Manger A Travers Les Cultures: A Comparative Look at Food Waste, Awareness and Redistribution Potential

Chloe Bergeron
bergshoots3@gmail.com

Follow this and additional works at: https://scholar.stjohns.edu/jovsa

Part of the Arts and Humanities Commons, Business Commons, Curriculum and Instruction Commons, Curriculum and Social Inquiry Commons, Disability and Equity in Education Commons, Educational Methods Commons, Law Commons, Life Sciences Commons, Medicine and Health Sciences Commons, Scholarship of Teaching and Learning Commons, and the Urban Studies and Planning Commons

Recommended Citation
Bergeron, Chloe (2022) "Manger A Travers Les Cultures: A Comparative Look at Food Waste, Awareness and Redistribution Potential," Journal of Vincentian Social Action: Vol. 6: Iss. 1, Article 5. Available at: https://scholar.stjohns.edu/jovsa/vol6/iss1/5

This Article is brought to you for free and open access by St. John's Scholar. It has been accepted for inclusion in Journal of Vincentian Social Action by an authorized editor of St. John's Scholar. For more information, please contact JoVSA@stjohns.edu.
INTRODUCTION

From overproduction to improper disposal, food waste occurs in each step of the food-handling process, from the fields to the supermarket shelves and the kitchen table. Food waste is defined as “the decrease in the quantity or quality of food resulting from decisions and actions by retailers, food service providers and consumers” (FAO.org, n.d.). Food loss is “the decrease in the quantity or quality of food resulting from decisions and actions by food suppliers in the chain, excluding retailers, food service providers and consumers” (Food and Agriculture Organization of the United Nations, n.d.). In 2007 alone, nearly one-third of the food produced for human consumption was lost and wasted globally (Munesue et al., 2015). The average United States college student generates 142 pounds of food waste a year (Recycling Works Massachusetts, n.d.). U.S. college campuses throw out 22 million pounds of uneaten food each year (Food Recovery Network, n.d.). St. John’s University (SJU), located in bustling New York City, is surrounded by food redistribution networks and takes part in food redistribution through the Food Recovery Network (St. John’s University, n.d). Many SJU students, however, as examined throughout this research, are unaware of these opportunities and are not involved in alleviating waste in their own communities. While this food is rotting and polluting the earth, there are an estimated 815 million people in the world suffering from “chronic undernourishment” (Hunger Notes, 2018). Chronic undernourishment, as defined by Hunger Notes, can occur in two ways, through consistent protein-energy malnutrition, that is a “lack of calories and protein” and/or consistent micronutrient deficiency meaning deficiency in vitamins and minerals (Hunger Notes, 2018). These statistics beg the Vincentian question: ‘What must be done?’ To act against the food-waste phenomenon, countries around the world have begun taking steps toward waste reduction and redistribution potential.

France has been named a world leader in its performance against food loss and waste through legislation and cultural measures (Barilla Center, 2017). Award-winning journalist Christopher Livesay explains the French approach to eating:

The French take food seriously... Lunch is so sacred here that you’ll find many stores closed between about noon and 2, so workers can enjoy a long relaxed mid-day meal. The French not only appreciate food, they’re committed to not wasting it. In fact, it’s the law. (Saltzman et al., 2019, August 31)

From a young age, the French are culturally taught “l’éducation du gout” (the education of taste) wherein they are taught to try all foods fresh, local and in moderation (Diggs, 2018, March 19). This cultural education seems to be associated with a reduction in food waste. In the most recent nationwide studies, France’s estimated annual food waste, as of 2017, is 1.8% (Barilla Center, 2017), while the United States’ estimated annual food waste, as of 2010, is between 30-40% (USDA, 2010). Because of this cultural prioritization of food waste reduction, the French passed a law (Law N. 2016-138) that requires supermarkets nationally to sign and organize agreements with non-profit organizations to donate food that otherwise would be wasted (Vaque, 2017). Many cultural and institutional differences between France and the United States affect the amount of food waste and waste awareness in each country. France’s efforts to
combat the issue have proven highly successful and should be examined moving forward for possible application in the United States.

