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Entrepreneurial Competencies in Graduate Students from Mexico: A Gender Perspective

By Eduardo R. Díaz¹

Abstract

Mexico faces a gender gap in opportunity entrepreneurship. Part of the problem is the masculine approach to business education in graduate programs. This research uses data from 173 female and male graduate students to compare self-efficacy levels in entrepreneurship and leadership. The data were collected under a cross-sectional, survey research design. Findings suggest that there were no statistically significant differences between females and males in five entrepreneurship and two leadership dimensions. Statistically significant differences were identified in one entrepreneurship dimension: initiating relationships with investors. A key takeaway is that females undervalue their ability to secure funds for entrepreneurial purposes.

Keywords: Self-efficacy, Opportunity Entrepreneurship, Gender

Introduction

This study helps address the gender gap in opportunity entrepreneurship in Mexico by examining female and male self-efficacy in terms of managerial behavior. Data from the Global Entrepreneurship Monitor (GEM) suggest that females have greater difficulty finding entrepreneurial opportunities (González-Álvarez & Solís-Rodríguez, 2011), but more recent research suggest that education can be an effective pathway toward narrowing the gender gap in opportunity entrepreneurship (Okeke-Uzodike & Obianuju, 2019). Drucker (1993) argued that business creation and success depends largely on management performance, and that successful managers tend to excel in entrepreneurial and leader behaviors. To develop these management behaviors, individuals often enroll in graduate programs that promise to help them develop their business and management competencies (González-Álvarez & Solís-Rodríguez, 2011).

Business schools tend to take a masculine approach to teaching entrepreneurship, which means that students do not learn how to address the gender disparities common among managers in most industries (Kelan & Jones, 2010). It is unclear what educators and program coordinators can do to help aspiring female entrepreneurs develop the appropriate skill set they will need to create and manage successful ventures (Valencia-Arias & Marulanda-Valencia, 2019). Potentially, institutions of higher education (IHE) can improve their work with students if they measure self-efficacy and use the insights gained to make relevant adjustments to their programs (Ornelas-Contreras et al., 2013). This claim is supported by other research where educators sought to help their students become more self-aware and reflective as they establish goals (Warren et al., 2018). The key takeaway is that self-awareness driven by the implementation of assessment strategies in educational institutions can help address the gender gap in business as well as problems associated with business education (Díaz et al., 2019; Díaz, 2020a).

Females in Mexico are well represented in entrepreneurial activities because they tend to engage in self-employment, but few manage to find their place in lucrative entrepreneurial ventures (Zabludovsky, 2015). This situation is common in other developing countries (Okeke-Uzodike & Obianuju, 2019). Canales-García et al. (2017) examined official data on entrepreneurship and argued that female entrepreneurs in Mexico are underrepresented partly

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because they tend to engage in business creation for survival, and not because of a true desire to become business owners. In other words, females tend to stay away from opportunity entrepreneurship. From a young age, women are geared toward less rewarding occupations than men, owing perhaps to cultural and educational influences (Macías-González et al., 2019).

Female opportunity entrepreneurs in Mexico often face rejection in their ventures because of the persistent notion that women should not oversee bankable businesses (Zabludovsky, 2015). This situation is not confined to Mexico, and similar cases have been documented in African and Latin American nations (Okeke-Uzodike & Obianuju, 2019). Joardar (2014) examined the impact of foreignness in entrepreneur performance and noted that being male continues to be a clear advantage across cultures. Mexico needs entrepreneurs to create jobs, innovation, and economic prosperity, so it cannot afford to turn away half of the population to occupations where returns are exceptionally low.

For the purposes of this study, opportunity entrepreneurship refers to situations where individuals are drawn to new business ventures out of the possibility of obtaining relatively high financial returns and improving their lives (Nikolaev et al., 2018). Clearly, this type of work requires individuals to develop advanced business and management competencies, which is why individuals turn to higher education (González-Álvarez & Solís-Rodríguez, 2011). While there is no reason to believe that males are better prepared than females in terms of the competencies needed to succeed in lucrative entrepreneurial ventures (i.e., there is parity in education and share of the workforce), more research is needed to account for the gender gap in entrepreneurial roles Mexico. For that reason, this study will compare female and male self-efficacy across two leadership and six entrepreneurship dimensions. The focus on self-efficacy is justified because previous research found that females are often discouraged from starting new businesses due to a lack of confidence in their own abilities (Cantú-Cavada et al., 2018), and current research on entrepreneurial intention is insufficient to adequately understand the influence of gender.

