

# Reinforcing Confidence? Gender Gaps in Entrepreneurial Self-Efficacy in Finland

Sanna Joensuu-Salo, Anmari Viljamaa and Elina Varamäki

Seinäjoen University of Applied Sciences, Finland

[sanna.joensuu-salo@seamk.fi](mailto:sanna.joensuu-salo@seamk.fi)

[anmari.viljamaa@seamk.fi](mailto:anmari.viljamaa@seamk.fi)

[elina.varamaki@seamk.fi](mailto:elina.varamaki@seamk.fi)

**Abstract:** Entrepreneurial self-efficacy (ESE) - the belief in one's ability to perform entrepreneurial tasks - is a well-established predictor of entrepreneurial entry, persistence, and outcomes (Chen et al., 1998; Zhao et al., 2005; Newman et al., 2019). A large body of research shows systematic gender gaps in ESE, with women consistently reporting lower entrepreneurial confidence than men (Wilson et al., 2007; Shinnar et al., 2012). Yet most evidence comes from Anglo-American contexts, while Nordic welfare states such as Finland, globally recognized for gender equality, remain understudied. Moreover, although ESE is often treated as an antecedent of entrepreneurial behavior, fewer studies examine how entrepreneurial experience itself may reinforce ESE, potentially creating a self-reinforcing cycle that disadvantages women. This study addresses these gaps by analyzing data from the 2025 Finnish Global Entrepreneurship Monitor (GEM) Adult Population Survey (N = 2,050). We investigate how gender, age, household size, income, role model exposure, and business ownership predict ESE, and whether ownership mediates gender differences. Multinomial logistic regression results show that gender, age, role model exposure, and business ownership significantly predict ESE, while household size and income do not. Women are markedly less likely than men to report moderate (OR = 0.38,  $p < .001$ ) or strong (OR = 0.67,  $p < .001$ ) self-efficacy. Business ownership is the strongest predictor: owners are over three times more likely to report moderate ESE and more than eleven times more likely to report strong ESE compared to non-owners ( $p < .001$ ). Bootstrapped mediation analysis further demonstrates that ownership partially mediates the gender gap: men are more likely to own businesses, and this experience significantly strengthens self-efficacy. While ESE clearly influences entrepreneurial entry, our findings also highlight the reverse pathway: entrepreneurial experience reinforces ESE (Markman et al., 2002). By situating Finland in global debates on gender and entrepreneurship, this study contributes new evidence from a high-equality context and underscores the dynamic interplay between self-belief and entrepreneurial experience. The results suggest that policy measures enabling women to gain entrepreneurial exposure early, even through small-scale or low-risk ventures, could help break the cycle in which lower ESE reduces entrepreneurial engagement and lack of experience further suppresses confidence.

**Keywords:** Entrepreneurial self-efficacy, Gender gap, Entrepreneurship, Global entrepreneurship monitor

---

## 1. Introduction

Entrepreneurial self-efficacy (ESE) refers to an individual's belief in their ability to perform the tasks necessary for starting and managing a business. It is widely recognized as a central psychological construct in entrepreneurship research (Chen et al., 1998; Zhao et al., 2005; Newman et al., 2019). High levels of ESE are consistently linked to entrepreneurial entry, persistence, and success. Understanding ESE is therefore critical for explaining who becomes an entrepreneur and why some individuals are more likely to pursue and sustain entrepreneurial activity than others.

Despite its theoretical and empirical importance, previous research has repeatedly documented gender differences in entrepreneurial self-efficacy. Women tend to report lower confidence in their entrepreneurial abilities compared to men (Wilson et al., 2007; Shinnar et al., 2012). This finding has been replicated across diverse national contexts and remains one of the most robust patterns in the field. However, the majority of studies have been conducted in Anglo-American settings, while Nordic welfare states, which are globally recognized for their high levels of gender equality, remain relatively underexplored. Examining gendered patterns of ESE in Finland therefore provides a valuable opportunity to assess whether psychological gender gaps persist in a context characterized by strong institutional support and egalitarian values.

