



# The Effect of Resource Accessibility on Quality of Life and Health in Marginalized Communities in Mexico



Matthew Arguello<sup>1</sup>, Rebecca Barber<sup>1</sup>, Lyolya Hovhannisyann<sup>1</sup>, Grace Maher<sup>1</sup>, Priscilla Perez<sup>1</sup>, Efrain Talamantes MBA, MD, MS<sup>2</sup>

<sup>1</sup>Flying Samaritans at UCLA, University of California Los Angeles, Los Angeles, California, USA  
<sup>2</sup>Robert Wood Johnson Foundation Clinical Scholar, UCLA, and US Department of Veteran Affairs

## Background

- The Flying Samaritans at UCLA is a student-run organization that provides medical aid and health education to Colonia Margarita Moran, an underserved community located outside of Tijuana, Mexico.
- As a community formed largely of individuals relocated because of flooding and mudslides, it is not well developed and lacks the most basic living necessities: paved roads, potable water and sewer systems, healthcare, and safe and sanitary housing.
- This research project describes how our student group partnered with the local community to establish a medical clinic where we provide free basic care and health education.
- The top 20% of the Mexican population earns 13 times as much as the bottom 20%
- Mexico has a universal health care system, but accessibility to healthcare still remains a large problem for many Mexicans.
- Rural communities stricken with poverty have trouble traveling to hospitals, and 8% of the country's municipalities still lack any health care facilities.
- The top five causes of death in Mexico are diabetes, ischemic heart disease, cerebrovascular disease, chronic disorders of the liver and chronic obstructive pulmonary disease.
- Many of the conditions affecting Mexicans are chronic and non-communicable, for which incidence and risk factor can be reduced by increased access to resources and healthcare.



## Methods

Study subjects were recruited from Colonia Margarita Moran, Rancho Ontiveros and nearby communities to participate in the community needs health assessments. Participants included patients from the Flying Samaritans at UCLA clinic and residents in the surrounding neighborhoods.

We obtained verbal consent from participants after research assistants explained the content and purpose of the assessment.

The community health assessment surveys:

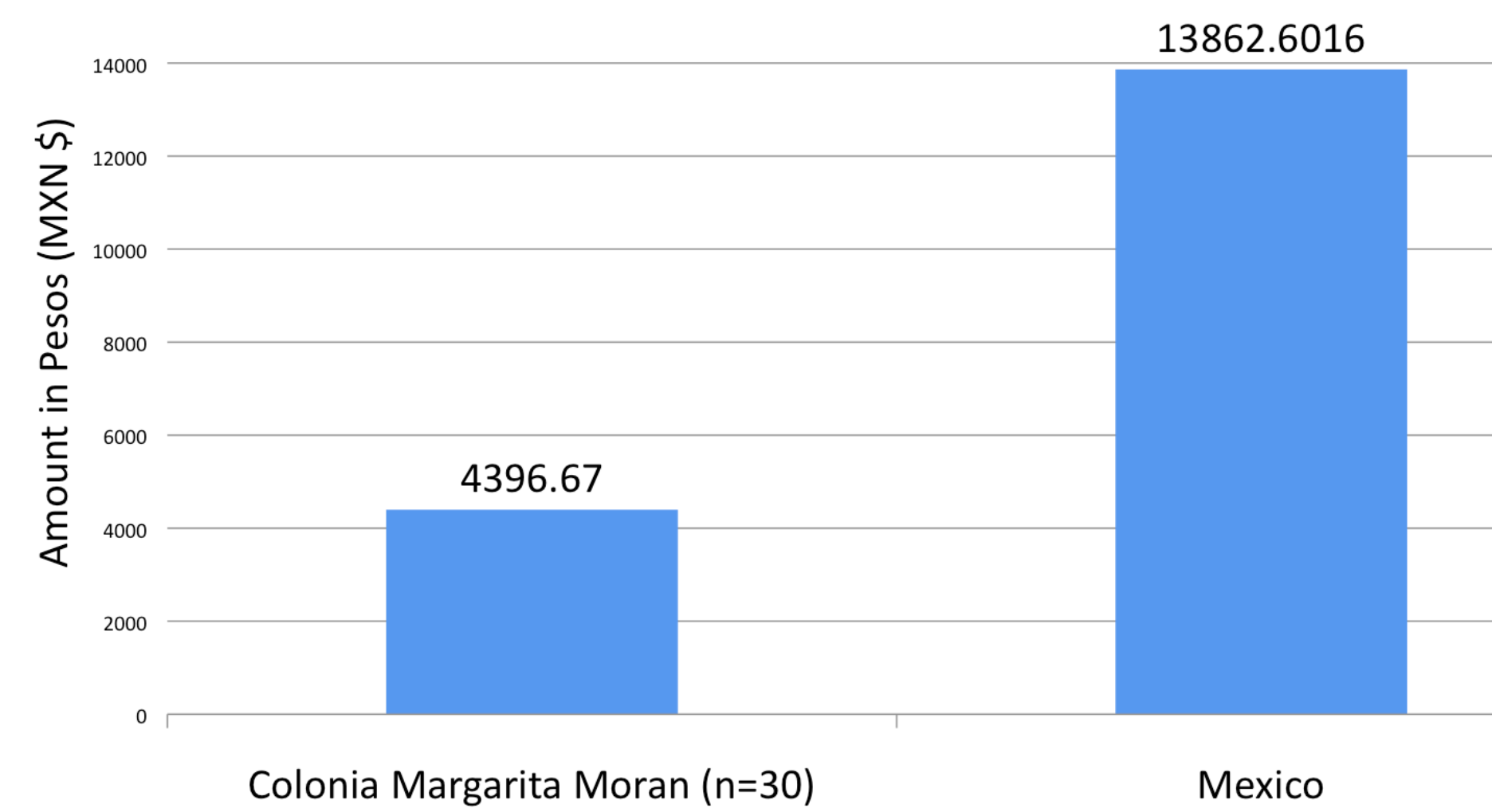
- Healthcare
- Governmental infrastructure
- Perceived community safety
- Hygiene, diet and health
- Drinking and bathing water sources
- Toilet and sanitary conditions
- Road signs and conditions
- Access to health care facilities
- Household composition
- Income and occupation
- How else can we help?

