

**Women's Self-Efficacy and Social Learning in Agripreneurship**

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### Introduction

Engaging women in agripreneurship is a key step to promoting women's economic empowerment, improving their overall livelihoods and contributing sustainable economic growth (Dhar, 2023; Singh et al., 2022). Agripreneurship creates on-farm diversification to grow an agribusiness (Fitz-Koch et al., 2017). However, there are barriers to agripreneurship for women. Women agripreneurs and entrepreneurs often lack self-efficacy, professional development opportunities, support, and mentorship (Baldwin, 2022; Laukhuf, 2014). Overcoming these barriers by joining cooperatives could provide women with the support and mentorship to increase their self-efficacy. Cooperative membership has numerous benefits, such as increasing economic and environmental sustainability and building support systems (Liang et al., 2022; Ma et al., 2023). Therefore, the purpose of this exploratory study was to better understand the influence of group membership on women's perceived agripreneurial self-efficacy in Ohio. The objectives for this research were: (1) describe women's engagement in cooperatives, social learning, and self-efficacy in agripreneurship, and (2) compare the self-efficacy in agripreneurship and social learning of women cooperative members and non-members.

### Theoretical Framework

This study uses Bandura's Social Learning theory and self-efficacy construct (Bandura, 1977). Social learning theory underscores that people learn behaviors and cognitive strategies through observation and that this knowledge can be learned without direct enforcement (Bandura & Walters, 1977). For women, working in teams and involvement in cooperatives could increase their self-efficacy. Women in cooperatives, like women in teams, may perceive an increase in learning and participate in more programs increasing their self-efficacy (Hammond & Feinstein, 2005; Yang, 2020). Self-efficacy can deeply influence a person's choice of activities especially in the presence of personal and external challenges (Bandura, 1977; Bandura & Walters, 1977).

### Methods

This exploratory *ex post* research compares two groups which already exist (cooperative members and non-members) to determine their social learning and self-efficacy using a survey approach (Creswell & Creswell, 2023). The population was Ohio women agripreneurs. A convenience sample of women farmers/ranchers in Ohio ( $n = 32$ ) was included in the analysis. The *Qualtrics* questionnaire measured agripreneurial self-efficacy using McGee et al.'s (2009) entrepreneurial self-efficacy scale (ESE) and social learning via Vrieling-Teunter et al.'s (2023) dimensions of social learning (DSL) questionnaire with adjusted wording for agripreneurs and cooperative membership. For objective one, the scores from the questionnaire were analyzed using descriptive statistics. For objective two, an independent samples t-test was conducted since assumptions were met. *Post hoc* Cronbach's alpha determined the questionnaire's internal consistency (Creswell & Creswell, 2023). *Post hoc* Cronbach's alpha was acceptable for all questionnaire constructs ( $\alpha = .94$  to  $.71$ ) except practice integration ( $\alpha = .22$ ). Therefore, practice integration was dropped from the analysis as it did not meet internal consistency standards (Creswell & Creswell, 2023).

### Results

Many participants' businesses gross at least \$100,000 a year ( $n = 10$ ), are limited liability companies ( $n = 14$ ), farm livestock ( $n = 11$ ), and engage in off-farm employment ( $n = 15$ ).

Participants averaged of 26.62 years of engagement in agriculture, 15.92 years of business ownership, and were neither satisfied nor dissatisfied with their business's performance ( $M = 3.54$ ,  $SD = 1.10$ ). For objective one, most women were members of cooperatives ( $n = 21$ ). On average, participants had moderate agripreneurial self-efficacy ( $M = 84.52$ ,  $SD = 19.32$ ) and moderate social learning ( $M = 3.55$ ,  $SD = 1.17$ ). A Pearson correlation between ESE and DSL was conducted, but was insignificant ( $r = .16$ ,  $p = .42$ ). For objective two, non-members' agripreneurial self-efficacy was higher ( $M = 86.84$ ,  $SD = 19.34$ ) than members ( $M = 83.30$ ,  $SD = 19.67$ ). However, this difference (3.54, 95% CI: -11.32 to 18.41) was not statistically significant and had a small effect size ( $t_{30} = .487$ ,  $p = .63$ ,  $d = .181$ ). On average, members had higher social learning ( $M = 3.69$ ,  $SD = 1.25$ ) than non-members ( $M = 3.33$ ,  $SD = 1.05$ ). However, this difference (.36, 95% CI: -1.35 to .62) was not statistically significant and had a small effect size ( $t_{24} = -.77$ ,  $p = .45$ ,  $d = .311$ ).

### Conclusions

Women agripreneurs in Ohio are engaged in a variety of agricultural enterprises. All participants were engaged in more than one enterprise, and many of them had additional employment. Our study did not find a correlation between self-efficacy and social learning or evidence that cooperative membership impacts social learning and self-efficacy contradicting previous research (Hammond & Feinstein, 2005; Yang, 2020). This could be due to the nature of our sample. Cooperative members had slightly higher scores for social learning, while non-members of cooperatives had slightly higher scores for agripreneurial self-efficacy. While the difference between the scores was insignificant, the small effect sizes suggest that further exploration of these topics is necessary. Overall, women agripreneurs had medium to high agripreneurial self-efficacy scores, suggesting that they are confident in their business acumen.

### Implications/Recommendations/Impact

Though, their satisfaction with their business' performance was neutral. This gap between their self-efficacy and business satisfaction could either highlight a mismatch between their self-efficacy and ability or success in one business over the other, since business performance satisfaction was in general rather than specific to the number of businesses that were owned and operated by participants.

Despite their small effect sizes, the insignificant differences for agripreneurial self-efficacy and social learning could suggest that women engage in social learning regardless of cooperative membership. Future research should attempt to discern the influence of social learning on agripreneurial self-efficacy and the role of cooperatives in supporting women's social learning. Overall, increasing the sample size could illuminate further information about the impacts of cooperative membership on social learning and self-efficacy.

Ohio's women agripreneurs have a wealth of experience in agriculture and business. Programs for them should address their needs and reflect the variety of agricultural enterprises in Ohio as well as their backgrounds. Further, program topics should connect business performance with practical applications. While this research is unclear whether cooperative membership impacts agripreneurial self-efficacy or social learning, further investigations based on this exploratory study could identify any meaningful connections. Understanding how women agripreneurs learn and if agricultural cooperatives enhance their learning, could enable more attuned education and training for women agripreneurs. Supporting women's engagement in agripreneurship could see more positive social and economic returns for their communities.

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