

Social Enterprise Pathways for Advancing Recycling and Upcycling Behaviors in Local Communities



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INTRODUCTION

- Social Entrepreneurship (SE) has become a viable approach to advancing sustainable development by integrating economic viability with social and environmental impact (Méndez-Picazo et al., 2021).
- SE generates revenue and empowers communities as well as long-term systems change: Government services are lacking in creating collective responses to global challenges (Global Innovation Index, 2024).
- The circular economy (CE) offers an alternative to “take-make-dispose” production models, prioritizing waste efficiency and reduction (UNECE, 2024).
- CE innovations are optimizing product life cycles and delivering measurable solutions for waste reduction, especially environmental and economic benefits across industries such as apparel, food systems, packaging, and electronics (Harish et al., 2025).
- SE and CE intersect to create a promising social enterprise that acts as a catalyst for implementing CE principles by linking technological innovation with community-level engagement.
- Even with these advances, the United States still lags behind other developed nations in recycling participation and effectiveness (United States Environmental Protection Agency, 2025).
- This is attributed to inconsistencies across local programs, a lack of convenience, weak incentive mechanisms, etc. Social enterprises that focus on repair, reuse, and upcycling offer promising solutions.
- However, there is a knowledge gap regarding how community-level factors shape the success of recycling and upcycling initiatives. (Galila et al., 2024; Wijekoon et al., 2025).

METHODS

- Thirteen FSU students (8 female, 5 male; average age 20) were recruited through snowball sampling for this study.
- A literature review and three pilot-test interviews informed the development of a survey questionnaire that included demographic items, open-ended questions, and multiple-choice questions.
- To provide a more in-depth qualitative component, one-on-one interviews with participants were conducted. Each interview was held in person and lasted approximately 15 minutes.
- Survey responses will be analyzed using Qualtrics and qualitative content analysis.

RESULTS

- 75% of respondents have received prior education on recycling/upcycling - primary sources for receiving information about recycling = social media (69.2%), school/university (46.2%), and family/friends (46.2%).
- Respondents identified electronics (84.6%), metal (69.2%), and glass (53.8%) as the hardest to recycle.
- Major obstacles are a lack of awareness on how to handle materials and a lack of access to proper disposal.
- Over 50% of participants view recycling/upcycling as moderately to very effective in reaching CE goals.
- Overall, all respondents agreed to the community benefits of recycling.

DISCUSSION & CONCLUSION

- High baseline awareness exists, but there is a significant gap between knowledge and effective recycling practices.
- Moving from general awareness to specific education on difficult-to-recycle materials should be highlighted.
- Local businesses can transform recycling challenges faced by the community into socially entrepreneurial initiatives
- Integrating upcycling adds value to recycling and can promote a circular economy.
- FSU students show interest in recycling but lack the necessary access and education on disposal.

RESEARCH PURPOSE & QUESTIONS

The purpose of this study was to investigate how residents and college students can transform household recycling practices into social entrepreneurial initiatives that support circular economy goals.

Research Questions (RQ)

- RQ1:** How does public awareness, education, and community engagement influence household recycling behaviors and the development of local upcycling businesses?
- RQ2:** Which waste materials are most challenging to recycle or upcycle, and how can communities develop innovative, socially entrepreneurial strategies for their reuse?
- RQ3:** How can recycling and upcycling processes complement one another to strengthen circular economy outcomes, protect the environment, and empower local communities?

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Figure 1. Five categories of recycling and waste.



Figure 2. The overall smart waste bin system.

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