Self-efficacy and Females in Managerial Roles

One assumption behind this research is that individuals who believe themselves to be competent in a specific task or activity are more likely to try to undertake it. Bandura (1977) developed the self-efficacy theoretical model to explain how a person's belief in his or her own abilities could lead them to pursue challenging tasks. Warren et al. (2018) noted that self-efficacy can be measured through survey research and serve as a platform to create a feedback loop between students and educators. This was the thinking behind De Noble et al.'s (1999) work when they developed the Entrepreneurship Self-Efficacy (ESE) scale. Their main argument was that entrepreneurship education could be more effective if it were possible to pin-point specific constructs of behaviors in which students felt competent or incompetent.

These authors were not alone in thinking that self-efficacy plays an important role in entrepreneurship development and equity (Afandi & Kermani, 2015; Ventura-Fernández & Quero-Gervilla, 2013; Wilson et al., 2009), and in closing the gender gap in leadership roles (Díaz, 2018; Huszczo & Endres, 2017). This type of research is scarce, however, and more is needed to consolidate an adequate body of work that can inform educators, educational leaders, and students.

Females and males believe that they can perform the tasks required to conduct business, but it is unclear whether they share the same parameters in their assessments. Santamaria-Velasco

and Brunet-Icart (2016) documented the narratives of 62 male and female entrepreneurs in Mexico. The focus of their study was on the role of women at work. The authors concluded that both males and females in their study believed that business is gender neutral and went on to claim that the underrepresentation of women in managerial roles in larger, more profitable organizations was due to internal factors (i.e., self-efficacy) rather than external environmental factors common in male-dominated societies. This supports the argument that females stop themselves from advancing in business and other fields.

The reason women give up looking for better opportunities to increase their income and overall standing in Mexican organizations is often because they get discouraged (Arceo-Gómez & Campos-Vázquez, 2014). Research suggest that self-efficacy can go a long way in increasing levels of entrepreneurial intention and innovativeness in individuals (Barrera-Verdugo, 2018), so it stands to reason that increasing self-efficacy in females can help narrow the gender gap in business-related areas. The problem is that it is hard to develop a targeted strategy to increase self-efficacy. While it is possible to accept the claim that females have lower levels of self-efficacy than males when it comes to entrepreneurship, it is unclear what behaviors are involved. By identifying the appropriate behaviors, entrepreneurship educators and program coordinators can intervene and help address this gender gap.

The equalizer in this situation tends to be education, especially advanced programs in higher education. Entrepreneurship education is often part of the business curriculum, and it has been shown to influence female self-efficacy in developed countries (Wilson et al., 2009). Educational programs act as a counterweight to traditional female underestimation. The key is for female students to identify and develop the right skills and behaviors needed to succeed in business. Even if they grew up watching their female role models limit themselves, developing business-related behaviors should help their self-confidence. Therefore, measuring self-efficacy levels in appropriate dimensions of management-related behaviors can help female business students become more self-aware and aim for higher goals, thus, making it more likely that they will pursue more lucrative and attractive career paths without being discouraged.

The assumption is that there should not be a gender gap in competencies between well-educated females and males, so there should not be differences in terms of self-efficacy either. One caveat is that the specific behaviors that influence success in managerial roles in one culture may change in another (Díaz, 2020b). Although some of the studies cited here suggest the effectiveness of entrepreneurship education on female self-efficacy, it is important that individuals in different societies conduct their own studies.