In addition, existing research has primarily treated ESE as an antecedent of entrepreneurial behavior. While individuals with high self-efficacy are more likely to engage in entrepreneurship, fewer studies have examined the reverse relationship: how entrepreneurial experience may, in turn, enhance ESE. This feedback mechanism could create a self-reinforcing cycle, where men's greater participation in entrepreneurship further strengthens their self-belief, while women's limited access to entrepreneurial experience sustains lower confidence (Markman et al., 2002).

The purpose of this study is to investigate how gender and related individual-level factors influence entrepreneurial self-efficacy in Finland and to examine whether business ownership mediates the relationship between gender and self-belief. Specifically, the study explores how age, household size, income, role model exposure, and current business ownership predict ESE levels, and whether differences in entrepreneurial experience account for part of the gender gap in self-efficacy.

By situating Finland within global debates on gender and entrepreneurship, this study contributes to a more nuanced understanding of how institutional equality interacts with individual-level psychological mechanisms. The findings provide empirical evidence on whether gender equality at the societal level is mirrored by equality in entrepreneurial confidence. From a policy perspective, the results highlight the importance of creating opportunities for women to gain entrepreneurial experience through mentoring, training, and low-risk venture programs, thereby helping to reduce persistent disparities in entrepreneurial self-efficacy and participation.

## **2. Theoretical Framework and Hypotheses Development**

Although entrepreneurial self-efficacy (ESE) is a domain-specific belief, it does not form in a social vacuum. Social role expectations and gender stereotypes about what an entrepreneur looks like or how they behave shape the way in which women and men interpret their own skills and chances of success. Prior studies show that the entrepreneurial role is stereotypically associated with masculine traits such as assertiveness and risk-taking, and that these stereotypes dampen women's entrepreneurial intentions (Gupta et al., 2009; Díaz-García & Jiménez-Moreno, 2010; Jennings and Brush, 2013). ESE research echoes this. Studies of adolescents, students, and adults find that women often report lower ESE than men, and that these differences are associated with weaker entrepreneurial career intentions (Wilson et al., 2007; Newman et al., 2019; Langowitz and Minniti, 2007; Koellinger et al., 2013). Meta-analytic evidence further indicates that self-efficacy is a predictor of entrepreneurial outcomes (Miao et al., 2017; Glosenberget al., 2022), which makes understanding gendered patterns in ESE all the more important.

Beyond psychological and cultural explanations, gender differences in entrepreneurial self-efficacy are also shaped by economic constraints. Thébaud (2010) shows that women's entry into entrepreneurship is more sensitive to financial risk and potential income loss, reflecting gendered differences in economic security. These asymmetric risk conditions can discourage entrepreneurial engagement and influence how women assess their entrepreneurial capability, thereby indirectly shaping self-efficacy. Such constraints may be further reinforced by gendered evaluation practices among financial gatekeepers, which can limit women's access to external finance and, in turn, their opportunities to accumulate entrepreneurial experience (Carter et al., 2007).

At the country level, Finland is high on global gender-equality indices, ranking second in the Global Gender Gap Report (World Economic Forum, 2025), and offers strong institutional support for entrepreneurship. Yet, GEM-based analyses show a persistent gender gap in entrepreneurial activity: women are less likely than men have entrepreneurial intentions and report lower perceived entrepreneurial skills (Saarela et al., 2024). These findings are in line with broader cross-national evidence that gender gaps in perceived entrepreneurial skills and confidence remain considerable even in advanced, equality-oriented economies (Koellinger et al., 2013). Taken together, prior research suggests that gendered ideas about entrepreneurship and persistent differences in perceived abilities translate into systematically lower ESE among women, even in contexts where equality is relatively high and formal barriers relatively low. We therefore hypothesize:

*H1. Women report significantly lower entrepreneurial self-efficacy (ESE) than men, even within an equality-oriented context such as Finland.*