This research aims to answer the following question: how can practical knowledge and awareness of French cultural food education and French law N.206-138 regarding mandatory food redistribution be utilized at St. John’s University to increase institutional waste-reduction efforts and awareness? The research compares University of Paris students’ and St. John’s Students’ awareness and knowledge of food waste on an individual, university, and governmental level to gain an in-depth understanding of the impacts of this awareness and knowledge.

A survey of University of Paris students and St. John’s students was designed to understand these impacts. The survey allowed participants to better understand food waste in their school, home and national communities. The survey was designed to educate and potentially motivate participants to get active in eliminating food waste and/or feel inspired to influence their school or government to combat the issue. It also aimed to provoke a thoughtful analysis on one’s relationship to food and what it means to them and/or their culture. The results of this study have the potential to impact food waste reduction efforts and awareness on St. John’s University’s campus through awareness campaigns, a student-led club and redistribution at university catered events, among other initiatives.

**Figure 1.**
Food waste consumes these percentages of freshwater, landfill volume, cropland and fertilizer.

“"I was born into a house where my mother would not make me eat if I did not want to. I was taught to only eat when I was hungry... I get how much I can and I eat it fresh. The French like fresh food."
—French Student Participant

**METHOD**

Initially the survey was distributed to St. John’s University and University of Paris social media pages and through text/email. University students were chosen from St. John’s University and Paris in hopes that they, having grown up in different cultures, one having nearly half of their food go to waste and the other close to zero, would be able to share their awareness of food waste and waste reduction in a way that highlights how St. John’s University and universities across the United States...
University students were chosen specifically because the intended capstone will be implemented within a university setting, so the need to understand students and their wants and needs is crucial to moving forward. The study employed a mixed methods approach. Quantitative data analysis was conducted using Microsoft Excel and the Qualtrics site to discern trends and easily compare results. Qualitative data, in the form of open-ended responses, were downloaded and analyzed by the researcher, who conducted content analysis in an effort to locate key patterns and trends. Data collection began February 2020 and continued through the remainder of the Spring 2020 semester.

The research consisted of an anonymous Qualtrics survey of 52 questions (offered in English and in French) separated into categories: Demographics, Individual Awareness, University Awareness, Government Awareness, Improvement, and additional comments. Qualtrics survey responses were made anonymous and easily formatted after collection for analyzing. Many of the questions allowed for open-ended responses in order for participants to elaborate on their yes/no answer or about how they believe their waste reduction systems can improve. Answering with an explanation for each question was made optional rather than required. Using this wording and way of collecting information, the goal was to gather as much information as possible without making any participant feel overwhelmed.

The culminating pilot project and capstone was a comprehensive week long food waste reduction campaign and yearly pledge led via Instagram @foodjusticeSJU with links, graphics, and challenges that emphasize portion planning, redistribution efforts, individual waste reduction opportunities that mimic French cultural education, ways to get involved institutionally and how to advocate for the issue on the governmental level. The campaign’s graphics and links were shared with all student organizations and clubs that expressed interest during the campaign for future use. The information will make it easier for students to get involved. By sharing the links and information on how to get involved and how to combat the issue, clubs and organizations on campus will have a greater understanding and responsibility to continue the fight for food justice. Those that followed the campaign’s social media page were asked questions daily and given information through Instagram. At the end of the week, those who followed the account were sent another Qualtrics’ survey through Instagram’s direct messaging feature that analyzes the impact of the awareness campaign and measures outcomes.