Specific Behaviors that Influence Female Opportunity Entrepreneurship

Drucker (1993) argued that business managers were entrepreneurial and forward thinking, concerned with reaching desired outcomes from organizational stakeholders. Others have claimed that managers are the ones who are able to trigger most entrepreneurial behaviors in organizations through their actions (Hashimoto & Nassif, 2014). These descriptions suggest that entrepreneurship is one dimension of management. In fact, Drucker (1993) noted that the two functions of management were entrepreneurship and innovation, and he went on to say that managers needed to exercise their influence over others to carry out their work. This suggests that managerial roles include entrepreneurial and leader behaviors. One of the missing elements of Drucker's discussion on management is the role of female management. However, Buttner (2001) called attention to the different styles female and male entrepreneurs use when managing their organizations. She noted that female entrepreneurs were relationship-oriented, and that this

management style was more effective when dealing with highly educated employees. It could be argued that entrepreneurial behaviors include behavioral dimensions that align with creating desired changes (i.e., achieving outcomes), and with the way individuals interact with those around them (i.e., taking a relational approach).

This description of entrepreneurs implicitly suggests a masculine perspective of management. Research conducted by de Pádua-Carrieri et al. (2013) found that business executives describe managers as *commanders* who oversee growing the business and sustaining control. This did not imply that women could not be commanders, but it did mean that executives needed to adopt masculine traits to raise their credibility. Feminine traits (i.e., self-control and sensitivity) were also seemed as important, but not as much as risk-taking and assertiveness, which are considered masculine. This means that females must make more significant adjustments in their behaviors to succeed as managers in organizational contexts. This signals the need for some leadership training and experience for both females and males, but it is especially important for females in masculine-oriented organizational contexts like the ones in Mexico (Zabludovsky, 2015).

Schein (2001) argued that the association of masculine traits and behaviors with effective management is a big reason why women continue to be underrepresented in lucrative and influential roles within organizations. This claim suggests that (1) individuals have a hard time believing that women can adopt masculine behaviors, and (2) feminine behaviors are undervalued in leadership roles. Stogdill's (1969) leader behavior theoretical model classified leader behavior as task-oriented and relationship-oriented, but these have been implied to signify masculinity and femininity. Although he never said that one leadership orientation meant better performance than the other, latter studies based on this model (e.g., Schein, 2001) found that females were consistently characterized as feminine in the way they approached their work, and that this was not the desired approach for effective management. More recent theoretical approaches have emerged to decrease the effect of masculinity or femininity on leader behavior assessment (Eagly & Chin, 2010). This is because management, in practice, requires a balance between task and relationship-orientation. So, it stands to reason that the generalizations made about femininity and masculinity in leadership two decades ago are no longer viable.

Hamilton (2013) argued that the study of entrepreneurship was centered on men and masculinity. She noted that even classic works focused on masculine personalities or traits of entrepreneurs, which influences how management academic programs develop their teaching practice. Predictably, these descriptions usually ended up being associated with stereotypical male behaviors or traits, suggesting that entrepreneurs are autonomous, and achievement driven. Marlow and Swail (2014) went further when they noted that even when researchers examined female entrepreneurship, they gave support to the either-or nature of masculinity and femininity, presenting an inaccurate depiction of the influence of gender on business ownership.

Their reasoning was that gender was socially constructed, and that these constructions were contextual. Therefore, there is no need to assume that women act feminine, or men act masculine in business. Hamilton (2014) went on to argue that the study of female entrepreneurs would improve by not relying solely on the narratives of entrepreneurial events and experiences. Instead, she suggested focusing on post-positivist perspectives. This way, the research could be carried out objectively and focused on specific behaviors. De Noble et al.'s (1999) model lends itself particularly well for this task because it is survey-based and was designed to measure entrepreneurial behaviors (not experiences or traits).

The barriers that contribute to the underrepresentation of women in managerial roles can be summarized as follows. First, business leaders are assigned masculine labels that influence women from a young age. Second, management behaviors are deemed masculine or feminine, but not both. Third, the measure of entrepreneurial readiness tends to be more compelling when using narratives and case point experiences, rather than objective measures. These barriers make it extremely hard for management educators to target gender-neutral behaviors in support of entrepreneurial effectiveness. A better way to address the gender gap through entrepreneurship education is to identify specific behaviors that can be developed or reinforced in individuals, regardless of gender.

