Article

Education for Sustainable Leadership: Raising Women’s Capacities

Mónica Segovia-Pérez * , Pilar Laguna-Sánchez 1 and Concepción de la Fuente-Cabrero 1

1. Business Department. Rey Juan Carlos University; pilar.laguna@urjc.es,(P.L-S)
concepcion.delafuente@urjc.es (C.F-C)
* Correspondence: monica.segovia@urjc.es (M.S-P)

Abstract: Education is an imperative key to driving sustainability and gender equity. In addition to addressing well-known female deficiencies in leadership training, it is really important to develop initiatives in sustainable leadership education for women to acquire skills, competencies and tools on leadership and to increase their self-perceptions. The purpose of this study is to assess a Women’s Leadership Program for university students. The sample consisted of 50 students enrolled in the program. A mixed-method approach was applied. Quantitative methods with a survey were conducted to evaluate the training and the achievement of leadership skills. In the data analysis, a descriptive statistics variance analysis, using a Welch statistic and T2 Dunnett test, was applied. Qualitative research methods were conducted through three focus groups to evaluate personal changes in their own-perceptions and self-confidence. Results suggest that the female students in the program reached a level of leadership knowledge with practical tools for their future. The program inspired them and confirmed changes in their personal capacities or self-confidence, including reflection about facing challenges in the work environment. The findings support the effectiveness of the specific education in breaking two barriers shown by the literature for women to getting a managerial position: lack of training and female self-confidence.

Keywords: education for sustainable leadership; gender equality; competencies; higher education; women managers

1. Introduction

Education is crucial for the achievement of sustainable development and is extraordinarily important to women's empowerment [1]. In 2015, the 2030 Agenda for Sustainable Development was adopted by the United Nations (UN) General Assembly and incorporated, as part of the 17 Sustainable Development Goals (SDGs) the goal to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" [2]. In Education for Sustainable Development Goals (ESDG): Learning Objectives, UNESCO aims to promote gender equality in education as one of the behavioural learning objectives (on ESDG 4) and recommends that education for sustainable development should be included in all curricula of formal education: primary, secondary and higher education [3].

In this context, the 2030 Agenda for Sustainable Development focuses on the need to acquire a set of key transversal competencies applicable to different contexts and purposes, along with professional careers [4]. The EU, since the implementation of the Bologna European Credit Transfer and Accumulation System and Tuning project, has encouraged improvement of the acquisition of professional competences and changing the learning approaches and outcomes emphasizing the importance of lifelong learning for professional and personal development in a global and unstable world. Most of the competences suggested by UNESCO [2] are related to the competences appropriate for a leader, such as critical thinking, collaboration, strategic, integrated problem-solving, anticipatory competency, normative, systems thinking competency, and even self-awareness competency. Education is absolutely critical for assuring the acquisition of these...
competences, especially for women who need to improve their capability to gain manager positions.

Literature has recognized that there can be no sustainability without gender equality [5-7] and it has been a long-established priority for the international and national organization. Women’s empowerment is essential for expanding economic growth, promoting social development and achieving sustainable development. As part of the 17 SDGs for achieving gender equality (SDG 5), the empowerment of women and girls [2] is one of the main aims, and one of the main behavioural learning objectives is for females to be able to take the measure of their surroundings to empower themselves or others who are discriminated against because of their gender. [8-10] In addition, sustainability and gender mainstreaming are considered as a basic instrument for policymaking to reduce inequalities. Other stakeholders, such as civil organizations and movements (#Metoo, Time’s Up, YesAllWomen, massive marches on International Women’s Day (IWD)) are seeking a more equitable society to improve world sustainability. Literature suggests that women leaders enable more sustainable development in corporations and are associated with greater control over Corporate Social Responsibility [11]. Also, from the point of view of the Boards of Directors, gender diversity [12] and increased numbers of women in upper-management positions allow businesses to shift from short-term profit maximization to a broader focus on longer-term goals, and make them more environmentally conscious, behave more ethically, have greater transparency, integrate the interests of multiple stakeholders and pursue innovate initiatives [13-17].

