hierarchical Agglomerative Clustering Method: Which Algorithms Implement Ward's Criterion? *J. Classif.* **2014**, *31*, 274–295.
44. Vázquez-Parra, J.C.; Carlos-Arroyo, M.; Cruz-Sandoval, M. Social Entrepreneurship and Complex Thinking: Validation of SEL4C Methodology for Scaling the Perception of Achieved Competency. *Educ. Sci.* **2023**, *13*, 186. [\[CrossRef\]](#)
45. Vázquez-Parra, J.C.; García-González, A.; Ramírez-Montoya, M.S. Social Entrepreneurship Competency: An Approach by Discipline and Gender. *J. Appl. Res. High. Educ.* **2021**, *13*, 1357–1373. [\[CrossRef\]](#)
46. Braun, K. Social Entrepreneurship: Perspectives on an Academic Discipline. *Theory Action* **2009**, *2*, 74–79.
47. Teasdale, S.; McKay, S.; Philimore, J.; Teasdale, N. Exploring Gender and Social Entrepreneurship: Women's Leadership, Employment and Participation in the Third Sector and so-Cial Enterprises. *Volunt. Sect. Rev.* **2011**, *2*, 57–76.
48. Lemaire, S.L.L.; Maalaoui, A.; Dana, L.P. Social Entrepreneurship, Age and Gender: Toward a Model of Social Involvement in Entrepreneurship. *Int. J. Entrep. Small Bus.* **2017**, *31*, 363. [\[CrossRef\]](#)
49. Bernardino, S.; Freitas Santos, J.; Cadima Ribeiro, J. Social Entrepreneur and Gender: What's Personality Got to Do with It? *Int. J. Gend. Entrep.* **2018**, *10*, 61–82. [\[CrossRef\]](#)

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