RESULTS

Trends surfaced relating to individual, university, and governmental awareness. Firstly, the data was split dependent on the participants’ respective university. One trend that surfaced was the lack of student awareness/involvement on St. John’s campus surrounding food waste compared to Parisian University students. SJU students’ also seemed eager to learn more about the issue. Similarly, another theme that surfaced was the lack of substantial communication networks lending to lack of awareness at St. John’s campus surrounding food waste compared to Parisian Universities. When collecting data from Parisian students, trends emerged surrounding food waste responsibility and the belief in government involvement and responsibility. Opinions and feelings surrounding the issue were also analyzed and compared. Looking into education in the home and throughout childhood aided in understanding how education could impact how students gain awareness in university and how they follow up on their government to ensure that waste reduction is occurring on all levels (see Figure 3).
Eating Behaviors: Overall, Parisian students reported having more time than SJU students to each their meals each day (see Figure 4). Nearly a third of SJU students (28.78%) reported being “probably” or “definitely” food insecure at some point in their lives while none of the Parisian students reported the same. A higher number of SJU students (61.11% vs 50%) than Paris University students reported eating on campus more than half of the time. In response to the question “how often do you leave food on your plate when you eat on campus”, the survey reveals that over half of University of Paris student participants answered that they “never” leave food on their plate whereas only a quarter of SJU students answered that they “never” leave food and nearly half stated that they “sometimes” leave food (See figure 5). The motivation for asking about education on portion size, nutrition, hunger and food waste throughout one’s life was the possibility that it may affect this person’s relationship to food waste. More University of Paris participants answered that they learned about these components in their home than SJU participants by

---

**Figure 3.**
*Did you learn about food waste, redistribution and nutrition in the home?*

---

**Figure 4.**
*How much time do you have to eat each day?*
How often do you leave food on your plate?

Awareness: When asked if agencies could donate excess food to nonprofit organizations in the U.S., most (70%) SJU participants answered that they were “not 100% positive.” When asked “do you think your government should have the most responsibility in food redistribution, institutions, or each individual community member via volunteer service”, most (70%) of French students choose “government.” a quarter (25%) of SJU students responded “government.” meanwhile, half (50%) of SJU participants stated that individual community members and community organizations should hold the most responsibility. One French student expanded on their answer for government stating “le ministère de l’écologie devrait plus sensibiliser” noting the importance of leaders to spread awareness on the issue. When asked about the St. John’s University compost system, most (81.82%) SJU students replied that they did not know about it. When asked what SJU does with leftover foods, nearly all (90.91%) participants replied that they “don’t know” (see Figure 6). While the majority of French students responded that they knew which foods create the most carbon emissions (61.54%), a majority (72.22%) of SJU students responded that they did not know. When asked how knowledgeable students were on food waste and redistribution, a majority (58%) of SJU participants answered that they were “not knowledgeable at all” while 0% answered that they were “very” or “extremely” knowledgeable. A majority (53.85%) of French students answered that they were moderately knowledgeable. A majority of the French students who expanded on their answer that they were “moderately knowledgeable” said that they obtained food waste education from their parents. One French student stated that the food redistribution app “too good to go” and other redistribution practices he had heard of happening in France had contributed to his knowledge. One who responded as slightly knowledgeable stated that they learned from radio broadcasts. Some Parisian students (40%) who said they had heard of redistribution efforts also mentioned that redistribution sites that have grown in response to the Food Waste legislation, the largest being Restos du Cœur.
Engagement: When asked if students were “actively involved in eliminating food waste in [their] life”, a majority (72.09%) of U.S. students answered that they were not, meanwhile more than half (53.85%) of French students answered that they were actively involved in eliminating food waste. SJU students who said they were active in eliminating food in their own lives said they did so through cooking their own meals, taking proper portion sizes, eating leftovers, only buying food when hungry, and placing more value on food. The SJU student who mentioned placing value on food stated that they do this because they “know how hard it is to sell food and [they] think about the struggles it took to get to [their] plate.” French students who expanded their answers mainly mentioned that they “only bought what they needed. When asked “do you feel that your university’s communication efforts are substantial? Are you up to date with the news of your University”, less than a third (27%) of SJU students answered “mostly yes” while half (50%) of Parisian University students answered “mostly yes.” 18% of SJU students responded “definitely not” while none of the University of Paris students answered “definitely not.” Of the 27% of SJU students who answered “mostly yes,” 75% of these students also answered that they did not know if SJU had a compost system and 88% said they did not know what SJU did with leftover foods.