Hypotheses

This brief review of the relevant literature on the gender gap in managerial roles suggest the need for educators to act and help address the gender gap in business and education. It seems that there is a need to focus on specific behaviors that opportunity entrepreneurs, regardless of gender, need to perform at high levels. One step that educators can take is to identify differences in self-efficacy and use these insights to adjust their teaching practice. In keeping with Drucker's (1993) description of managers, the two main elements that will be considered are the self-efficacy in leadership and entrepreneurial behaviors. This is because individuals need to be able to exercise influence over others, and produce the outcomes needed for businesses to succeed. This is consistent with other research where leadership and entrepreneurship are considered overlapping constructs of management (Díaz et al., 2019; Díaz, 2020b). The relevant dimensions in this research correspond to the Consideration and Initiating structure measured by the short Leader Behavior Description Questionnaire (LBDQ), and the six dimensions of the ESE scale. These instruments will be described in the Method and Materials section. The general question that this research should help address reads as follows: Are there behavioral differences between females and males in the sample that justify the gender gap in managerial roles? Answering this question requires addressing the following hypotheses:

- H1: Males score higher than females in initiating structure.
- H2: Males score higher than females in consideration structure.
- H3: Males score higher than females in new product and market opportunities.
- H4: Males score higher than females in building innovative environments.
- H5: Males score higher than females in initiating investor relationships.
- H6: Males score higher than females in defining core purpose.
- H7: Males score higher than females in coping with unexpected challenges.
- H8: Males score higher than females in developing critical human resources.

Method and Materials

This research was conducted under the quantitative paradigm through cross-sectional survey research. The theoretical foundation rests on the Bandura's (1977) self-efficacy model, where it is noted that individuals who have confidence in their ability to achieve certain tasks will be more motivated, make greater efforts, and will be less likely to be deterred from achieving their goals than if they feel they are likely to fail. This methodological approach has been used with graduate students in Mexico before (Reyes-Cruz & Gutiérrez-Arceo, 2015), and it served as the foundation for De Noble et al.'s (1999) model of ESE, and other Leadership self-efficacy studies (Díaz, 2018; Huszczo & Endres, 2017).

Participants

The participants in this study were 173 Mexican graduate students enrolled in business programs (about 43% of the total number of students invited to participate). There were 92 males and 81 females in the sample. The students were in the city of Tijuana, Baja California, Mexico. MacNab et al. (2010) studied self-efficacy levels among graduate students in the United States, Canada, and Mexico and found the Mexican students had comparatively high levels of self-efficacy. The authors attributed this to the possibility that more affluent Mexican students get the opportunity to study a master's degree, whereas in the United States and Canada more students have access to graduate education. Since this study was meant to measure managerial behaviors associated with opportunity entrepreneurship, graduate students were a logical sample because they are more likely seek entrepreneurship opportunities as a way to enhance the quality of their lives rather than just as a means for self-employment and survival, for which they would not need a master's degree. Participation was voluntary and there were no incentives to accept the invitation to complete the survey.

Instruments

Stogdill's (1969) LBDQ was designed to measure 12 leader behavior dimensions: initiating structure, consideration structure, representation, demand reconciliation, tolerance of uncertainty, persuasiveness, tolerance of freedom, role assumption, emphasis on production, predictive accuracy, integration, and superior-orientation (Templer, 1973). The short version of the questionnaire includes only the consideration and initiating structures. Initiating structure refers to the degree that the leader focuses on the task at hand, while consideration structure refers to the degree to which the leader focuses in the needs of the individuals doing the work (Templer, 1973).

The other instrument used in the study was the ESE scale. De Noble et al. (1999) developed and validated the instrument with six dimensions. These dimensions were labeled: developing new product and market opportunities, building an innovative environment, initiating investor relationships, defining core purpose, coping with unexpected challenges, and developing critical human resources. Both questionnaires use Likert scales and were applied electronically. Research conducted by Díaz (2020b) serves as an example of the use of both questionnaires.