Nevertheless, some differences persist in women’s access to management positions in all economic sectors, as evidenced by the so-called “Glass Ceiling” [18-21]. According to the World Economic Forum (2018), women hold just 34% of managerial positions and less than 7% in the four worst-performing countries (Egypt, Saudi Arabia, Yemen and Pakistan) and, on average, globally, just 18% of ministers and 24% of parliamentarians are women. Data from UN [2] shows this number as 27% holding management positions. This situation contrasts with gender parity in education, where women have a greater presence in the universities, and where they exceed, for some degrees, more than half of the students [22]. Also, regarding leadership capacity, there is no doubt that experience in leadership, solving problems, communication abilities and self-confidence are essential for professional promotion. The problem is that even with having parity in education, female seem to lack some of these competencies that allow them to access to management positions.

Several studies conducted throughout the world have tried to identify the barriers that limit women’s access to decision-making positions. Generic issues have been identified; for example, insufficient critical mass in managerial positions or discriminatory stereotypes, such as considering effective leadership associated with male attributes; structural and institutional obstacles, lifestyle choices, incompatibility between work-life balance. Human capital theories have explained these barriers to access to women’s management positions as being because of a lack of specific training and experience, stereotypes and lack of self-confidence [23-25]. Disadvantages in education translate into a lack of access to skills and limited opportunities in the labour market. Hence, education becomes a fundamental key in its employment and subsequent professional development. Leadership education might link to occupational practice and consists of providing professionals with tools suited to resolving issues likely to arise in the course of practising their respective manager positions. At the same time, a specific program that focuses on a gendered perspective enables female students to furnish a suitable response to situations women encounter in professional practice.

On the other hand, [26-27] some suggest that gender stereotypes are what causes anchor biases about women’s abilities as leaders. Stereotypes and social role theory [28] explain that men and women are allocated different roles in society due to their gender and these include different managerial discourse. The “think manager, think male” phenomenon [29] associates leadership with masculine characteristics and impedes women’s career progression [30-31]. Women are expected to behave like women, but traditional female behaviour conflicts with the desirable abilities of a leader. For example, communication has been considered a central leadership competency [32-35]. Social norms and stereotypes shape feminine communication as more indirect
and emotional, whereas masculine communication is more direct and instrumental. The female style of communication is not considered suitable for leadership, because women’s linguistic style is perceived as uncertain, nervous, and showing a lack of authority [32].

Gender roles affect individuals’ perceptions of their own abilities, self-esteem, career ambitions and self-imposed barriers [36]. Related to gender stereotypes, leadership is associated with men’s qualities as managers, including self-confidence, assertiveness, competitiveness, ambition and emotional stability [37], while women are perceived as less competent. This external perception affects female self-abilities, confidence and self-perception. Guillén, Mayo and Karelaia [38] highlighted that self-confidence and ambition is based on others’ perceptions and the extent to which a woman sees herself as capable of leader performance external standards. So, the environment and society’s roles predict the extent to which men and women are seen as capable and promotable in their organizations. This lack of self-confidence and institutional confidence in them could explain why women do not put themselves forward for management positions.

In conclusion, women stereotypes, along with a lack of self-confidence in applying for leadership positions and a lack of leadership education [39, 24, 25] require concrete actions within public administration, places of employment, academic institutions and with women themselves [40]. Actions supported in education could create females’ own social capital, promotion and help them communicate their value for the organization.

In this context and in response to the lack of women’s leadership competences, Rey Juan Carlos University launched a specific training program for female university students in collaboration with the Women’ CEO Association (WCA). The objective was to ensure the acquisition of skills, competencies and tools for leadership and to increase their self-perceptions and motivations.

The main objective of this paper is to show the results of this case study, analysing its impact on female students. The paper is structured as follows: section 2 describes the research background, the design, methods and sample; section 3 outlines the main research findings; section 4 presents the discussion and finally section 5 provides the main conclusions.

2. Materials and Methods

2.1. The Research Background

The research focuses on the results of the Women Leadership Program (WLP), which took place during two years, 2017 and 2018. The main objective of the WLP was that the female students enrolled in the program acquired skills, competences and tools related to management and leadership. As a second goal, the course attempted to improve student motivations, self-esteem and self-perceptions to empower female about their own value. Also, it explained the difficulties the women would face in the labour market or with the balance of their personal life, with case studies offered through managers’ practical experiences and advice on how to overcome barriers. The applications for enrolment in the WLP were four times the number of places offered; therefore, a selection process was necessary. The final groups constituted a heterogeneous team in terms of their academic profiles, including students pursuing Business, Social Sciences or Engineering degrees. It was intended that the program give access to leadership training not only to students in Business, but also to those with more technical profiles, such as women in Architecture, Medicine or Engineering, so that in the second year the WLP ensured that half of students enrolled were from these technical degrees.

