

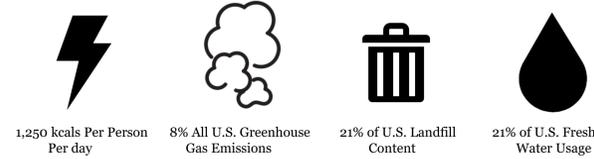
# Strategies, Motivations and Unmet Needs to Reduce Household Food Waste Reported by Self-Identified Food Conservers

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## INTRODUCTION

Wasted food results in (1):



Food waste produced at the household level contributes 43% of total food waste in the U.S. (1) Household food waste involves the interaction between technical, temporal and spatial factors along with individuals' tastes, preferences, & food habits. (2-4) Self-determination theory (SDT) is increasingly being used to facilitate food waste mitigation. (5) SDT suggests a range of motivational regulatory styles. On the self-determined behavior end of the spectrum, intrinsic motivation is the most powerful and sustainable form, occurring when individuals pursue a specific behavior because it provides them with personal satisfaction and enjoyment. Conversely, on the non-self-determined end, extrinsic motivation is less effective and occurs when behavior is intended to obtain outcomes outside from the behavior itself- often in response to external pressures or consequences.(6)

An estimated 35% of Americans "put a lot of effort" to reduce food waste, suggesting an opportunity to utilize a positive deviance approach to identify waste reduction strategies that may be acceptable and applicable to other consumers. (7) Positive deviance is defined as an approach that is based on the observations of successful individuals in determining solutions to problems compared to their peers who may have the same constraints. (8) However, little is known regarding the motivations driving strategies and behaviors of active food conservers.

## AIM

The purpose of the study was to identify food conservation practices, and psychosocial drivers, and unmet waste mitigation needs of self-identified food conservers.

## METHODS

### Participant Recruitment:

- Self-identifying food conservers recruited through an online University weekly email during the Fall 2021.
- Interested individuals screened for eligibility criteria: over the age of 18 years, not enrolled in an on-campus meal plan, ability to complete an online survey, and access to microphone for online focus group.

### Focus Groups:

- Each 90-minute recorded Zoom focus group included questions on current household food waste-related behaviors, why participants classify themselves as food conservers, and their inspiration to conserve food.
- All interview transcripts were professionally transcribed verbatim. Three independent researchers thematically coded transcripts. Discrepancies were addressed and resolved by a fourth-party researcher.

## RESULTS

Table 1: Participant Characteristics

Identity	
Male	7
Female	18
Transgender	1
None of the above	1
Household Size	
Total Members	2.6 ± 1.4
Children	1.5 ± 1.0
Race	
White	13
Black/African American	1
Asian	11
Other	2
Education	
High school/GED	2
Some college (1-3 years)	5
College (4+ years)	20
Income <sup>1</sup>	
<\$10,000	4
\$10,000-\$30,000	0
\$30,000-\$50,000	2
\$50,000-\$70,000	4
\$70,000-\$100,000	7
\$100,000+	8

Participant characteristics of self-identified food conservers (n = 27).

1: Two participants declined to provide income information

Figure 1: Self-Determination Theory continuum as applied to reported food conservation motivations