Data Collection

The data collection phase took place during the Spring of 2019. The participants were approached through their academic coordinators. Consistent with Fowler (2014), this survey research design was cross-sectional to minimize time and costs. The graduate students who agreed to participate in the survey received an e-mail in their institutional inbox. A second e-mail was sent after one week to remind those who did not respond to the first invitation. Also, instructors were asked to remind their students of the invitation during one of their class sessions. The message in the e-mail included a description of the study, the role of the participants, the promise of confidentiality, instructions to complete the survey, researcher's contact information, and the link to the survey.

Data Analysis

Descriptive statistics and independent samples t-tests were used to address the hypotheses. Before that, internal consistencies for each of the dimensions on both questionnaires were examined using Cronbach's alpha. The results for the two leadership dimensions and the six entrepreneurship dimensions are noted on Table 1. It should be noted that the consideration

structure dimension scored slightly below the .70 standard in internal consistency. All the analyses were conducted with the Statistical Package for the Social Sciences, version 25.

Table 1: Internal Consistency for the Short LBDQ and ESE Dimensions

Dimension	# of items	α
Initiating Structure	10	.74
Consideration Structure	10	.67
Developing New Product and Market Opportunities	7	.87
Building an Innovative Environment	4	.78
Initiating Investor Relationships	3	.74
Defining Core Purpose	3	.87
Coping With Unexpected Challenges	3	.82
Developing Critical Human Resources	3	.72

Source: Developed by the author.

Results

After the analysis phase was completed, descriptive statistics and independent samples t-tests served to identify statistically significant differences between females and males in the sample. As illustrated on Table 2, males scored higher than the female group in one dimension, initiating investor relationships. Mean differences in all the other dimensions proved not to be significant (ns), with alpha level established $\leq .05$. Levine's test of equality of variances were not significant, suggesting that equal variances can be assumed. This provided enough data to address the hypotheses (see Table 3).

Table 2: Independent Samples T-tests for Male and Female Groups

	Female			Male			Levine's test	t
	n	μ	SD	n	μ	SD		
Initiating structure	81	39.96	4.32	92	41.27	4.44	>.05	-1.95
Consideration structure	81	40.49	4.56	92	40.97	3.94	>.05	-0.74
Developing New Product and Market Opportunities	81	24.80	4.00	92	26.08	5.13	>.05	-1.81
Building an Innovative Environment	81	16.55	2.16	92	16.63	3.08	>.05	-0.18
Initiating Investor Relationships	81	10.77	1.87	92	11.66	2.25	>.05	-2.78*
Defining Core Purpose	81	11.72	2.09	92	12.20	2.22	>.05	-1.45
Coping With Unexpected Challenges	81	12.23	2.20	92	12.38	2.33	>.05	-0.42
Developing Critical Human Resources	81	8.49	1.77	92	8.31	2.08	>.05	0.60

* $p < .05$ (2-tailed).

Source: Developed by the author.

Table 3: Hypotheses Test Results

Hypotheses	Result
H1: Males score higher than females in initiating structure.	Reject
H2: Males score higher than females in consideration structure.	Reject
H3: Males score higher than females in new product and market opportunities.	Reject
H4: Males score higher than females in building innovative environments.	Reject
H5: Males score higher than females in initiating investor relationships.	Retain
H6: Males score higher than females in defining core purpose.	Reject
H7: Males score higher than females in coping with unexpected challenges.	Reject
H8: Males score higher than females in developing critical human resources.	Reject

Source: Developed by the author.

Discussion

Consistent with the work of McEldowney et al. (2009) and Santamaria-Velasco and Brunet-Icart (2016), the results from this study suggest that females feel that they can lead businesses with similar levels of success as their male counterparts. There were no statistically significant differences between females and males in the sample in terms of the two leadership dimensions, and five out of the six ESE dimensions. The more notable finding was that females in the study showed statistically significant lower scores in the initiating investor relationships dimension than the male group. This suggests that they may have more trouble convincing themselves that they are capable of securing financing from venture capitalists or financial organizations. This is consistent with the findings in the Coleman and Kariv (2014) study.

