



Wasted food: A qualitative study of U.S. young adults' perceptions, beliefs and behaviors

Cassandra J. Nikolaus^a, Sharon M. Nickols-Richardson^a, Brenna Ellison^{b,*}

^a Department of Food Science and Human Nutrition, University of Illinois at Urbana-Champaign, 905 S. Goodwin Ave., Urbana, IL, 61801, United States

^b Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, 1301 W. Gregory Dr., Urbana, IL, 61801, United States

ARTICLE INFO

Keywords:

Wasted food
Food waste
Waste behavior
Young adults
Consumer perceptions

ABSTRACT

U.S. consumers, namely young adults, are one of the largest sources of preventable food waste. However, the antecedents of wasted food among young adults in the U.S. are unknown. This study aimed to explore the perceptions, beliefs and behaviors related to wasted food among 18- to 24-year-old adults. Fifty-eight individuals (63.8% female) with an average age of 20.2 y (± 1.6) who lived in a residence where they had control over some food purchases (excluding co-op or other communal housing, and living with parents) participated in 75-min focus groups during spring of 2016. Thirty participants lived in residence halls at a university and the remaining 28 lived in off-campus dwellings. Focus group transcriptions were analyzed for themes by two investigators using a constant-comparative approach. Inductive thematic analyses provided insights that were broadly categorized into: 1) awareness and knowledge of wasted food, 2) factors that influence food waste behaviors, and 3) suggested interventions to reduce wasted food. Results provide evidence of heterogeneity in perceptions, beliefs, and behaviors related to wasted food based on dwelling type. Insights from the current study may be used to inform observational or intervention work focused on reducing wasted food by young adults.

1. Introduction

The issues of food loss and waste are receiving increased attention around the globe. While government agencies vary somewhat in how they define loss and waste (see Bellemare, Cakir, Peterson, Novak, & Rudi, 2017 for a discussion), all agree on the need for waste reduction strategies. In the U.S., Buzby, Wells, and Hyman (2014) estimated that 31% of food available at the retail and consumer levels was lost, with the majority of losses occurring at the consumer level. Food waste causes increasingly limited agricultural resources to be wasted (Gunders et al., 2017; Hall, Guo, Dore, & Chow, 2009) and costs the average U.S. household of four \$1365–\$2275 annually (Bloom, 2010; Gunders et al., 2017). Both public and private initiatives have been formed to address food loss and waste along the supply chain. For example, the U.S. Food Waste Challenge that was launched in 2015 calls for a 50% reduction of food waste by 2030 (USDA, 2015).

Consumers are one of the largest sources of preventable food waste

in developed countries, with over 60% of their waste considered avoidable¹ (Gunders et al., 2017; Queded, Parry, Eastale, & Swannell, 2011). Waste at the consumer level often takes the form of plate waste, but can also include food that is discarded for other reasons such as spoilage from poor planning or excess purchases due to impulse buying or buying in bulk (Buzby et al., 2014; Gunders et al., 2017). Some explanations for consumer food waste are: lack of connection between individuals and their food (Aschemann-Witzel, de Hooge, Amani, Bech-Larsen, & Oostindjer, 2015); poor household food management (Evans, 2014; Gunders et al., 2017; Queded, Marsh, Stunell, & Parry, 2013); confusion over date labels (Gunders et al., 2017; Newsome et al., 2014; Wilson, Rickard, Saputo, & Ho, 2017); and low cost of wasting food (Gunders et al., 2017; Lusk & Ellison, 2017). Despite these challenges, prevention at the individual-level has been identified as one of the most powerful ways to reduce wasted food (ReFED, 2016).

At the consumer-level, age is negatively correlated with wasted food behaviors, and young adults are one of the highest-wasting groups

* Corresponding author.

E-mail addresses: cjnikol2@illinois.edu (C.J. Nikolaus), nickrich@illinois.edu (S.M. Nickols-Richardson), brennae@illinois.edu (B. Ellison).

¹ Queded et al. (2011) define avoidable waste as food that “could have been eaten at some point prior to being thrown away” (pg. 461). In the present study, our primary interest is in avoidable food waste; however, definitions of what is edible or inedible may vary across cultures. In favor of a more inclusive approach, we do not utilize the avoidable/unavoidable or edible/inedible terminology when discussing waste in our focus group sessions. For more information on our presentation of the food waste concept to participants, refer to section 2.3 in the Methods discussion or the focus group script in the Appendix.

(Ellison & Lusk, 2018; Quested et al., 2013; Secondi, Principato, & Laureti, 2015; Stancu, Haugaard, & Lahteenmaki, 2016; Stefan, van Herpen, Tudoran, & Lahteenmaki, 2013; Thyberg & Tonjes, 2016). In a study conducted with Polish university students, participants were familiar with negative outcomes from food waste but this did not impact behavior. The authors concluded this was a byproduct of limited experience with (and creativity for) food management (Radzaminska, Jakubowska, & Staniewska, 2016). In contrast, a recent literature review suggests this could be due to underlying psychological differences in this age group (Aschemann-Witzel et al., 2015). Specifically, younger individuals' food waste behaviors may be influenced by greater spontaneity levels, an alignment towards convenience, limited food management experience, and how trade-offs are managed (Aschemann-Witzel et al., 2015). An investigation in a U.K. college setting found that the 'on-the-go' culture of campus disrupted any intentions to decrease food waste among students (Lazell, 2016). Though these findings give insight into underlying aspects that may contribute to high waste behaviors of this age group, the research on food waste among young adults has almost exclusively been conducted outside of the U.S.