The WLP included theoretical classes (a total of 24 hours), a case study, several appointments to companies, a visit to the European Parliament (Brussels), and a coaching system. In the 2018 edition, also students were given an individualized test on their own leadership style and competencies, thanks to the collaboration of a Coaching Human Resources Company, Psicotec.

Currently a good leader must know how to communicate, work as a team, negotiate, coordinate and motivate a team in an increasingly changing and globalized environment [41]; therefore the theoretical modules were designed according to these needs. The topics covered areas such as:
All modules included specific reflections on the situation of women in the work environment. The 21 professors, men and women, were experienced managers from different economic sectors, who were very committed.

2.1. Methods and Sample

The evaluation of the impact on the acquisition of student competencies was a fundamental aspect of the WLP. A multi-source program evaluation design based on the students’ perception was used for the analysis.

The evaluation included two issues: a) the performance assessment of the WLP itself and the training received; b) the results in terms of skills and confidence acquired by the students themselves. A mixed-method approach was applied.

• Quantitative survey

For the assessment of the WLP itself and the training received, a quantitative survey was developed at the end of each theoretical module by a self-administered survey. The questionnaire included a ten-point Likert scale with nine questions about the theoretical and practical subjects, the documentation and the professors, in addition to their previous knowledge about the topics, how the module contributes to their future or their capability and finally, a global evaluation.

The final survey sample was a total of 50 students, 25 for each year. None declined to answer the questionnaire. Most of them added some positive comments at the end of the questionnaire. On average, they were 21.6 years and they were in the last year of their Bachelor's degree in Business, Social Sciences, Law, Engineering and Architecture. Some of them were combining their university classes with their mandatory business practices.

• Qualitative Study.

Secondly, for the valuation of the results in the acquisition of skill and self-confidence, a qualitative methodology was conducted. At the end of each year, focus groups were held with the students to learn about their perception of the program, the lessons they learned from it and the personal change they experienced. Three focus groups were conducted with eight participants on each one. A total of 24 students participated in qualitative study. The interview schedule comprised open questions. Also, four individual informal interviews were carried out with a selected group of students. The main objective of this qualitative approach was a deep comprehension the students' perception about whether the program favoured individual changes in their behaviour or the way they think about or perceive themselves. It was fundamental to evaluate the real impact on improving self-confidence in university students who stand on the threshold of the labour market.

2.3. Analysis

The analysis of the quantitative data was done with a classical descriptive analysis with the evaluation of the mean, standard deviation, percentages, etc. using the SPSS v.25 software. Additionally, a stochastic treatment of the data was carried out. The stochastic analysis relating to the inter-group comparisons was conducted using a variance analysis (ANOVA). To test homoscedasticity, we used a Levene test. The variance analysis was done using a Welch statistic,
because the heteroscedasticity of the sample. This test uses a modified F-statistic to analyse significant effects and it is commonly used to deal with heteroscedastic samples [42]. Moreover, to identify inter-group differences, we used a T2 Dunnett test.

The qualitative data were recorded with participants’ consent and were later transcribed. The analysis was done as conventional content analysis (inductive analysis), in order to capture relevant information [43]. The analysis identified two categories: Program Category related to the course performance and, How the program changed capacities and self-confidence categories, considering changes at the individual and personal level.

3. Results

The results of the quantitative and qualitative research are presented below.

3.1. Quantitative Data

Regarding the evaluation of theoretical classes, the general opinion of all students is that the course has been extraordinary. As can be seen in Figure 1, on a scale of 1 to 10, the average overall rating is 8.47 in 2017 and 8.63 in 2018. The global opinion is excellent, improving from year to year, not only because of the content, but also because of the teachers, the organization and the coordination itself. A more detailed assessment shows that, in all the items analysed (theoretical, practical, documentation, etc.) (Figure 1), satisfaction has been outstanding and that it increased in the second year. Above all, students have most valued the practical part of each module.
The assessments related to how the program has contributed to the participants’ own capacities are specially interesting. As can be seen in Figure 1, their previous knowledge about the subjects was very low (6.2) and much lower in 2018 (5.73). Regarding the degree to which the topics have provided them with applicable tools for the future, the evaluation is high with 8.6 and 8.5 respectively each year. In addition, the topics discussed have introduced them to a desire to gain more depth of knowledge about the topic (8.7 both years).