Cowden and Tang (2017) noted that females were more concerned than men when securing resources to fund their new ventures. This may be because they feel less confident about their ability to obtain funding for their ventures from third parties. Similarly, research conducted with teams of female and male participants showed that female-led teams receive less financial support from investors, and that females tend to ask investors for less capital even though they provide more equity (Poczter & Shapsis, 2018). The results from Coleman and Kariv (2014), Cowden and Tang (2017), and Poczter and Shapsis (2018), along with the findings presented here, make a compelling argument for the need to train females interested in pursuing resources to finance their business ventures. Through training, they might increase their confidence enough to be willing to make strong efforts to pursue capital for their entrepreneurial ventures. This is a major point for entrepreneurship educators in Mexico.

The overall conclusion in this study suggests that gender does not moderate self-efficacy in entrepreneurial and leader behavior. With one exception, females in this sample yielded similar results than the males in the leadership and entrepreneurship dimensions. This finding challenges the results in similar studies. For example, Davis et al. (2010) surveyed 212 small business CEOs in the United States and noted that female respondents showed statistically significant higher averages than males ($p = .004$) in one market orientation construct. This finding was consistent with the conclusions expressed by Knotts et al. (2008), who conducted a study with firms in the manufacturing sector and noted that female top executives tended to be more marketing-oriented than their male counterparts. The reason behind the different conclusions between the present study and the ones just cited may be due to context. Females in Mexico would be expected to show less progress than females in the developed world because their acceptance, as a group, in the labor

market and in managerial roles has been slower. This reinforces that claim that these types of studies should be conducted in specific contexts to inform decision-making.

One study that may inform, partially, on this was the one conducted by Onyemah and Rivera-Pesquera (2015), who examined the behaviors of female entrepreneurs in three developing countries and the United States. They found that female business owners in the developing countries often lacked the informational resources to anticipate changes that affected their businesses, so they would cope and address the challenges as they emerged. Female entrepreneurs in the United States also coped with their challenges, but they did manage to predict and plan as they were in a better position to use information to their advantage. In this sense, access to market information may be an important factor for increased confidence among entrepreneurs.

One aspect that deserves further examination is that this research showed no statistically significant differences between males and females in the sample in the two leadership dimensions. This is consistent with the results in Díaz (2018) but suggest more evidence of glass-ceiling effects in organizational roles in Mexico (Zabludovsky, 2015). This study suggest that females believe they are as capable as their male counterparts when it comes to leading in the workplace, but the gender gap in leadership is undeniable. A key insight to addressing the issue may be found in one study conducted in Finland. Katila and Eriksson (2013) examined gender roles in the workplace to better understand the influence of gender and leadership in Finland. The authors noted that male and female leaders were perceived favorably in terms of their management skills, but male leaders were perceived to be more effective in using their interpersonal skills to influence others. It is possible that the gender gap in leadership roles in Mexico is not due to internal factors (i.e., self-efficacy) or performance. It may be the case that males have been better at developing the appropriate relationships with those in positions to help them advance.

In line with this opinion, Thébaud (2015) noted that gender status affects female entrepreneurs, especially when traditionally male-centered industries are involved. It could be that it is just easier for males to relate to others because there is a disproportional share of males in the industry, so they are in a better position to gain credibility and advance. Nonetheless, the gender gap seems to be narrowing and this is due in part to the accumulation of evidence that effective leadership is not moderated by gender (Eagly & Chin, 2010; Zabludovsky, 2015; Cowden & Tang, 2017; Díaz, 2018).

Therefore, the variety of opinions on females in entrepreneurship and/or leadership roles are present in the literature. Overall, females have made important progress, but there continue to be unspoken and perhaps unconscious bias that affect their advancement in management roles (Madsen & Andrade, 2018). It is important to address issues of context and theoretical models to continue this line of inquiry in Mexico. Although progress has been made in terms of gender equality, achieving gender equity in opportunity entrepreneurship will require the work of many in organizational, social, political, and educational contexts. This work is important because Mexico needs all the talent it can get to create and manage the next generation of businesses.