It is vital to understand the antecedents to food waste behaviors among young adults in the context of the U.S. because the values of individuals and the food system they interact with vary across geographic regions. In some countries with high adherence to healthful and highly perishable dietary patterns, such as Italy and Spain, avoiding waste requires significant planning (Mondejar-Jimenez, Ferrari, Secondi, & Principato, 2016). However, U.S. dietary patterns contain a higher proportion of processed foods, providing more than 50% of calories in one estimate (Steele et al., 2016), yet consumers still produce excessive wasted food (ReFED, 2016). The role of factors identified as important in predicting wasted food behaviors in other countries are underexplored among young adults in the U.S.

Within the U.S., one study reported baseline beliefs of university students before an educational campaign on food waste (Whitehair, Shanklin, & Brannon, 2013). The average student agreed that wasting food was wrong with hungry people in the world, but there was more uncertainty that an individual's actions could make a difference. Whitehair et al. (2013) interpret these findings as an indication that students already have beliefs about food waste but require reminders to act in line with their beliefs. These data provide insight on young adults' perceptions of wasted food in the U.S., but the study utilized quantitative techniques to explore student attitudes and is restricted by that nature. Specifically, the value that students placed on these beliefs and their influence on perceived behaviors is unknown.

An additional factor that could impact waste behavior, which has received limited attention in this population, is residence type. During young adulthood, many individuals begin to assert their independence; this could mean moving away from home, making their own purchases (for food and other goods), and enrolling in college. Depending on the living situation, one's involvement with food provisioning activities could vary. For example, young adults who decide to attend college and live on campus may purchase a meal plan where the majority of meals are provided by campus dining facilities. Other students may opt to live off-campus, where they have more direct responsibility for their food purchases and management. In each case, individuals will likely encounter some amount of food waste; however, the factors that influence their waste decisions may differ based on their living situation. This study aims to fill this gap in the literature.

The purpose of this study was to explore the perceptions, beliefs and behaviors related to wasted food among 18- to 24-year-old adults through focus groups. Qualitative approaches to understanding food waste among American young adults are important because individuals can provide direct insight into how they understand and interact with the phenomena in question. Perceptions, beliefs, and behaviors were segmented by residence type to determine how waste may be impacted by one's living situation. Insights from this study can be used to inform future interventions that focus on reducing the amount of avoidable wasted food in this age group.

2. Materials and methods

This section describes the development of the script, recruitment of participants, coordination of focus groups, and analysis of the resulting transcripts. A hypothesis for this work was not constructed *a priori* due to the explorative and qualitative nature of the study's aim. Inductive analyses were used to allow participants' comments to direct the findings (Braun & Clarke, 2006; Krueger & Casey, 2015). After data summarization, theories and literature were consulted to categorize responses and interpret findings.

2.1. Script development

A script of focus group questions and prompts relevant to consumer-level wasted food was drafted based on food waste literature and script development guidelines (Krueger & Casey, 2015; Liangputtong, 2011). The script was designed to elicit participants' knowledge, awareness, and behaviors related to wasted food in addition to their ideas on reducing waste. Six experts reviewed the script draft for content validity; each expert held a graduate degree, had experience working with young adults and reviewing research methodology, and was trained in the broader food system and consumer decision-making. Based on the experts' feedback, the focus group script was revised and pilot-tested with age-eligible volunteers² for clarity or wording concerns. The final script is available in the Appendix.

2.2. Sample recruitment

Participants were recruited from a mid-size city in Illinois, USA. Convenience sampling techniques, such as posted fliers and advertisements on listservs were used. To recruit a variety of young adults, fliers were distributed across university campus buildings and community locations. Further, listservs included university-affiliated e-mail lists as well as online forums frequented by those in the broader region. Individuals who were interested in participating completed an online screener (Qualtrics, Provo, UT) to establish eligibility; criteria included age (18–24 years), fluency in English, and residence in a living situation where individuals had some control over food purchases. Individuals living with their parents, in co-op style households, or in Greek housing (a communal building where members of a fraternity or sorority reside³) were excluded due to limited food provisioning control. The screener included demographic questions regarding gender identity, race, ethnicity, college enrollment, as well as residential and household characteristics.

2.3. Focus groups

Eligible individuals provided availability for focus groups, which were coordinated to include five to nine participants each. Residence type was a segmentation variable of interest. Nine focus groups were scheduled, with six representing homogenous residential characteristics (on-campus only or off-campus only) and three with a mixture of individuals from both residence types. The final three groups were scheduled to ensure that the presence of more heterogeneous individuals did not alter participants' discussion and that saturation had been achieved. This was evidenced by continued vocalization of common themes and ideas within these groups (Krueger & Casey, 2015). Focus groups were conducted in-person. Upon arrival, participants were provided consent information and signed a written informed

² Volunteers were undergraduate students, both domestic and international, from the population of interest.

³ Fraternity and sorority members who opted to live outside of the communal building were eligible to participate in the study so long as all other eligibility criteria were met.

Download English Version:

<https://daneshyari.com/en/article/7305009>

Download Persian Version:

<https://daneshyari.com/article/7305009>

[Daneshyari.com](https://daneshyari.com)