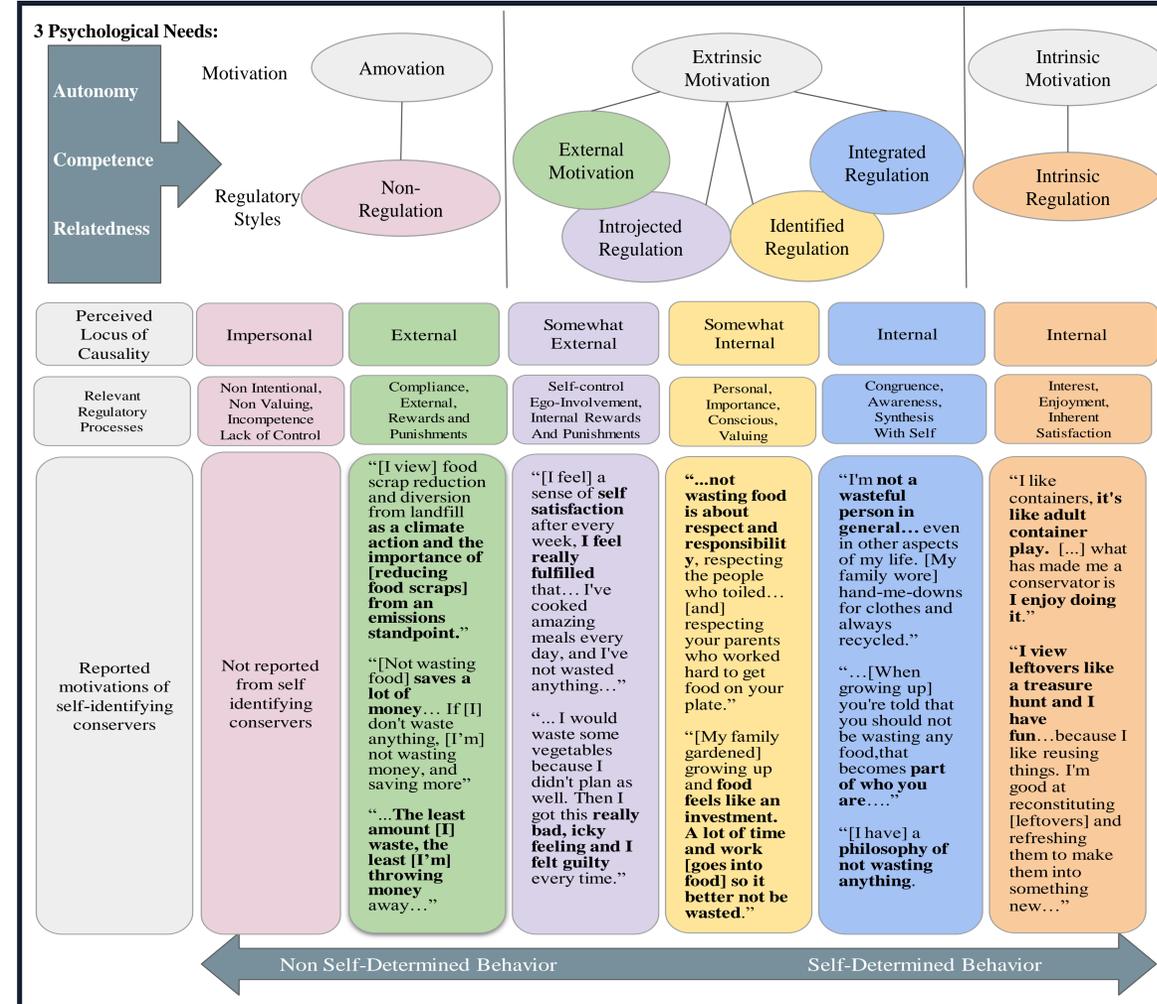
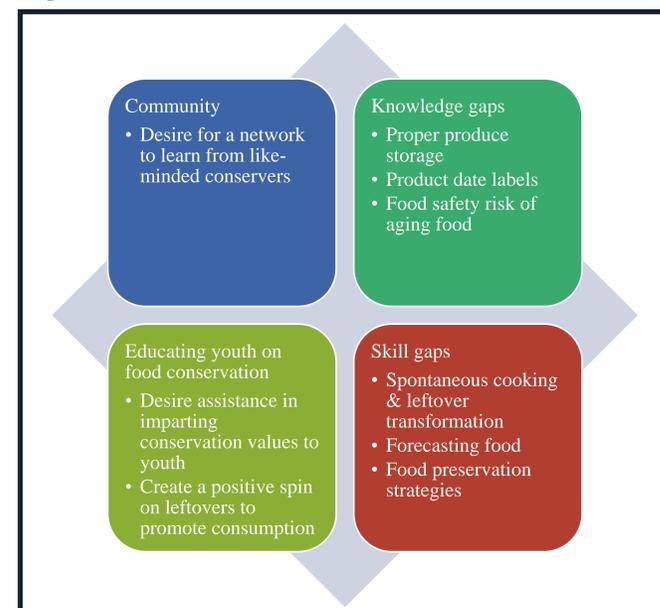


Figure 2: Psychosocial drivers and reported food behaviors of self-identified food conservers



Figure 3: Self-identified food conservers unmet needs



## CONCLUSIONS

Self-identified food conservers reported a variety of household food waste mitigation strategies that can be summarized into five processes: plan, shop, store/organize, prepare/cook, and reuse/recover. These household food conservation practices may be promoted to other non-conservator households to reduce household food waste. Consumers reported inspirations for food waste conservation efforts that can be categorized across the SDT self-determined behaviors, ranging from extrinsic to intrinsic motivation. Identification of these can be utilized to design tailored interventions towards sustainable food conservation practices.

These findings suggest relatively high food literacy among self-identified food conservers. However, unmet needs to increase conservation ability were also reported, suggesting opportunities for improvement by addressing cooking skill deficits, improving knowledge and skills related to food storage a preservation, and providing opportunities to engage with other conservers to create community and share strategies.

## ACKNOWLEDGEMENTS

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USDA National Institute of Food and Agriculture  
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