Regarding the evaluation of the specific program’s subjects, all subjects received excellent scores. In Figure 2, those with outstanding valuations are collected. Among them, **Personal Branding**, **Social Media and Networking** and **Communicate Efficiently** are the topics with the best valuation attending their theoretical, practical content and the documentation received (Figure 2.). However, there are differences from one year to the next, with better scores found in the second year (Figure 2).
One of the program’s organizers’ main concerns was to know which, of all the topics, had had a better evaluation in terms of its contents and, above all, which were considered to have contributed the most in terms of the student skills development. For this, an ANOVA analysis was performed with the best rated subjects. Descriptive results about subject evaluation by contents and skills provided are shown in Table 1. As shown, *Personal Branding* and *Social Media and Networking* are the ones that received the best results in relation to their theoretical contents, with averages of 9.05 and 8.97 respectively. Regarding students’ previous knowledge of the topic, *Negotiate Efficiently* and *Personal Branding* were the least known subjects. As regards to the way the topic provided applicable tools for the future, *Personal Branding* and *Public Speaking* are the subjects that gave them the most skills capacities. Finally, *Personal Branding* and *Social Media and Networking*, are the topics the most stimulated them the desire to know more about it.

### Table 1. Descriptive results between subject evaluation by contents and skills provided.

<table>
<thead>
<tr>
<th>Subject Evaluation</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Theoretical Subject Matter</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Branding</td>
<td>9.05</td>
<td>1.068</td>
</tr>
<tr>
<td>Communicate Efficiently</td>
<td>8.18</td>
<td>1.66</td>
</tr>
<tr>
<td>Social Media and Networking</td>
<td>8.97</td>
<td>1.088</td>
</tr>
<tr>
<td>Public Speaking</td>
<td>8.64</td>
<td>1.515</td>
</tr>
<tr>
<td>Negotiate Efficiently</td>
<td>8</td>
<td>1.7</td>
</tr>
<tr>
<td><strong>Skills Provided</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous knowledge of the subject</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Branding</td>
<td>5.79</td>
<td>1.567</td>
</tr>
<tr>
<td>Communicate Efficiently</td>
<td>5.91</td>
<td>1.736</td>
</tr>
<tr>
<td>Social Media and Networking</td>
<td>6.36</td>
<td>1.857</td>
</tr>
<tr>
<td>Public Speaking</td>
<td>5.92</td>
<td>1.903</td>
</tr>
<tr>
<td>Negotiate Efficiently</td>
<td>5.84</td>
<td>1.993</td>
</tr>
<tr>
<td>Provided applicable tools for the future</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Branding</td>
<td>9.07</td>
<td>1.009</td>
</tr>
<tr>
<td>Communicate Efficiently</td>
<td>8.09</td>
<td>1.626</td>
</tr>
<tr>
<td>Social Media and Networking</td>
<td>8.92</td>
<td>1.085</td>
</tr>
<tr>
<td>Public Speaking</td>
<td>9.03</td>
<td>1.464</td>
</tr>
<tr>
<td>Negotiate Efficiently</td>
<td>8.22</td>
<td>1.436</td>
</tr>
<tr>
<td>Stimulated to want to know more</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Branding</td>
<td>9.21</td>
<td>1.206</td>
</tr>
<tr>
<td>Communicate Efficiently</td>
<td>8.41</td>
<td>1.821</td>
</tr>
<tr>
<td>Social Media and Networking</td>
<td>9.18</td>
<td>1.121</td>
</tr>
<tr>
<td>Public Speaking</td>
<td>8.89</td>
<td>1.41</td>
</tr>
<tr>
<td>Negotiate Efficiently</td>
<td>8.56</td>
<td>1.382</td>
</tr>
</tbody>
</table>

Nevertheless, descriptive analysis only provides an initial examination. To validate the robustness of these descriptive analyses, a stochastic analysis was made. The variance analysis allowed for identification of significant differences between the subject evaluation and skills provided through all the specific subjects of the training program groups (p<0.05). Moreover, a post hoc test offered more in-depth information about the inter-group differences. Particularly, ANOVA analysis were applied, combining each factor with each variable.

From these results, it was possible to conclude that only “**Theoretical Subject Matter**” and “**Provide applicable tools for the future**” have a significant influence on the evaluation of each subject, as the rest of the tests are rejected at a level of significance of less than five per cent (Table 2).

