

Abstract

This study aims to determine interest in composting and environmental issues, as well as specific motivations to engage in environmentally friendly practices, with a focus on composting. A 14-question survey was used to gauge the interest and participation in said practices by 315 participants who were a combination of University of Florida students and nonstudent Gainesville, Florida residents. The results from this dataset indicated an interest in environmental issues and a desire to participate in composting among participants. The main perceived barriers to participation were a lack of time, space and education. Based on the results, it can be concluded that there is a desire and perceived need to compost and perform other 'environmentally friendly' actions among participants. However, there is a disconnect when it comes to putting those interests and desires into action. There has been a major culture shift concerning ideas about the importance of environmental issues, but much work remains to be done in putting these newly popular ideals into actions.

Introduction

"Every year, U.S. landfill and trash incinerators receive 167 million tons of garbage." (Platt)¹. There has been an increased focus on environmental issues, however, individual participation in activities aimed at reducing negative impacts on the environment is still lower than desired. In 2018, a study found that only 35% of the population in the U.S. participates in composting (Paben)². "EPA estimates that in 2018, 2.6 million tons of food (4.1 percent of wasted food) was composted." (EPA)³. This study aims to gauge public perceptions about composting, perceived barriers to participating in composting, as well as attitudes about environmental issues and practices in general. We aimed to gauge these attitudes across generations, but also with a focus on college aged people (18-24 years). This was done through a survey format of a series of questions regarding composting and their individual knowledge of what is involved. Also, to have a holistic approach, the survey included questions regarding their environmental views and their actions towards recycling, gardening, buy/growing organic, and the onsite composting facility at the University of Florida.

Objectives

- Gauge public perceptions on composting and other waste reduction practices.
- Measure current participation in composting and other environmentally cognizant practices among participants.
- Understand perceived barriers to participating in these practices, with a focus on composting.
- Understand public perception about the perceived importance of environmental issues.

Methods

- A 14-question survey was constructed using Qualtrics software after research on previous surveys of a similar nature gauging interest/participation of composting and other environmental issues.
- Various question techniques were used to elicit responses from participants such as a Likert scale, open, and multiple-choice questions.
- Participants were recruited, the majority of whom were college aged (18-24 years) recruited around the campus of the University of Florida and the surrounding Gainesville area through canvassing with fliers containing a QR code that linked participants to the survey using their smartphone or tablet device.
- Responses were collected and data was analyzed.

Results

- 315 total participants ranged in age from 18 years to over 65 years old (Under 18yrs n=8; 18-24yrs n=163; 25-34yrs n=52; 35-44yrs n=13; 45-54yrs n=19; 55-64yrs n=32; Over 65yrs n=16).
- **Figure 1** depicts the results of question #2 of the survey indicating that 27% of respondents stated that they participate in composting.
- **Figure 2** depicts the results of question #4 of the survey indicating that 54% of respondents stated that they were interested in learning how to compost and 17% stating they were uninterested, while 29% were neither interested nor uninterested.
- **Figure 3** depicts the results of question #5 of the survey indicating that 91% of the participants stated that individual composting does have an impact on our environment.
- **Figure 4** depicts the results of question #12 of the survey indicating most participants do not believe that composting requires a lot of space or technical knowledge. Results also indicate most participants believe that composting takes a lot of time and effort.
- **Figure 5** depicts the results of question #6 of the survey indicating that 89% of respondents stated environmental issues are important to them.
- **Figure 6** depicts the results of question #13 of the survey indicating that 94% of participants participate in re-using materials that would otherwise be thrown out, 85% participate in aluminum can recycling, 82% participate in glass recycling, and 67.7% participate in newspaper recycling.
- Results from other questions in the survey indicate that over 90% of people have heard of composting before. The most common reasons why participants indicated they don't compost is lack of space, uneducated about the process, lack of interest, lack of time, and price. When asked where they would like to compost, about 60% of participants wanted to start composting at home, 20% at a facility and 15% do not want to compost. About 80% of participants are willing to purchase a product that turns food waste into compost in 21 days. The older age group was more willing to purchase the technology to turn food waste into compost in 21 days. 60% of participants garden or want to garden themselves. The top two reasons for why participants compost or would be willing to compost is because they don't like to waste, and it saves space in a landfill.

