Tackling Gender Disparities in Entrepreneurship

Starting a business, namely one that is profitable and successful, is not a path for the faint of heart. This is especially true for women. The social and economic challenges faced by women in entrepreneurship, especially those from lower socioeconomic status, are more abundant and more persistent than those faced by men who have pursued entrepreneurship.

Early supports, like the Network for Teaching Entrepreneurship's (NFTE) entrepreneurship programs, can reduce barriers experienced by women that hinder the success of their entrepreneurial ambitions. This brief presents data from female and male students who completed NFTE's program in school year 2020-21 and finds that:

- Females end with higher post-assessment scores and greater growth in entrepreneurial mindset than males
- Females have greater entrepreneurial self-efficacy than males
- Gender differences in entrepreneurial intentions shrinks by the end of the program

Together, these findings suggest that investment in entrepreneurship and career-building programs can empower young girls and women to pursue entrepreneurial careers and own their futures.

Entrepreneurship is a contributing force to the economy: according to data from the U.S. Small Business Association, small businesses created 10.5 million net new jobs compared to the 5.6 million generated by large businesses from 2000 to 2019, and small businesses have accounted for 65.1% of net new job creation since 2000 (U.S. Small Business Association, 2020). There is, however, a gender gap in entrepreneurial behavior. For example, as of 2019 in the United States, 3.3% of men were self-employed with employees, whereas that same figure was 1.3% for women (OECD, 2021). Another report finds a gender gap in early-stage entrepreneurial activity, with women's entrepreneurial activity at 80% of men's and even lower representation in high-growth sectors like information technology (Global Entrepreneurship Monitor, 2021). This discrepancy represents a missed opportunity, as women entrepreneurs can significantly contribute to economic development by generating new jobs, increasing the gross domestic product (Bahmani-Oskooee et al., 2013; Ayogu and Agu, 2015), and reducing social exclusion (Langowitz and Minniti, 2007; Rae, 2015).

Gender-specific barriers

Research has underscored lower self-efficacy and confidence and fear of failure among the reasons for the lower rate of woman entrepreneurship (Dawson & Henley, 2015; Noguera et al., 2013). That is, in addition to systematic economic and regulatory barriers, women are hindered by poorer internal, noncognitive factors in pursuing entrepreneurship. Coleman and Robb (2012) note that fewer educational opportunities and experiences with training limit a woman's willingness to take risks. According to data on postsecondary secondary degree completions in the United States, despite being *overrepresented* among non-business degree completions, female students are *underrepresented* among students earning degrees in business fields, and even more so in entrepreneurship degree programs (U.S. Department of Education, 2021).

NFTE AS A SOLUTION

As the literature suggests, females are less likely to pursue entrepreneurship, possibly because of poorer noncognitive factors such as self-efficacy and risk-taking and less engagement in educational and training opportunities. To address these gaps, early intervention programs that equip women with the mindsets, skills, and opportunities that can propel them into diverse careers, including entrepreneurship, are crucial.

One such program is the Network for Teaching Entrepreneurship (NFTE), a nonprofit organization that globally serves about 60,000 K-12 students each year, about 30,000 of whom are within the United

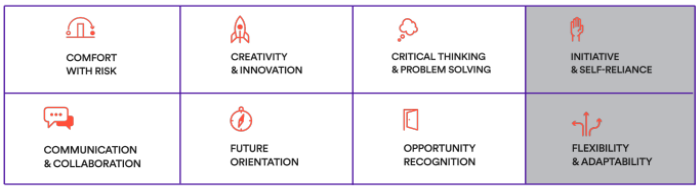
States. NFTE uses an experiential approach to develop not only the hard skills required for business but also the noncognitive skills crucial to young people's success in the 21st century workplace.

Although NFTE drives some of its K-12 students to start businesses while enrolled in one of its courses, oftentimes impact is not felt until years later, only when graduates enter the workforce and start businesses. To evaluate shorter-term impact, NFTE developed the Entrepreneurial Mindset Index (EMI), an assessment designed to measure eight domains of noncognitive skills such as comfort with risk, creativity and innovation, and future orientation.

What is the Entrepreneurial Mindset Index? (EMI)

An entrepreneurial mindset is a set of skills that enable people to identify and make the most of opportunities, overcome and learn from setbacks, and succeed in a variety of settings.

NFTE's EMI is a largely reliable and valid instrument to measure entrepreneurial mindset. The eight domains below are captured with Likert items (questions that ask students to self-report agreement) and Situational Judgement Tests (questions that ask students to respond to a real-world scenario that is tied to a domain).



The EMI is a key outcome of interest to NFTE as research shows that an entrepreneurial mindset is valued by employers, boosts educational attainment and performance, and is crucial for creating new businesses.

