CONSUMER RESPONSES TO HOUSEHOLD PROVISIONING DURING COVID-19 CRISIS AND RECOVERY

NSF 2030205
Kelly J. Clifton, Portland State University
RAPID, FY2020

Principal Research Investigators	Community Partners
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Project Overview

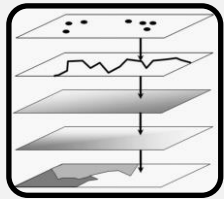|		
Project Team	Portland State University of Oregon Uber Eats	
Online Surveys	4-waves AZ, FL, MI, OR, & WA Food shopping frequency In-person & online Technology adoption & use	
Augment Data	COVID infections & vaccines COVID policies Food retailing environment Online platform availability Social vulnerability	
Outcomes	Behavioral change Technology adoption models Transportation & shopping patterns Barriers & food insecurity	

Project Vision

- The acquisition of food and household necessities has been dramatically impacted by the COVID-19 pandemic.

- Aided by technology, online retailers & delivery services are filling some gaps left by the disruption.

- This is a unique opportunity to capture consumer behavioral change during this dynamic period, as people respond to the pandemic, its impacts, and policy responses.
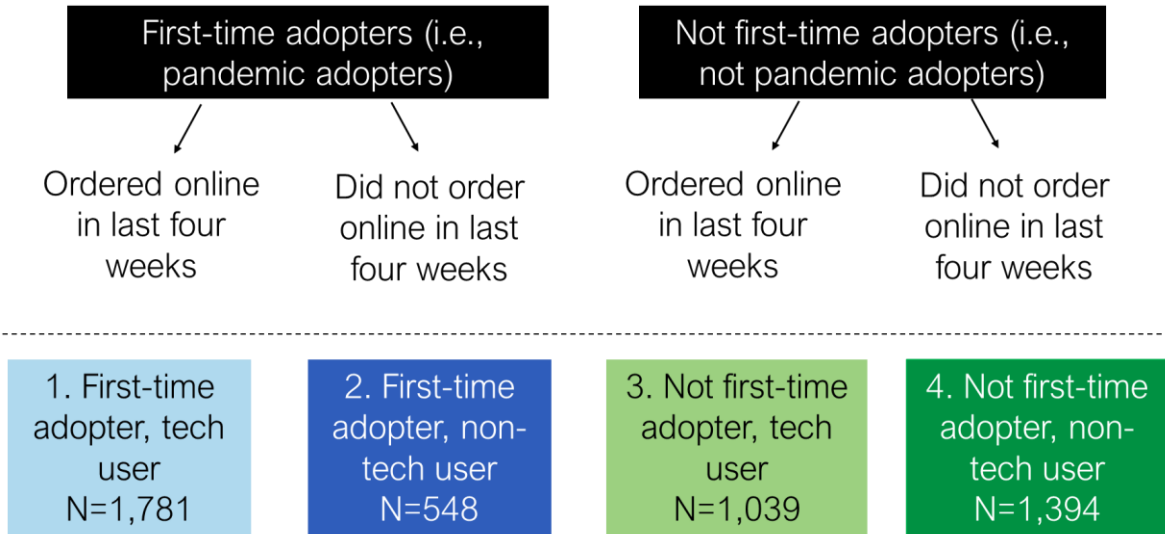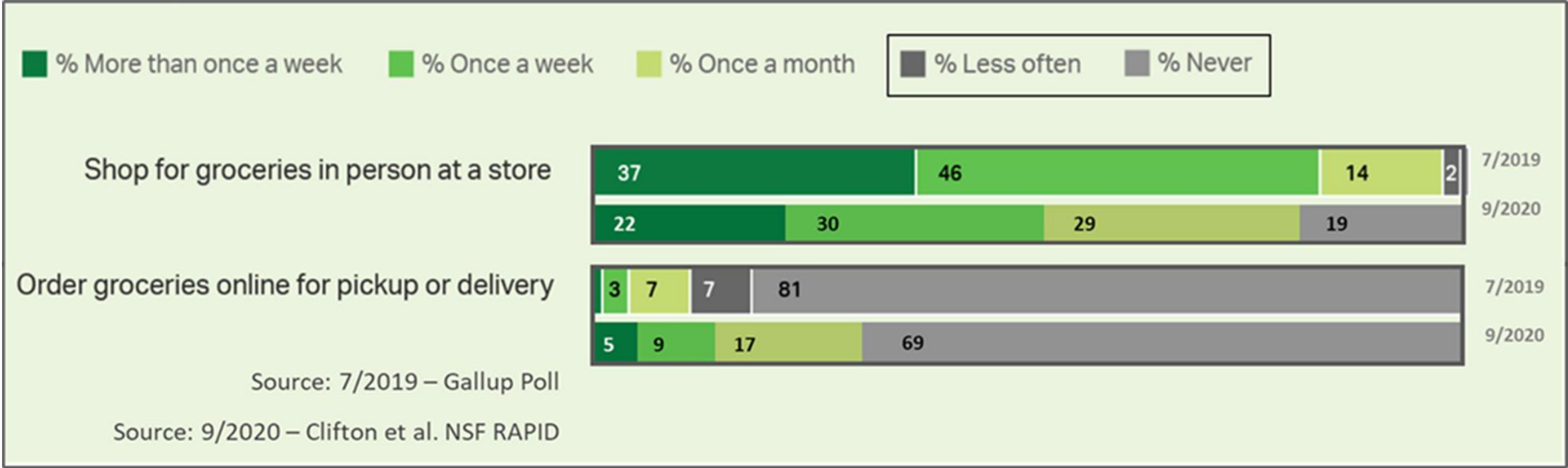
Project Overview