Social cognitive theory posits that self-efficacy develops through mastery experiences, i.e., successful performance of relevant tasks, as well as vicarious learning, social persuasion, and the interpretation of affective states, all of which affect the objectives, effort, and persistence of individuals (Bandura, 1997). In the entrepreneurial domain, owning and actively managing a business provides rich opportunities for mastery experiences: entrepreneurs identify business opportunities, mobilize resources, acquire customers, and cope with uncertainty. Handling entrepreneurial challenges in practice gives individuals concrete evidence that they can, in fact, handle such challenges, thereby strengthening ESE. Empirical studies support this mechanism. Zhao et al. (2005) show that previous entrepreneurial experience positively predicts ESE, which in turn mediates the relationship between experience and entrepreneurial intentions. Similarly, Chen et al. (1998) find that entrepreneurs score higher on ESE than managers, suggesting that the experience of starting and running a business is associated with stronger ESE. Also, a comprehensive systematic review by Newman et al. (2019) shows that entrepreneurial experience—whether captured as prior founding, self-employment, or similar role

exposure—is one of the most consistent antecedents of higher ESE, while more recent meta-analytic evidence confirms the robustness and relevance of ESE for entrepreneurial outcomes (Glosenberget al., 2022).

Current business ownership can be considered a particularly strong form of mastery experience: individuals who are presently running a business are continuously exposed to entrepreneurial tasks and feedback, which should reinforce their belief that they can successfully perform entrepreneurial roles. In line with this reasoning and prior studies, we hypothesize:

*H2. Entrepreneurial experience, operationalized as current business ownership, positively predicts entrepreneurial self-efficacy.*

Gender differences in ESE do not arise solely from internalized stereotypes. They are also shaped by gendered patterns of entrepreneurial activity. Cross-national studies show that women are less likely than men to be nascent entrepreneurs or business owners, and that this lower propensity is strongly associated with lower perceived entrepreneurial skills (Koellinger et al., 2013). Using GEM data for Finland, Saarela et al. (2024) similarly show a persistent gender gap in start-up intentions and perceived entrepreneurial skills, along with higher fear of failure among women. These findings suggest that in apparently egalitarian contexts, women's lower participation in entrepreneurship is coupled with lower self-assessed capability in the entrepreneurial domain.

Prior studies demonstrate that entrepreneurial experience and related learning opportunities influence entrepreneurial intentions largely by increasing ESE (Ciuchta & Finch, 2019; Zhao et al., 2005), and that the translation of experiential inputs, such as education, into ESE is gendered (Wilson et al., 2007; Shinnar et al., 2014). Recent work also finds that ESE mediates the effect of perceived public support on entrepreneurial intentions and that this indirect effect is stronger for women than for men (Ouni & Jarboui, 2025). Furthermore, evidence from a study by Demsey and Jennings (2014) suggests that prior successful entrepreneurial activity mediates the relationship between gender and ESE. Ciuchta and Finch (2019), however, argue that there is little to suggest that the impact of entrepreneurial experience on ESE should vary across genders. Indeed, their study confirms that ESE mediates the influence of experience on intentions but finds little difference between men and women. They further suggest that the "initial entrepreneurial experiences may be less likely to occur for females" (p. 8). Indeed, it is reasonable to expect that men's higher likelihood of owning and managing a business gives them more opportunities to accumulate mastery experiences in the entrepreneurial domain, thereby elevating their ESE. Women, by contrast, are less often business owners and therefore have fewer opportunities to build ESE through entrepreneurial experience.

In sum, existing mediation models have mostly cast ESE as the mediator between experience and entrepreneurial intentions. We propose that experience—operationalized as current business ownership—acts as a mediator between gender and ESE itself. That is, part of the observed gender difference in ESE may reflect differential access to the experiential building blocks of ESE that come with owning and running a business. Testing this mediation provides a way to examine how much of the gender gap in ESE can be attributed to unequal participation in entrepreneurship, over and above any direct effects of gendered norms or stereotypes. Hence, we hypothesize:

*H3. Business ownership mediates the relationship between gender and entrepreneurial self-efficacy, so that men's greater likelihood of owning and managing a business partly explains their higher levels of self-belief.*

### **3. Data and Method**

#### **3.1 Sample Description**

The empirical analysis is based on individual-level data from the 2025 Finnish Global Entrepreneurship Monitor (GEM) Adult Population Survey (APS). The dataset includes 2,050 respondents aged 18–64 years, representing a demographically diverse and nationally balanced sample of the Finnish working-age population. The youngest respondents were 18 years old and the oldest 64. The age distribution was even, with the modal age groups in their early and mid-thirties ( $M \approx 41$ ). Only four cases were missing due to refusal or "don't know" responses, indicating excellent data completeness.