## Results

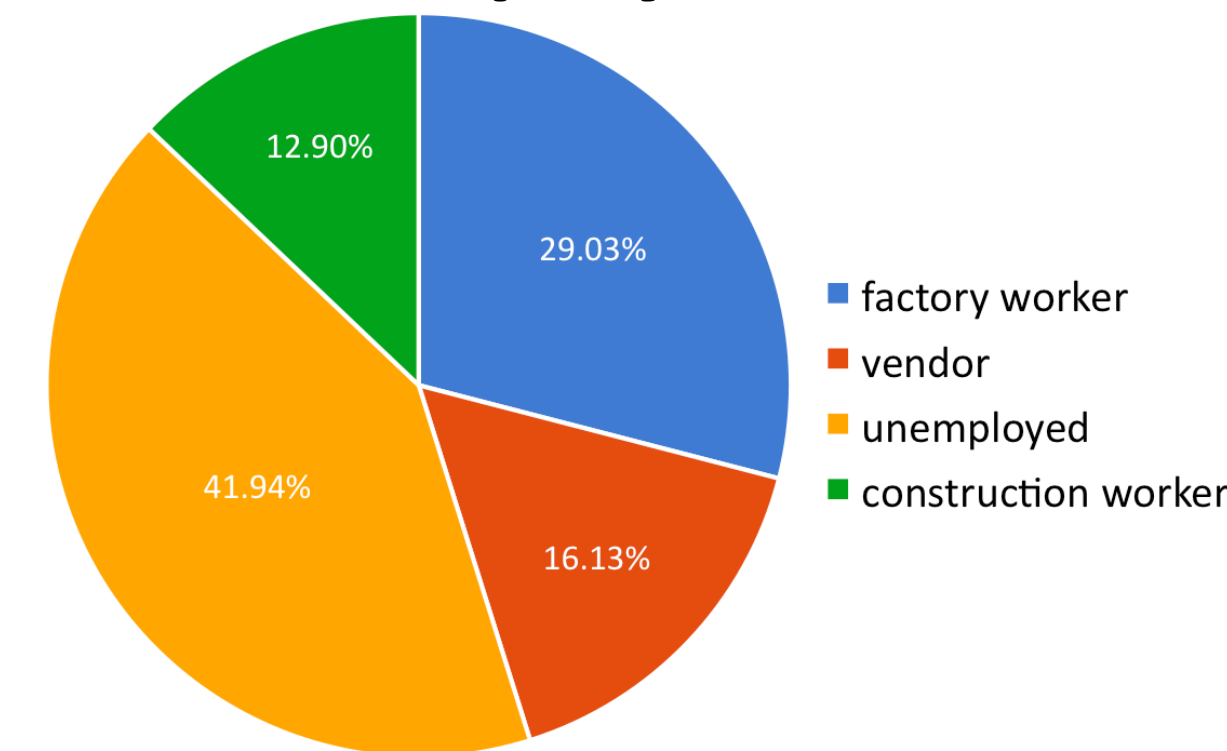
### Community Demographics

Mean household size (n=39)	4.05
Mean Community age (n=47)	26.04
Median Community age (n=47)	26.00
Median number of children (n=24)	2.00
Average number of children (n=24)	2.24
Female(n=63):male(n=55) ratio	53.39:46.61