When asked if students were “interested in learning more about food waste and redistribution potential”, a majority (79%) of SJU students answered either “definitely” or “probably yes” and 0% answered “definitely not” (see Figure 7). A majority (71%) of University of Paris participants were also interested (Figure 7). Most (83%) of SJU participants noted that they attend catered events on campus multiple times a month. 8% of SJU participants reported that they attend these types of events 4-6 times a week. When asked “would you be interested in having your catered club/school events have food redistribution efforts with the food that is left after the event”, a possible capstone after research, the majority (63.64%) of SJU students said “probably yes.” All (100%) of survey participants who stated that they attend catered events 4-6 times a week also stated that they were “definitely” interested in having redistribution efforts at their catered events.
Throughout the survey, French students indicated that, when compared to SJU students, they attended less catered events (38% vs. 17% said never), leave less food on their plates when eating on campus (64% vs. 17% said they never leave food on plate), overeat less on campus (64% vs 25%), and had a higher level of awareness regarding: how to be involved with eliminating waste on campus (50% vs 9%), redistribution efforts in their own community (44% vs 19%), and laws on food waste and donations (14% vs 5%).

French Student Advisement: Moving forward, there were questions on how government, institutions, and individuals should reduce waste. French students advised that individuals better plan and manage their food shopping and portion-size. One French student suggested to notice food waste more often and ask for less in the cafeteria. Institutionally, French students advised that portions for each person be adapted.

On the governmental level, French students mentioned the need for awareness campaigns and building “sensibilization,” or awareness. One also mentioned the need for increased study on the issue and another noted the need to “imposer la redistribution alimentaire des invendus” meaning to legally impose redistribution as is happening now in France. In the additional comments of the survey, many students noted that the survey made them want to do more research on the issue and reflect on waste in their own lives. One student stated that the survey made them “consider how sustainable my and my country’s eating habits are.”
**CAPSTONE RESULTS:**

**Campaign Reach.** Using over 100 graphics, the pilot project Instagram campaign entitled @foodjusticeSJU garnered 200 followers in a week (see Figures 8 and 9). Of the 200 followers, a majority were St. John’s University Students. Each grid post, on average, reached 88 followers while each story and interactive quiz question, on average, reached 35 people.

**United States Waste.** In previous research with St. John’s students, 38% reported knowing how much the U.S. wastes in food and 21% of students were aware of governmental efforts surrounding food waste. After the campaign, a distributed survey reported that students’ knowledge doubled with 81.25% of students knowing how much the U.S. wastes and nearly quadrupled with 75% of students knowing about what the US government is/is not doing to fight food waste.

**Involvement.** After the campaign, more than half (59%) of surveyed followers felt like they knew more about how to get involved in their own community and another 37.5% said they partially knew. The majority (94%) of surveyed followers said they knew more about how to change certain habits in their personal lives to reduce waste. In order to change the habits, knowledge of carbon emissions is helpful. Post-campaign, two-thirds (75%) answered that they knew about the carbon emissions of the food they eat. A majority (87.5%) of surveyed followers stated that they found that the facts about food waste taught in the campaign will help them to advocate for waste reduction throughout their lives; the remaining 12.5% of students stated that the information will partially help them. Post-campaign, knowledge of redistribution efforts increased from 42% to 50%. Most participants (81%) responded that they feel more confident in their understanding of food waste and reduction practices.

**French Solutions.** The majority (87.5%) of students found learning about French food waste solutions interesting and helpful to take action in their own life, school/work environments and in their community.