The gender distribution was nearly equal: 915 women (49.6%) and 929 men (50.4%). In terms of household structure, 31.8% lived alone, 33.3% in two-person households, and 34.9% in households with three or more members. Respondents were classified into three household income terciles, representing the lowest, middle, and highest 33% of income earners. Approximately 33.0% were middle-income earners, 23.3% belonged to the

highest-income group, and the remainder to the lowest-income category. Exposure to entrepreneurial role models was relatively common: 53.5% of respondents personally knew at least one entrepreneur, while 46.5% did not. In terms of entrepreneurial activity, 12.7% reported owning and managing a business, whereas 87.3% did not.

### 3.2 Analytical Approach

All statistical analyses were conducted using IBM SPSS Statistics, version 30 and AMOS version 30. Two complementary analytical strategies were applied to examine how gender and business ownership predict entrepreneurial self-efficacy, while age, household size, income, and role model exposure were included as control variables. Entrepreneurial self-efficacy was measured with the item: “You personally have the knowledge, skill, and experience required to start a new business.” Responses were given on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). For further analysis, respondents were categorized into three groups indicating weak belief (ratings 1–2), moderate belief (rating 3), and strong belief (ratings 4–5).

First, a multinomial logistic regression was used to predict three ordered levels of entrepreneurial self-efficacy (weak, moderate, strong) based on the explanatory variables described above. The reference category for the dependent variable was “weak belief,” and income was entered as three terciles (lowest, middle, highest), with the highest tercile serving as the reference group. Odds ratios (ORs) and 95% confidence intervals (CIs) were reported to assess the magnitude and direction of associations. Listwise deletion was used to handle missing data, and statistical significance was set at  $p < .05$ .

Second, a bootstrapped mediation analysis was conducted to examine whether business ownership mediates the relationship between gender and entrepreneurial self-belief. Gender (0 = woman, 1 = man) served as the independent variable, business ownership (binary) as the mediator, and entrepreneurial self-efficacy (treated as a continuous indicator based on the five-point scale) as the dependent variable. The mediation model was estimated using structural equation modeling with AMOS, and bootstrapping with 5,000 resamples was applied to obtain bias-corrected confidence intervals for the indirect effect, ensuring robust estimates of mediation strength and reliability. Although entrepreneurial self-efficacy was measured with a single Likert-type item, it was treated as a continuous variable for the purposes of the mediation model, a common approach when the scale has multiple ordered response options and when bootstrapping is used to address non-normality.

The first two hypotheses (H1–H2) were tested using multinomial logistic regression, while H3 was examined through a bootstrapped mediation analysis. This combined strategy enables both the identification of significant predictors of entrepreneurial confidence and the exploration of the mechanisms through which gender influences self-efficacy via entrepreneurial experience.

## 4. Results

### 4.1 Multinomial Logistic Regression

The overall regression model provided a significant improvement over the intercept-only model,  $\chi^2(16) = 339.36$ ,  $p < .001$ , with a Nagelkerke  $R^2$  of .20, indicating a moderate amount of explained variance. Four predictors — gender, age, role model exposure, and business ownership — were statistically significant, whereas household size and income were not consistently significant predictors. Table 1 presents the results of the multinomial logistic regression predicting entrepreneurial self-efficacy (ESE), with “weak belief” as the reference category.