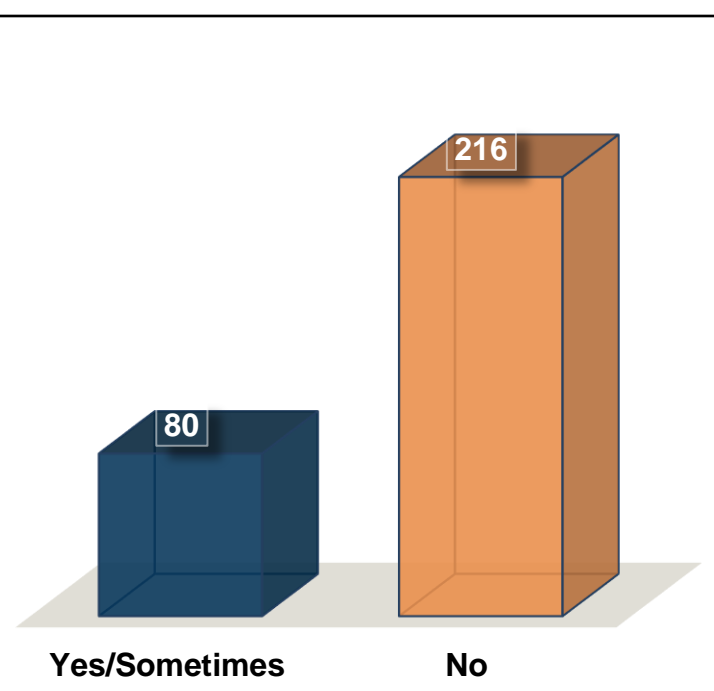


Figure 1: Do you compost yourself?

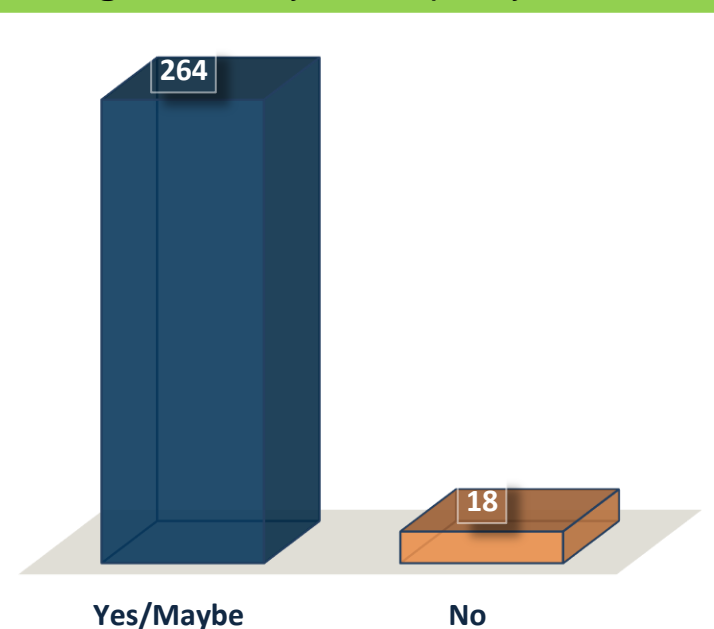


Figure 3: Does individual composting make an impact on the environment?