The first steps educators can take to address the issue is to conduct periodical assessment of student learning to identify specific behaviors that need to be targeted. Driscoll and Wood (2007) argued that changes to pedagogy and curriculum should be based on data taken from well-planned assessment practices. The present study can serve as an example of how survey-based assessment designed to measure self-efficacy in managerial behaviors (entrepreneurship and leadership) can be conducted. Based in the insights discussed here and some of the findings from previous research (Valencia-Arias & Marulanda-Valencia, 2019), the following recommendations may serve those responsible for managing business-related graduate programs in Mexico:

1. Measure entrepreneurship and leadership self-efficacy periodically. These measures combine to form a set of behaviors individuals in management roles need to perform effectively to launch and grow their businesses (Drucker, 1993; Díaz et al. 2019).
2. Include discussions in the curriculum about masculinity and femininity on management styles. This will help educators and students become familiar with existing literature on the gender gap in management roles in Mexico. By reading and discussing the issue, innovative solutions may emerge.
3. Provide financial training and access to market information, so that students understand how new business ventures are funded, and the role of financial institutions. This will help students feel more confident about their abilities to work with venture capitalist and financial institutions, which will eventually lead to more businesses being funded.
4. Create activities and competitions (i.e., pitch competitions), so that students can practice articulating their business ideas, and capital procurement skills. These activities tend to be better effective in raising students' confidence while preparing to make the case in support of specific business ventures.
5. Invite diverse groups of faculty and guest speakers to reduce the influence of the traditional management education approach, which tends to focus on Western, male-dominated contexts. This kind of diversity is consistent with modern workplaces and should help promote values of diversity and excellence in business.

Conclusion

This study aimed to examine self-efficacy in female and male graduate students in Northwestern Mexico in terms of specific behaviors characteristic of opportunity entrepreneurs. It serves as an example for educators interested in learning how to conduct assessment on management self-efficacy. The focus of the study was on opportunity entrepreneurship, which involves engaging in business ventures that create significant value added and yield greater rewards for entrepreneurs than self-employment or subsistence entrepreneurship. The results can appeal to an international audience because they add to one line of inquiry that concerns researchers in many societies: females in opportunity entrepreneurship. In this case, females and males reported similar levels of self-efficacy across two leadership and five entrepreneurship dimensions. This suggest that internal factors do not account for the gender gap in opportunity entrepreneurship. There was, however, one dimension in which males reported higher levels of self-efficacy than the female group: initiating investor relationships. Entrepreneurship education can go a long way in addressing this difference.

Hopefully, teachers, organizational mentors, and perhaps policymakers will be able to use the findings presented here to enhance teaching, training programs, and supporting developmental activities, in line with the recommendations set forth by Madsen and Andrade (2018) and Driscoll and Wood (2007). These recommendations include making sure that aspiring female entrepreneurs become aware of the internal and environmental factors that may cause them to underestimate their competencies, and engaging in assessment, training, and educational programs designed based on relevant theoretical models and current research. Educators can help their students overcome internal barriers by making simple, but important changes in the curriculum. These changes include making implementing assessment practices to evaluate managerial behaviors, openly discussing the gender gap in management, and formulating a team of diverse faculty to lead the programs.

There are four limitations in this study. First, this was a convenience sample that was surveyed to address one case. The results may not be extrapolated to the general population or to other, similar groups. Second, the study was cross-sectional, so it is possible that results can change with time with the same sample. Third, the short LBDQ was developed as part of the behavioral leadership model developed in the late 1940s, since then, other leadership models that may be more appropriate for the modern work and business environment have emerged (i.e., transformational, and authentic leadership), and the use of these newer approaches may affect the results as well. Finally, the consideration structure dimension showed low internal consistency ($\alpha < .70$), meaning the results in this construct may be unreliable.

Future studies should focus on the financial aspects of business creation from a gender perspective. More information is needed on potential biases of investors or internal factors in women in Mexico that may affect their beliefs about securing funds to launch a new enterprise. There has been too little research conducted so far on these matters, and the new information could go a long way in informing the strategies employed by those charged by helping to create a more equitable and entrepreneurial society. Although the findings presented here may not be extrapolated, hopefully, researchers and educators in other countries will be compelled to conduct their own research to better understand the gender gap in their contexts.

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