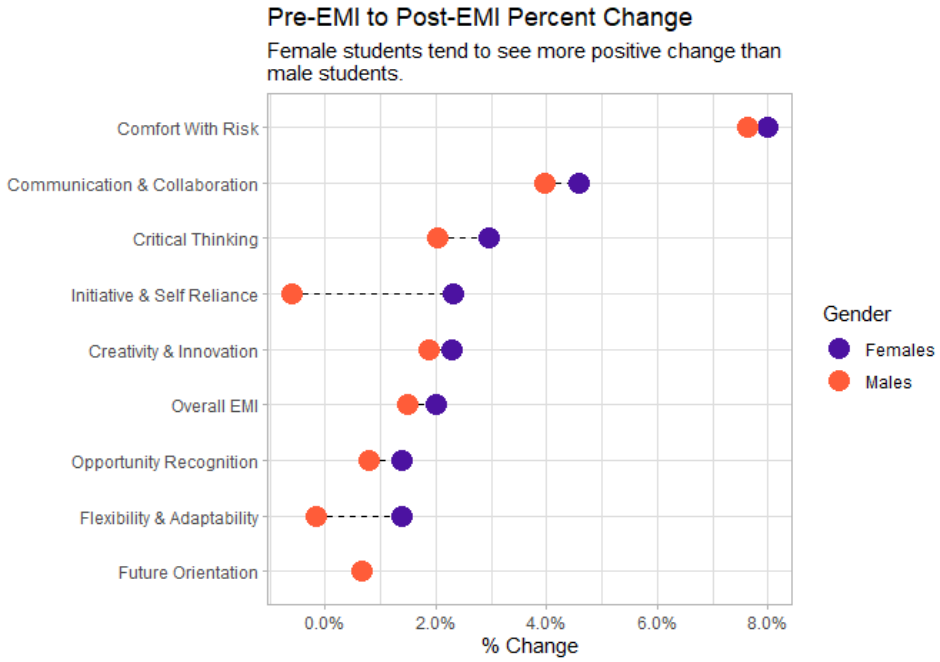
NFTE students are given the EMI at the start of their course to establish a baseline, and once again at the end, so growth can be measured. This brief analyzed EMI data from 1,126 middle and high school students (607 females and 519 males in the 2020-21 school year) who had both pre- and post-EMI scores. The following section highlights some of the gender-based findings of NFTE students on the EMI.

FINDINGS

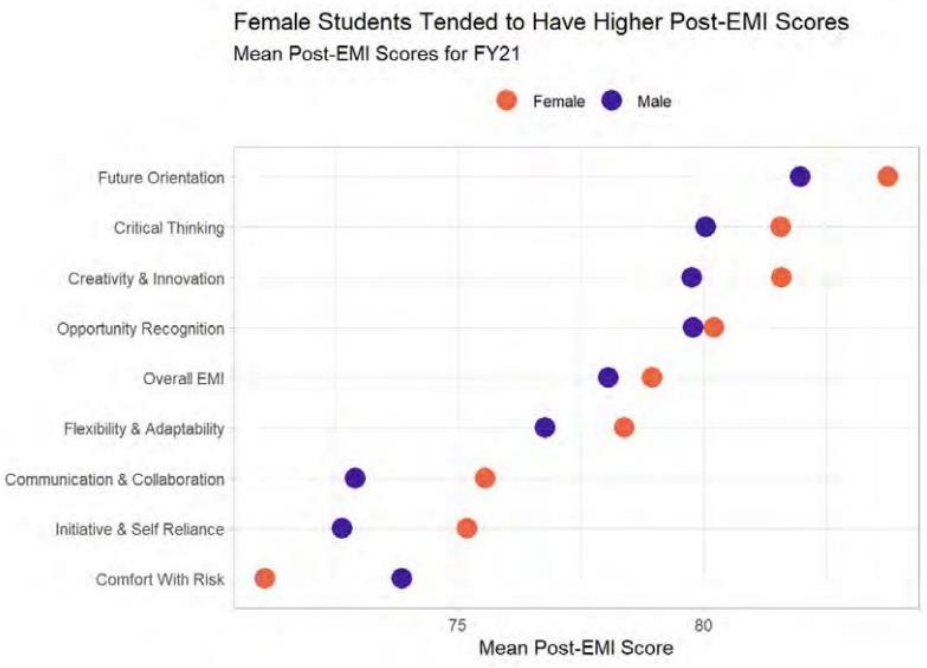
Finding 1: Females end with higher post-EMI scores and greater growth in EMI domains than males

When comparing EMI scores across males and females at baseline, we found that females scored significantly higher than males on the overall pre-EMI, a composite score of the eight underlying domains. However, when broken down by domain, females were found to score lower than males on comfort with risk by 1 percentage point.

After receiving NFTE training in entrepreneurship, we found that female students showed a statistically larger gain from pre- to post-EMI than male students, even after controlling for pre-EMI scores. Of note, females outpaced males in the domain where they had started off lower – comfort with risk.