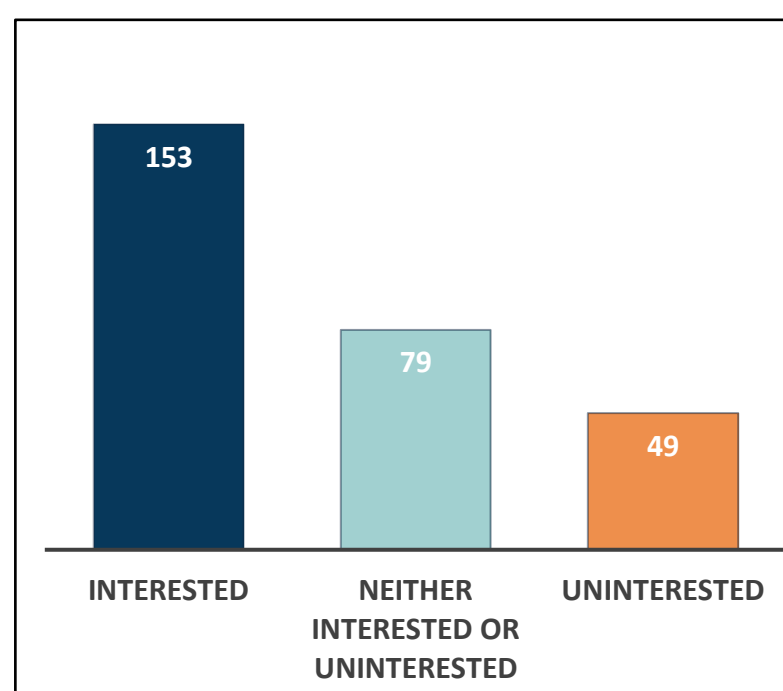


Figure 2: Interest in learning how to compost

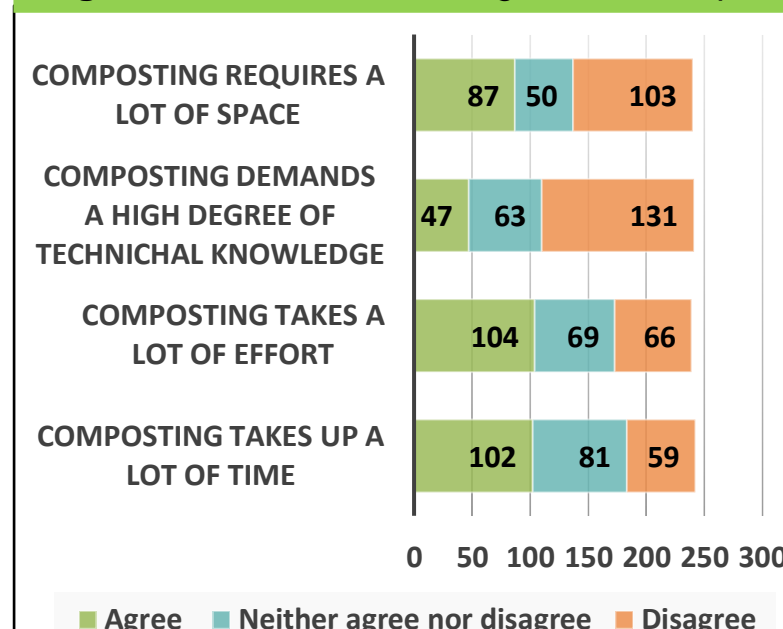


Figure 4: How much do you agree or disagree with the following?

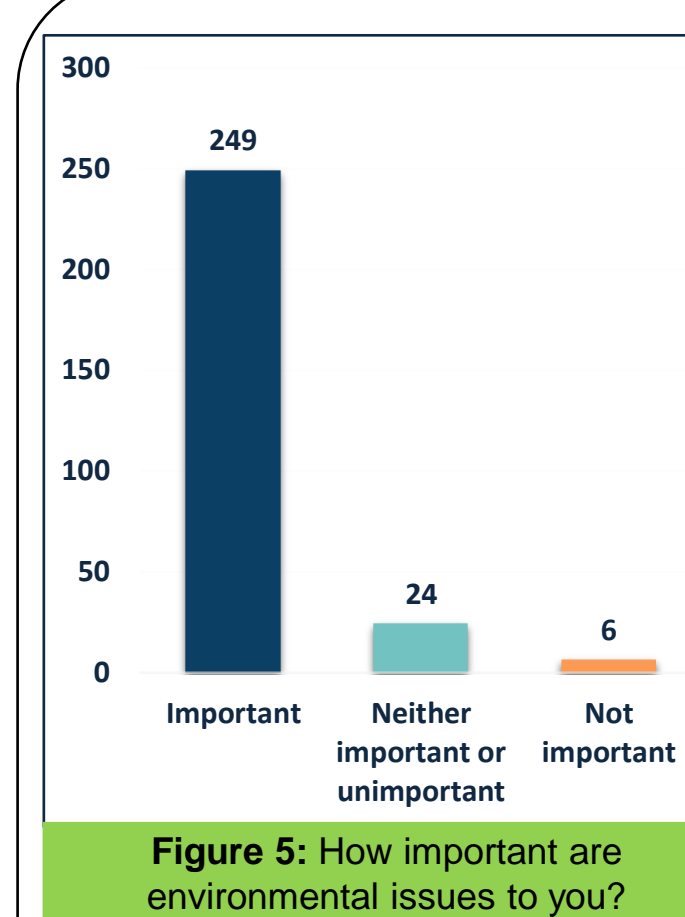


Figure 5: How important are environmental issues to you?