**Table 1: Multinomial logistic regression predicting entrepreneurial self-efficacy (reference category = weak belief, n = 918)**

Predictor	Comparison (DV)	B	SE	OR	95% CI for OR	p
<b>Age (years)</b>	Moderate vs. Weak	−0.021	0.007	0.98	[0.97, 0.99]	.002
	Strong vs. Weak	0.008	0.005	1.01	[1.00, 1.02]	.080
<b>Gender (0=woman, 1=man)</b>	Moderate vs. Weak	−0.813	0.173	0.44	[0.32, 0.62]	< .001
	Strong vs. Weak	−0.402	0.112	0.67	[0.54, 0.83]	< .001
<b>Household size (ref. = three or more persons)</b>	Moderate vs. Weak (one-person hh)	−0.067	0.229	0.94	[0.60, 1.47]	.772

Predictor	Comparison (DV)	B	SE	OR	95% CI for OR	p
	Moderate vs. Weak (two-person hh)	0.098	0.204	1.10	[0.74, 1.65]	.629
	Strong vs. Weak (one-person hh)	0.058	0.150	1.06	[0.79, 1.42]	.699
	Strong vs. Weak (two-person hh)	-0.211	0.137	0.81	[0.62, 1.06]	.124
<b>Role model (knows entrepreneur)</b>	Moderate vs. Weak	-0.327	0.176	0.72	[0.51, 1.02]	.062
	Strong vs. Weak	-0.681	0.117	0.51	[0.40, 0.64]	< .001
<b>Income (mid vs. high)</b>	Moderate vs. Weak	-0.269	0.134	0.76	[0.59, 0.99]	.045
	Strong vs. Weak	-0.388	0.160	0.68	[0.50, 0.93]	.015
<b>Income (low vs. high)</b>	Moderate vs. Weak	-0.064	0.202	0.94	[0.63, 1.40]	.753
	Strong vs. Weak	-0.099	0.243	0.91	[0.56, 1.46]	.684
<b>Owns and manages business</b>	Moderate vs. Weak	-1.137	0.315	0.32	[0.17, 0.60]	< .001
	Strong vs. Weak	-2.396	0.199	0.09	[0.06, 0.14]	< .001

Note. OR = odds ratio; CI = confidence interval. Nagelkerke  $R^2 = .20$ ; Model  $\chi^2(16) = 339.36$ ,  $p < .001$ .

Older individuals were less likely to report moderate entrepreneurial self-efficacy compared to younger respondents (OR = 0.98,  $p = .002$ ), indicating a small but consistent negative association between age and moderate self-belief. Gender differences were also clear: women were significantly less likely than men to report either moderate (OR = 0.44,  $p < .001$ ) or strong (OR = 0.67,  $p < .001$ ) entrepreneurial self-efficacy. Knowing an entrepreneur personally increased the likelihood of strong ESE (OR =  $1/0.51 \approx 1.96$ ,  $p < .001$ ), confirming the positive role of role model exposure in strengthening entrepreneurial confidence. Business ownership was the strongest predictor in the model. Owners were over three times more likely to report moderate ESE (OR =  $1/0.32 \approx 3.13$ ,  $p < .001$ ) and more than eleven times more likely to report strong ESE (OR =  $1/0.09 \approx 11.11$ ,  $p < .001$ ) compared to non-owners. Household size did not show any significant relationship with ESE: respondents living alone, with two people, or with three or more persons reported similar confidence levels. Income terciles also showed mixed but generally weak associations; while middle-income respondents showed a slightly lower probability of high ESE, neither income nor household structure emerged as robust predictors of entrepreneurial self-belief.

#### 4.2 Mediation Analysis: Gender, Business Ownership, and Entrepreneurial Self-Efficacy

To further understand the mechanisms behind the gender gap in entrepreneurial self-efficacy, a mediation analysis was conducted using structural equation modeling. The model examined whether business ownership functions as an intermediary pathway linking gender to entrepreneurial self-belief. A bootstrapping approach with 5,000 resamples was used to obtain bias-corrected confidence intervals for the indirect effect.

The results revealed a clear pattern of relationships. Men were significantly more likely than women to own and manage a business (path a:  $\beta = 0.11$ , 95% BC CI [0.07, 0.15]), indicating that entrepreneurial experience is unevenly distributed between genders. In turn, business ownership strongly predicted entrepreneurial self-belief (path b:  $\beta = 0.39$ , 95% BC CI [0.35, 0.43]), even when controlling for gender. Respondents with direct entrepreneurial experience consistently reported higher confidence in their entrepreneurial abilities.