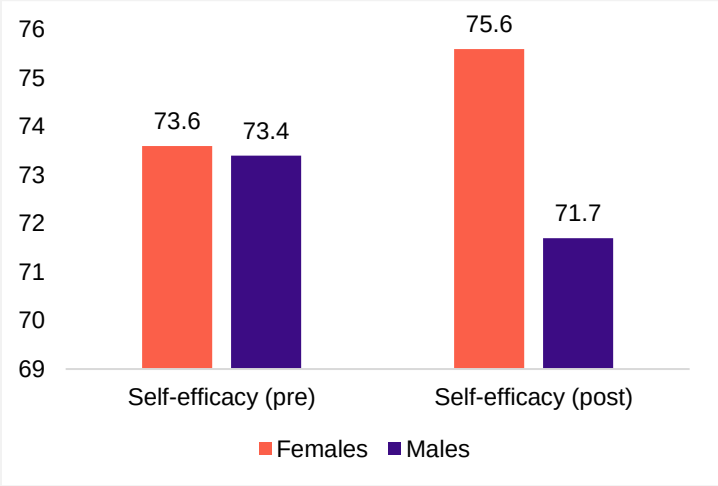
Not only did females demonstrate larger growth in mindset domains, but they also ended with higher post-EMI scores than males in all domains other than comfort with risk, signaling that they had strong noncognitive skills relevant to entrepreneurship by the end of the course.



Finding 2: Females grow in entrepreneurial self-efficacy at almost the same rate of decline among males

Lack of self-efficacy has been identified as a key barrier among females entering entrepreneurship. Our data shows that upon completion of the NFTE curriculum, female students grew in entrepreneurial self-efficacy, measured by the survey item “I feel I have the knowledge and skills required to start a

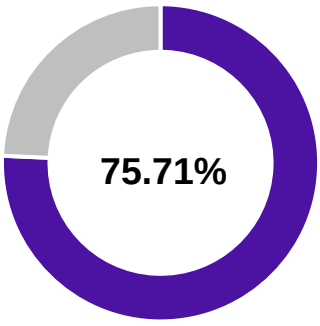
business," while male students in fact saw a decline in almost the same magnitude as females' growth. Considering that both male and female students began the courses with comparable levels of self-efficacy, this boost for females is particularly noteworthy.



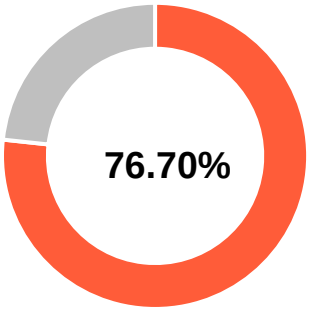
Finding 3: Gender differences in entrepreneurial intentions shrinks

Beyond gains in entrepreneurial mindset and self-efficacy, we found that our courses impact entrepreneurial ambitions in other ways too: at the start of NFTE courses, self-report data indicates that males are 2.7% more likely than females to want to own a business, but by the end, that gap shrinks to 1.0%. While males are still more likely to want to own a business than females, the difference is smaller by the end of the program. Notably, more than three-quarters of students express that they want to own a business, regardless of gender, showcasing the potential of youth entering the entrepreneurship field in the future.

Percent of **females** who would like to own business at post-EMI



Percent of **males** who would like to own business at post-EMI



CONCLUSION

Results from the present analysis suggest that early intervention programs such as NFTE may serve to reduce the gender gaps that exist in entrepreneurship and the development of career ready skills. Girls in the NFTE program have larger gains in the EMI, suggesting that the investment of entrepreneurship and career-building programs can empower young girls and women to develop positive non-cognitive skills, especially in entrepreneurial self-efficacy and comfort with risk, areas

that have been found to be positively correlated with entrepreneurial behavior. In addition to NFTE females growing their non-cognitive skills and mindsets, the gap between males and females in terms of entrepreneurial intention had shrunk by the end of the NFTE program.

Recommendations

Insights from NFTE data and the extant literature draw attention to the need for:

- Longer term trends of entrepreneurship among males and females. Beyond entrepreneurial intention and start up, there is also the challenge of managing and growing a business. Given that only two out of every three businesses with employees will last two years (U.S. Bureau of Labor Statistics) there is a need for longer term analysis on gender-based factors for business growth and sustained success.
- Research exploring the intersectionality of identities among women, such as differences in entrepreneurial outcomes by immigrant status, age, and family background.
- Continued investment in early intervention education and training programs like NFTE that help build students' noncognitive and hard skills to be agents of their own education and careers. Gender-sensitive support such as pairing female students with female advisors in business or explicitly confronting gender-based stereotypes may help to bolster the effect of these programs.

The findings from this brief suggest that investment in entrepreneurship and career-building programs like NFTE may empower young girls and women to pursue entrepreneurial careers and own their futures. To learn more about NFTE and its programming, please visit www.nfte.com.

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