**Shortcomings.** Only four students did the actionable bingo challenge board by the end of the week. The culminating pledge of the campaign could be a source for more actionable results of the research. The statement “I have learned about redistribution efforts in my own community” garnered the most “no” responses.
Continuity. Almost all (93.75%) stated they would be interested in future campaigns dealing with waste reduction and more than half (62.5%) stated that they were more likely to buy food from a redistribution app or volunteer with a redistribution organization. Most of the participants (91%) stated that they were less likely to waste as much food after the campaign. Also post-campaign, 5 students noted that the Instagram campaign triggered sponsored ads to come up on their Instagram news feed relating to food waste and sustainability. Campaigns like this one have the ability to trigger more eco-friendly and ethical social media algorithms that have the potential to spread awareness to larger audiences.

DISCUSSION

Survey findings provided valuable insight into the research question, “how can practical knowledge and awareness of French cultural food education and French law N.206-138 regarding food waste reduction be utilized at St. John’s University to increase University waste-reduction efforts and awareness?” Although many Parisian students were unaware of the legislation, they still hold it as a high-priority issue that should be dealt with by the government. A majority of students also reported that they were aware of food redistribution efforts in their community, many of which have grown in effect to the law, as explained in the literature review. Increasing redistribution efforts at St. John’s University, as France has done in recent years, shows extreme potential, not only for food waste reduction, but for education and awareness to be spread among the University community as it has for French students. The survey also pointed out that the law is not wholly responsible for building waste awareness and reduction due to the fact that many students seem to take initiative in their own lives whether or not they said they knew about the legislation. This personal initiative can perhaps be attributed to French cultural food education, although as the survey pointed out, this education occurred not as much in their schools.
as in their homes by family members. Although St. John’s University cannot change the culture of teaching about food waste in the home, they can consider creating a space on campus where students learn about the value of food and waste reduction, mimicking the ideas put forth by French students about how they eliminate food waste in their own lives.

In the explanation of how their cafeterias are usually arranged, a French student explained that each portion of a meal was set and included, but students may choose whether or not they take it and are given choices. As a student for a semester in Paris, one of the researchers noticed that many French students only ordered what they would eat rather than taking each portion offered while the American students at the Paris cafeteria would take every portion on most days and often leave food on their trays; in this way, the researcher noted that the French were better at understanding their portion sizes and only took what they knew they would eat. This observation was confirmed by the survey results, as Parisian students reported overeating less often than a majority of SJU students and leaving less food on their plate. Since many French students do not have meal plans like in the U.S., they may feel less obligated to eat at school, but many French students reported that they do, possibly because the multi-course meals are only roughly 2-4 euros each day, as explained in the literature review (Studialis, n.d.). Because the meal is cheaper, students are more likely to take less food if they are less hungry without feeling like they are wasting money. The variation of options for French students includes all food groups to ensure that students are adequately nourished; this may lead to students feeling full for a longer period of time. The French students noted that they believed serving portions that are too large is the primary reason for food waste and the reason that they sometimes waste. This means that adding more portion options to set meals has the potential for reducing waste in buffet-style settings, because each person chooses their portion size. While this has potential success, students will not always give themselves a proper portion if they are not educated on nutrition or if they are apathetic towards throwing away food. Understanding the value of food is very important. It is customary for French children to learn about the importance of food throughout childhood in the way they are served food, in the variation of food they are served and in the time they are given to eat and appreciate the food (Diggs, 2018, March 19). A majority of French students did report learning about food and not to waste from their parents. Although more SJU students did report learning about food and food waste in elementary school, most participants noted that the teaching was minimal and more focused on nutrition than waste. As explained in the literature review, French students are to be “educated in taste,” so although they may not have realized that they were learning about food as much in school, each meal in schools in France include multiple courses so that children’s pallets are introduced to many different flavors whether or not they realize it. In stating that they believe the government should have responsibility over the issue, French students are also stating that they prioritize food waste reduction and believe that their government must also prioritize the issue on a macro scale to alleviate it. They spend their tax dollars in hopes that the government will handle the issue. Minimal legislation does exist in the U.S. regarding food waste (Bill Emerson Good Samaritan Food Donation Act, 42 U.S.C. § 1791, 2009).