The indirect (mediated) effect of gender on entrepreneurial self-efficacy through business ownership was positive and statistically significant ( $\beta \approx 0.04$ ), with bias-corrected bootstrap confidence intervals that did not include zero. This indicates that part of the gender gap in entrepreneurial self-efficacy can be explained by differences in entrepreneurial experience.

At the same time, the direct effect of gender on entrepreneurial self-belief remained significant (path c:  $\beta = 0.11$ , 95% BC CI [0.07, 0.15]), demonstrating partial mediation. Men's greater likelihood of having entrepreneurial experience contributes to their higher self-assessed entrepreneurial capability, but other psychological or sociocultural mechanisms, such as confidence norms, perceived risk, or gendered role expectations, continue to shape how men and women evaluate their entrepreneurial competence.

The statistical analyses provided clear evidence in support of the study's three hypotheses.

H1, which predicted that women would report significantly lower entrepreneurial self-efficacy (ESE) than men, was supported. Women were consistently less likely than men to express confidence in their entrepreneurial abilities, even after controlling for demographic and background factors. This finding confirms that gender differences in entrepreneurial self-belief persist in Finland, despite the country's reputation as one of the most gender-equal societies in the world.

H2, which proposed that entrepreneurial experience, operationalized as current business ownership, positively predicts self-efficacy, also received strong empirical support. Individuals who owned and managed a business reported substantially higher levels of ESE than those without such experience. This result reinforces the theoretical argument that direct entrepreneurial engagement strengthens confidence through mastery and experiential learning.

H3 addressed the mediating role of business ownership in the relationship between gender and entrepreneurial self-efficacy. This hypothesis was also supported. The mediation analysis showed that part of the gender gap in ESE can be explained by differences in entrepreneurial experience: men were more likely to own and manage a business, and this experience was strongly associated with higher confidence. However, the mediation was only partial, suggesting that additional psychological, cultural, or social factors continue to influence gendered patterns of entrepreneurial self-efficacy.

Taken together, these results confirm the study's conceptual model. Gender remains an important factor shaping entrepreneurial confidence, but much of this difference operates through unequal access to entrepreneurial experience. While Finland's institutional equality provides a supportive environment, the findings indicate that experiential and psychological inequalities still play a key role in sustaining the gender gap in entrepreneurial self-efficacy.

## **5. Discussion and Conclusions**

The results of this study provide new evidence on how gender and entrepreneurial experience shape entrepreneurial self-efficacy (ESE) in the Finnish context. Consistent with previous research (e.g., Wilson et al., 2007; Shinnar et al., 2012; Newman et al., 2019), women reported significantly lower levels of entrepreneurial self-efficacy than men, supporting H1. This finding indicates that gender differences in entrepreneurial confidence persist even in societies that are often portrayed as gender-equal. While Finland has long been recognized for its institutional commitment to equality, the labor market remains highly segregated by gender (Finnish Institute for Health and Welfare, 2023). Such structural divisions may limit opportunities for women to gain entrepreneurial experience and contribute to enduring disparities in self-perception and confidence. In this sense, formal equality does not automatically translate into psychological or experiential equality.

The strong positive relationship between entrepreneurial experience and self-efficacy, supporting H2, aligns with Bandura's (1997) social cognitive theory, which identifies mastery experiences as the primary source of self-efficacy. Individuals who own and manage a business reported markedly higher confidence in their entrepreneurial abilities, confirming that ESE is not a static personality trait but a dynamic construct that develops through learning and experience (Markman et al., 2002; Zhao et al., 2005). Importantly, this study contributes to a growing recognition that ESE can function not only as an antecedent of entrepreneurial behavior but also as its outcome. Entrepreneurial experience appears to reinforce self-belief, creating a self-reinforcing cycle in which those who engage in entrepreneurship build further confidence, while those who lack such experience, more often women, are less likely to develop strong entrepreneurial self-efficacy. This dynamic helps explain how gendered participation gaps can persist even in relatively egalitarian contexts.