Use-Inspired Research

- The findings will be useful to understand adoption of technologies for household provisioning, identify barriers to access, and opportunities for future interventions.

- Specific interest in seniors and low-income populations, as they experience both transportation disadvantage and technology access/acumen.

- We expect to see variations in the rates of adoption and use of e-commerce and delivery platforms by location, COVID status, demographics, health status, technology availability, and policy variables over time.

Fundamental Research Contributions

- There have been 2 waves of surveys administered and we are in the process of weighting, augmenting and preliminary analysis.

- There will be 2 more waves of survey data in Spring and Summer 2021.

- Contribute to theories of behavioral change, technology adoption, and activity and transportation behaviors.

- Inform crisis planning by identifying how technological interventions may aid in resolving food security.

Project Update

Legend: % More than once a week | % Once a week | % Once a month | % Less often | % Never

Shop for groceries in person at a store
- 7/2019: 37 | 46 | 14 | 2
- 9/2020: 22 | 30 | 29 | 19

Order groceries online for pickup or delivery
- 7/2019: 3 | 7 | 7 | 81
- 9/2020: 5 | 9 | 17 | 69

Source: 7/2019 – Gallup Poll
Source: 9/2020 – Clifton et al. NSF RAPID

First-time adopters (i.e., pandemic adopters)
- Ordered online in last four weeks
- Did not order online in last four weeks

Not first-time adopters (i.e., not pandemic adopters)
- Ordered online in last four weeks
- Did not order online in last four weeks

1. First-time adopter, tech user N=1,781
2. First-time adopter, non-tech user N=548
3. Not first-time adopter, tech user N=1,039
4. Not first-time adopter, non-tech user N=1,394

- Consumer demand for pick-up and delivery is growing, but uneven. Income, age, access, and preferences play a role.

- Tech "users" generate ~40% more food and grocery related trips per month than "non-users", on average.

Project Evolution

Constant period of change:

- Length of the pandemic   → Adding a 4th wave of surveys

- Evolving & varying policies   → Challenge to collect/operationalize

- Vaccine roll out   → Stickiness of e-shopping behavior

- Forest fires and hurricanes   → Better emergency preparedness?

- Consolidating e-commerce and delivery platforms   → Difficult to characterize the supply-side in any location

Project considerations:

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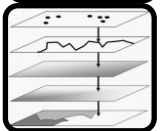## Kelly J. Clifton, Portland State University
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