Redistribution helps build awareness on food waste and hunger. The French legislation examined in the literature review has created thousands of partnerships that help to redistribute food from supermarkets. The growing of redistribution
efforts in France has not gone unnoticed by students. Redistribution efforts are growing in NYC through apps and businesses that could potentially help students either get involved and/or receive discounted food items while reducing waste as explained in the literature review. In order for food redistribution to grow, all citizens must understand that it is legal and can be a viable option for reducing food waste and hunger within their communities.

The outcomes of the pilot implementation reached all target outcomes. A large majority of surveyed followers answered ‘yes’ to every survey question dealing with levels of improved awareness, confidence and understanding of food waste and reduction. Moving forward, the interest of these organizations holds great potential for food waste reduction. More than 10 SJU clubs with a combined following of over 10K followers on Instagram have already signed the @foodjusticeSJU pledge that asks clubs to get active on social media about food waste each year between World Food Day and National Food Day in October using the guiding resources provided by @foodjusticeSJU (see Figure 10). Likewise, a large majority of student survey participants before the campaign

Figure 10.
Yearly #FoodJustice Pledge
and afterwards responded with interest in more waste reduction campaigns and education. The overwhelming positive response to the campaign in the survey reflection, the many shares and comments of interest by students and organizations on SJU’s campus, and the large number of followers garnered in one week to fight for food justice show great potential for reducing food waste and using Instagram as a means to spread awareness and education at St. John’s University.

ACKNOWLEDGEMENTS

I would like to extend my deepest gratitude towards the Ozanam Scholars Program, especially Carline Bennett, for her guidance and support throughout the course of this research. I am also extremely grateful to Kristen Sweeney, Jenni Marques, Imena Johnson and Hira Shafeeq who offered aid every step of the way. I would also like to thank my mentor, Dr. Monteiro, for his help designing the survey and overseeing the research and my professor of Research methods, Dr. Galvin who helped with the logistics of how to write about research. I would not have understood the impact of food redistribution as deeply were it not for the CEO of Rescuing Leftover Cuisine, Robert Lee, who gave me the opportunity to pursue an internship that provided a deeper look into redistribution potential in NYC. I would also like to extend my thanks to the student participants from the University of Paris and St. John’s University and the leaders of Serve the City: Paris for a cultural immersion in food waste and redistribution in Paris. Thanks to SJU student Cedric Dupoux who aided in translating the French survey and Paris University Student Antony Bournazel for helping distribute the survey. Lastly, I would like to thank all survey participants and those who, at any point during this process, took time out of their day to be involved in furthering the fight against food waste.

The researcher with a food redistribution group in Paris. The only volunteer-run group of its kind in the city. All other redistribution occurs between charities and businesses, while this one is community led.
REFERENCES


St John’s University. (n.d). *Sustainability*. https://www.stjohns.edu/about/campuses-and-locations/sustainability


ABOUT THE AUTHOR

I am Chloé Bergeron, a senior Communication Arts major, International Studies, Social Justice and TV/Film minor from South Louisiana. Coming from the South, I was born loving and appreciating good food. Without it, I would not be able to function or pursue what I love. I am passionate about waste reduction not only because delicious food should not be going to waste when someone else lives in hunger, but also because this food, when wasted, is polluting our earth. It was an honor to be able to do this comparative research, as I not only learned how to improve my own school community and live more sustainably, but I was able to learn more about my French heritage and global cultures surrounding food and waste reduction.

The researcher on a Morgan Stanley Times Square billboard ad for Food Redistribution organization Rescuing Leftover Cuisine in December 2019.