The partial mediation effect found for H3 deepens this interpretation. Business ownership accounted for part of the gender difference in ESE, but not all of it. This suggests that while entrepreneurial experience strengthens self-belief, broader social and cultural mechanisms continue to shape gendered confidence. These may include gendered expectations, socialization processes, and differences in perceived risk tolerance or legitimacy (Gupta et al., 2009). The findings resonate with the concept of cumulative advantage (Minniti & Bygrave, 2001), where initial disparities in confidence and opportunity amplify over time, sustaining structural and psychological inequalities. Thus, gender gaps in ESE should be understood as emerging from the interaction between individual experience, social learning, and institutional context.

Taken together, the results show that Finland's institutional equality provides a supportive foundation, yet gendered structures and norms within work and entrepreneurship continue to influence confidence formation.

The Finnish labor market remains among the most segregated in Europe (Finnish Institute for Health and Welfare, 2023), and entrepreneurship tends to concentrate in gendered sectors. Such conditions shape who gains access to entrepreneurial experiences and how entrepreneurial capability is perceived. The persistence of gendered patterns in ESE underlines the need to move beyond structural measures of equality toward understanding the psychological and experiential dimensions of entrepreneurship.

From a policy perspective, these findings suggest that closing the gender gap in entrepreneurial confidence requires more than equal access to resources; it also requires equal access to experience. Initiatives that provide opportunities for women to gain direct entrepreneurial exposure through experiential learning, mentoring, and role model programs can help build the mastery experiences necessary to strengthen ESE. Supporting such pathways could mitigate the self-reinforcing cycle that currently disadvantages women and move toward more genuinely inclusive entrepreneurial ecosystems.

**Ethics declaration:** Ethical approval was not required for this study, as it used anonymized survey data.

**AI declaration:** Artificial intelligence tools were employed only for linguistic refinement, such as grammar editing and improving wording. All analyses, interpretations, and substantive contributions to the manuscript were produced by the authors.