### Table 2. Results of ANOVA analysis by group.

<table>
<thead>
<tr>
<th></th>
<th>Welch</th>
<th>G1</th>
<th>G2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical Subject Matter</td>
<td>2.829</td>
<td>5</td>
<td>103.748</td>
<td>0.02</td>
</tr>
<tr>
<td>Provide applicable tools for the future</td>
<td>3.814</td>
<td>5</td>
<td>108.329</td>
<td>0.003</td>
</tr>
</tbody>
</table>

After that, we made a post hoc analysis using T2 Dunnett test for “**Theoretical Subject Matter**” and “**Provide applicable tools for the future**” through all the specific subjects of the training program groups to identify paired mean differences between groups (Table 3).
Table 3. T2-Tamhane results to identify inter-group differences regarding economic activity.

<table>
<thead>
<tr>
<th>Theoretical Subject Matter</th>
<th>Groups</th>
<th>Mean Differences</th>
<th>Standard Error</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Branding</td>
<td>Communicate efficiently</td>
<td>.936*</td>
<td>0.301</td>
<td>0.004</td>
</tr>
<tr>
<td>Provided applicable tools</td>
<td>for the future</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Branding</td>
<td>Communicate efficiently</td>
<td>.979*</td>
<td>0.289</td>
<td>0.017</td>
</tr>
</tbody>
</table>

*Statistically significant at 95%.

Results related to “Theoretical Subject Matter” showed only differences between the subject Personal Branding and Communicate Efficiently (Table 3), with a lower evaluation of the second topic. Regarding which subject has “provided an applicable tool for the future” the significant differences are between the same topics. In conclusion, the subject “Personal Branding” was the topic that has contributed the most tools for the future and had the highest theoretical performance (Table 3).

3.2. Qualitative Results

The qualitative analysis has identified two main evaluation categories: one about the course performance and one related to how the WLP changed the abilities and self-confidence of the students. Regarding the first one, results were coincident with quantitative data. In this section, only students’ self-performance or confidence changes will be analysed.

In general, the program has had a very significant effect on students. They consider that they learned many tricks to communicate, lead and apply skills for the future of work. A good proof of this is that they would recommend it to other students. Specifically, they consider that:

1. Meeting with people in the real business world has been a key part of the WLP. Participants have valued the diversity of the speakers/professors and found them “very interactive, very exciting, very inspiring” (Focus group 1). In this sense they valued the opportunity to meet great professionals, to analyse very important issues for them, which are not usually taught, and realize the importance of certain issues for further professional development (Focus group 1). Students agree that the course has been very useful for them, particularly as regards the specific reflections on the situation of women in the work environment and the challenges that they might face.

2. They agreed that they have more tools and guidelines when it comes to personal branding or public speaking, interacting with people and communicating with more security. For example, they have learned how to create more impact in their entrances and closing of professional presentations.

3. They know what kind of leaders they are and, therefore, they know the points that they need to strengthen or improve when delegating, due to the individual tests they have taken.

4. The WLP has helped them to know themselves better about the professional field because they have seen themselves in new situations that, if were not for the course, they would not have faced.

5. The WLP has helped them to manage their feeling of overwhelm.

The WLP organizers have a special interest in developing self-confidence, motivation and ambition in students, teaching them practical advice, skills and tools from real managers’ experiences. In this regard, students recognize that the program has offered them “every Wednesday a motivation to move forward” (Focus group 2). They were tired of hearing that “there is no future for them, that scholars and women find it difficult to grow up in employment, etc”. (Focus group 2). The course has provided them with constant motivation, which many students needed to hear at this time in their lives. They all came out more empowered, and with a broader vision of the future by constantly being in contact with women who are a clear example of success and who gave them a shot of positivity: “Yes, you can!” (Focus group 2). Some students even commented that this motivation has
given the courage to demand certain labour issues in their current external practices or in their current jobs.

Also, in capital letters, everyone thinks that it has given them a key to "BELIEVE IN THEMSELVES and SELF-CONFIDENCE" (Focus group 3). There has been a change in attitude towards their skills and aptitudes. In the interviews with the students and during the development of the program, many of them have stated that they have gained motivation and self-confidence:

“It has served a lot on a personal level of self-esteem, motivation, trust, decision that you can get things done if you work and others”. (Focus group 2).

“Program has provided tools to empower you as a woman, as a leader” (Focus group 3).

“Trust more in myself and in my qualities. Set a goal and know where I want to go and go on, go on, go on…” (Focus group 1).

And this confidence began from the same selection process that they liked, not only because of what they learned during it (how a selection interview is done and overcome), but also because it motivated them to know that they had been chosen from among large number of requests.