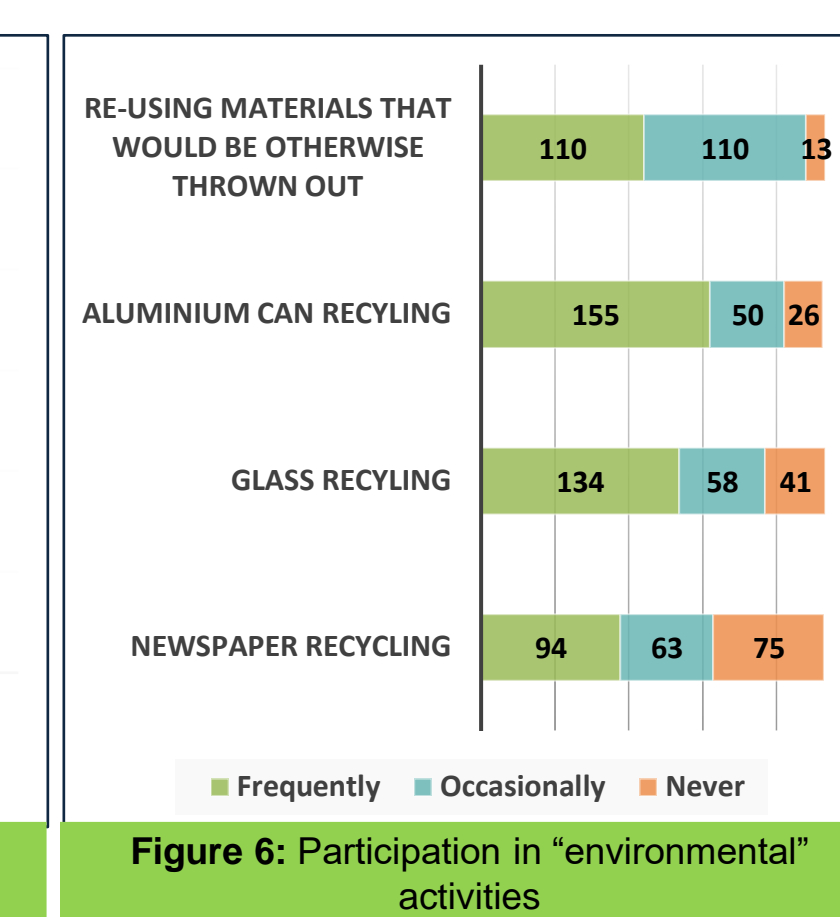


Figure 6: Participation in "environmental" activities

Discussion/Conclusion

The data indicates there is interest in environmental issues and an interest in composting amongst participants. There is also significant participation in environmentally conscious activities such as recycling various materials that have a perception of not taking much time or effort. However, there seems to be a disconnect in the perception of the amount of time and effort required to perform composting. The desire to help the environment is demonstrated in the results. Specifically, over 50% of participants are interested in participating in composting, with 91% admitting they understand that composting can have a positive impact on the environment. However, the misconception that composting takes a large amount of time and effort seems to be the biggest barrier to participation. The author believes these issues need to be addressed via education of the general public about the actual process and requirements of composting. This will help bridge the gap between interest in having a positive impact on the environment and people believing that composting is worth their time and effort based on the level of positive impact they can achieve. The authors believe that participation in composting could reach levels as high as current levels of participation in recycling if the public perceived it as something that did not require a lot of effort and was easy to begin implementing into their lives. The overall issue is not a lack of desire to compost, but rather a lack of implementation and action.

One recommended improvement of this study would be to determine methods to increase full participant completion of the survey. 74% of the 315 total participants completed all the questions of the survey. There was a drop-off in full completion of the survey around questions 11 and 12 (the larger Likert scale questions). It may be helpful to rearrange the questions in order to put the 'larger' questions at the start of the survey.

Future Work

The authors would like to delve deeper into the reasons that determine an individual's decision to compost or not. In future works, we would like to expand participation in similar surveys to include a more representative sample of other age groups, not just focusing on college-aged individuals. We would also like to determine more specific initiatives that would likely increase overall participation in composting. We are hoping to obtain funding to be able to put our desired educational initiatives into action to help bridge the gap between the desire to compost and help the environment, and putting those desires into action.

References

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3. EPA. "Reducing the Impact of Wasted Food by Feeding the Soil and Composting." Environmental Protection Agency, 29 Oct. 2020, <https://www.epa.gov/sustainable-management-food/reducing-impact-wasted-food-feeding-soil-and-composting#>

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