## References

- Ahl, H. (2006) "Why research on women entrepreneurs needs new directions", *Entrepreneurship Theory and Practice*, Vol. 30, No. 5, pp. 595–621.
- Ahl, H.J. and Nelson, T. (2015) "How policy positions women entrepreneurs: A comparative analysis of state discourse in Sweden and the United States", *Journal of Business Venturing*, Vol. 30, No. 2, pp. 273–291.
- Bandura, A. (1997) *Self-efficacy: The exercise of control*, W.H. Freeman and Company, New York.
- Carter, S., Shaw, E., Lam, W., and Wilson, F. (2007) "Gender, entrepreneurship and bank lending: The criteria and processes used by bank loan officers in assessing applications", *Entrepreneurship Theory and Practice*, Vol. 31, No. 3, pp. 427–444. <https://doi.org/10.1111/j.1540-6520.2007.00181.x>
- Chen, C. C., Greene, P. G., and Crick, A. (1998) "Does entrepreneurial self-efficacy distinguish entrepreneurs from managers?", *Journal of Business Venturing*, Vol. 13, No. 4, pp. 295–316.
- Ciuchta, M. P., and Finch, D. (2019) "The mediating role of self-efficacy on entrepreneurial intentions: Exploring boundary conditions", *Journal of Business Venturing Insights*, Vol. 11, e00128.
- Dempsey, D., and Jennings, J. (2014) "Gender and entrepreneurial self-efficacy: A learning perspective", *International Journal of Gender and Entrepreneurship*, Vol. 6, No. 1, pp. 28–49.
- Díaz-García, M. C., and Jiménez-Moreno, J. (2010) "Entrepreneurial intention: The role of gender", *International Entrepreneurship and Management Journal*, Vol. 6, No. 3, pp. 261–283.
- Finnish Institute for Health and Welfare (THL) (2023) "Equality infographics on work-life segregation", *THL – Gender equality website*. Available at: <https://thl.fi/en/topics/migration-and-cultural-diversity/integration-and-inclusion/gender-equality/equality-infographics-on-work-life-segregation>
- Glosenberg, A., Phillips, D., Schaefer, J., Pollack, J. M., Kirkman, B. L., McChesney, J., Noble, S. M., Ward, M. K., and Foster, L. L. (2022) "The relationship of self-efficacy with entrepreneurial success: A meta-analytic replication and extension", *Journal of Business Venturing Insights*, Vol. 18, e00342.
- Gupta, V.K., Turban, D.B., Wasti, S.A. and Sikdar, A. (2009) "The role of gender stereotypes in perceptions of entrepreneurs and intentions to become an entrepreneur", *Entrepreneurship Theory and Practice*, Vol. 33, No. 2, pp. 397–417.
- Henry, C., Foss, L. and Ahl, H. (2023) "Gender and entrepreneurship research: A review of methodological approaches", *International Small Business Journal*, Vol. 41, No. 3, pp. 263–287. <https://doi.org/10.1177/0266242614549779>
- Jennings, J. E., and Brush, C. G. (2013) "Research on women entrepreneurs: challenges to (and from) the broader entrepreneurship literature?", *The Academy of Management Annals*, Vol. 7, No. 1, pp. 663–715.
- Koellinger, P. D., Minniti, M., and Schade, C. (2013) "Gender differences in entrepreneurial propensity", *Oxford Bulletin of Economics and Statistics*, Vol. 75, No. 2, pp. 213–234.
- Langowitz, N., and Minniti, M. (2007) "The entrepreneurial propensity of women", *Entrepreneurship Theory and Practice*, Vol. 31, No. 3, 341–364.
- Markman, G.D., Balkin, D.B. and Baron, R.A. (2002) "Inventors and new venture formation: The effects of general self-efficacy and regretful thinking", *Entrepreneurship Theory and Practice*, Vol. 27, No. 2, pp. 149–165.
- Miao, C., Qian, S., and Ma, D. (2017) "The relationship between entrepreneurial self-efficacy and firm performance: A meta-analysis of main and moderator effects", *Journal of Small Business Management*, Vol. 55, No. 1, pp. 87–107.
- Minniti, M. and Bygrave, W. (2001) "A dynamic model of entrepreneurial learning", *Entrepreneurship Theory and Practice*, Vol. 25, No. 3, pp. 5–16.
- Newman, A., Obschonka, M., Schwarz, S., Cohen, M. and Nielsen, I. (2019) "Entrepreneurial self-efficacy: A systematic review of the literature on its theoretical foundations, measurement, antecedents, and outcomes, and agenda for future research", *Journal of Vocational Behavior*, Vol. 110, Part B, pp. 403–419.

- Ouni, S., and Jarboui, A. (2025) "The link between perceived public support and entrepreneurial intention mediated by entrepreneurial self-efficacy and entrepreneurial climate: Gender as a moderator", *Public Organization Review*, Vol. 25, pp. 1631–1654.
- Saarela, M., Björk, P., Kotavaara, O., Muhos, M., and Heikkinen, M. (2024) "Gender gap in entrepreneurial potential in Finland and reflecting its underlying causes", *Journal of Northern Studies*, Vol. 16, No. 2, pp. 33–54.
- Shinnar, R.S., Giacomini, O. and Janssen, F. (2012) "Entrepreneurial perceptions and intentions: The role of gender and culture", *Entrepreneurship Theory and Practice*, Vol. 36, No. 3, pp. 465–493.
- Thébaud, S. (2010) "Gender and entrepreneurship as a career choice: Do self-assessments of ability matter?", *Social Psychology Quarterly*, Vol. 73, No. 3, pp. 288–304. <https://doi.org/10.1177/0190272510377882>
- Wilson, F., Kickul, J. and Marlino, D. (2007) "Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education", *Entrepreneurship Theory and Practice*, Vol. 31, No. 3, pp. 387–406.
- World Economic Forum. (2025) *Global Gender Gap report*, [online], <https://www.weforum.org/publications/global-gender-gap-report-2025/digest/>
- Zhao, H., Seibert, S.E. and Hills, G.E. (2005) "The mediating role of self-efficacy in the development of entrepreneurial intentions", *Journal of Applied Psychology*, Vol. 90, No. 6, pp. 1265–1272.