Finally, the students also stated that the course has opened their eyes to a reality that they will have to face as women in the workplace but also in their family balance

“On a personal level it has helped a lot. It has opened my eyes to what is there. When I went to work ... now I have seen details that have made me alert. Nor do I have to be waiting and demonstrate, demonstrate. You, yourself know what you’re worth, and you have to demand according to your merits according to what you’re worth. I am more alert” (Focus group 1).

“Program wakes you up. I did not know that I will face problems between my family and my professional career...” (Focus group 3).

4. Discussion and Conclusion

The Sustainable Development Goals consider education as a priority for sustainable development, driving an inclusive an equitable opportunity for all. In this sense, education plays a critical role in assuring gender equality, particularly for improving women gaining managerial or leadership positions. The literature has highlighted deficiencies in women’s lack of training in leadership abilities, skills, tools and self-esteem [24,25] creating barriers for females to gain leadership positions. The present paper examines students’ subjective outcome assessments of the “Women Leadership Program” carried out as a collaboration between The Rey Juan University (Spain) and The Women CEO Association of (WCA) for two years.

The quantitative study indicated that students had a strongly positive evaluation of the program. The female students involved expressed great appreciation of all subject areas, but especially, the ones Personal Branding, Social Media and Networking and Communicate Efficiently. Most of the students have shown their previous ignorance about the subjects, especially in 2018. Also, female learners indicated that they have reached a level of knowledge, and were given specific tools that have allowed them to gain new capabilities in the topics learned. Thus, this program might have broken one of the main barriers, highlighted by the literature, to get a manager position: that is a lack of skills or training in leadership capacities such as communication, networking, negotiating, coordinating, being task-oriented or building networks [23,33,34,35,44].

A second conclusion arises from the increased results obtained on the second year. The program’s organizers had placed a special emphasis on involving female students from Engineering or applied science degrees, as the literature has shown that this group has even worse possibilities for gaining managerial positions in ICT sectors or occupations [45]. In the survey data from 2018, in which there were more students from engineer degrees, confirmed that there was a low score on the
item related to their previous knowledge of the subjects than in 2017. Associated with the acquisition of skills, the overall 2018 subject evaluation received higher scores than 2017, and the global program evaluation was a little more positive. Students seem to have a better perception of the program’s best use for real life. Based on these results, the program might have a strong influence on the improvement of female Engineering students’ leadership skills, especially for those who are technically gifted but who are too narrowly trained in the area of social, interpersonal or managerial tools [46-47]. In fact, the Engineering students highlighted as one of the strong outcomes of the program, that they most appreciated gaining a practical orientation and interacting with a multidisciplinary group of teachers/professors and students who gave them a more real-life vision than regular university classes.

The focus group discussions analysis allowed for the study of changes on personal capacities or self-confidence. Literature has shown that women have a poor personal perception of leadership capacity, and low self-esteem and career ambition [48], which brings on a self-imposed barrier, reducing women’s ambition for promotion [36,49]. The qualitative results highlighted that the program had an extraordinary influence on female students. The participants confirmed not only an improvement on specific tools or skills, but also a positive change in their attitudes and their self-confidence. Now, they believe in themselves. The program has been inspiring for them and gave them the courage to demand certain labour issues. Also, students highlighted that it was particularly useful for them to reflect on the situation of women in the work environment and the challenges that they might face. They confirmed that the program has opened their eyes to the reality that they had never thought about before.

Hence, the present study confirms a positive effect on two barriers shown by the literature to women gaining a managerial position: a lack of training and self-confidence. The results corroborate that education for female university students could be a helpful action to improve women’s positions in organizations [50].

Nevertheless, the study has several limitations that open new research possibilities for the future. First, the present study is a case study that might be replicated considering other contexts. Second, as the present findings were based on a small sample, there is a need to replicate the study in the future with large samples by a longitudinal approach with program students in the next academic year. Third, findings could be validated by studying the situation of these students after their incorporation to labour market.

In conclusion, sustainability is a theme that extends to all realms of life, including education and gender equity. The present study stressed the relevance of education for women students to build their leadership strengths, skills, tools and capabilities and also to reinforce their self-confidence. A strong commitment to developing leadership education for women could create a crucial scenario to break down the current barriers females face in getting management positions. Universities are well placed to facilitate education that builds a more sustainable and gender-equitable legacy for the next generations.


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