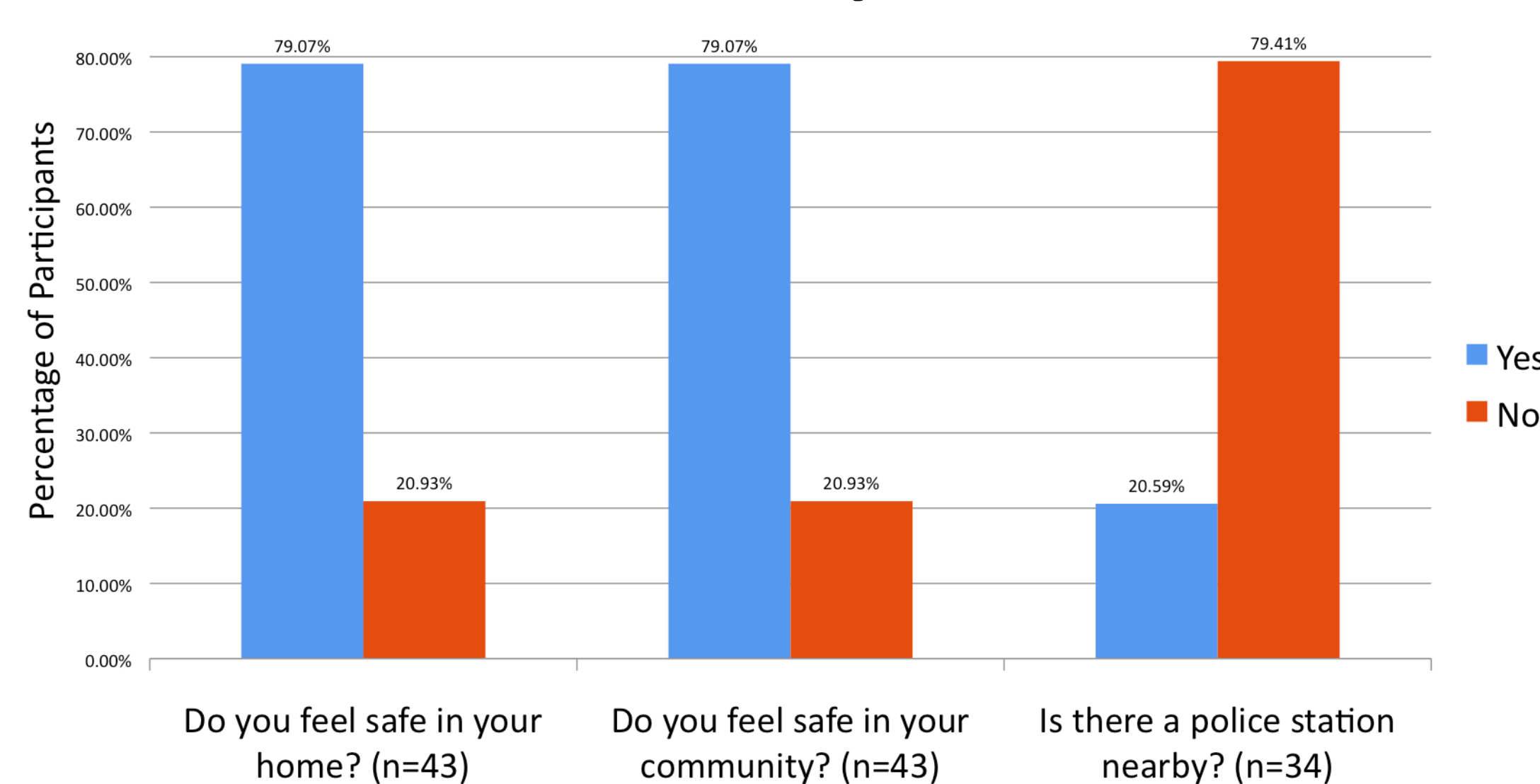
### Average Monthly Income



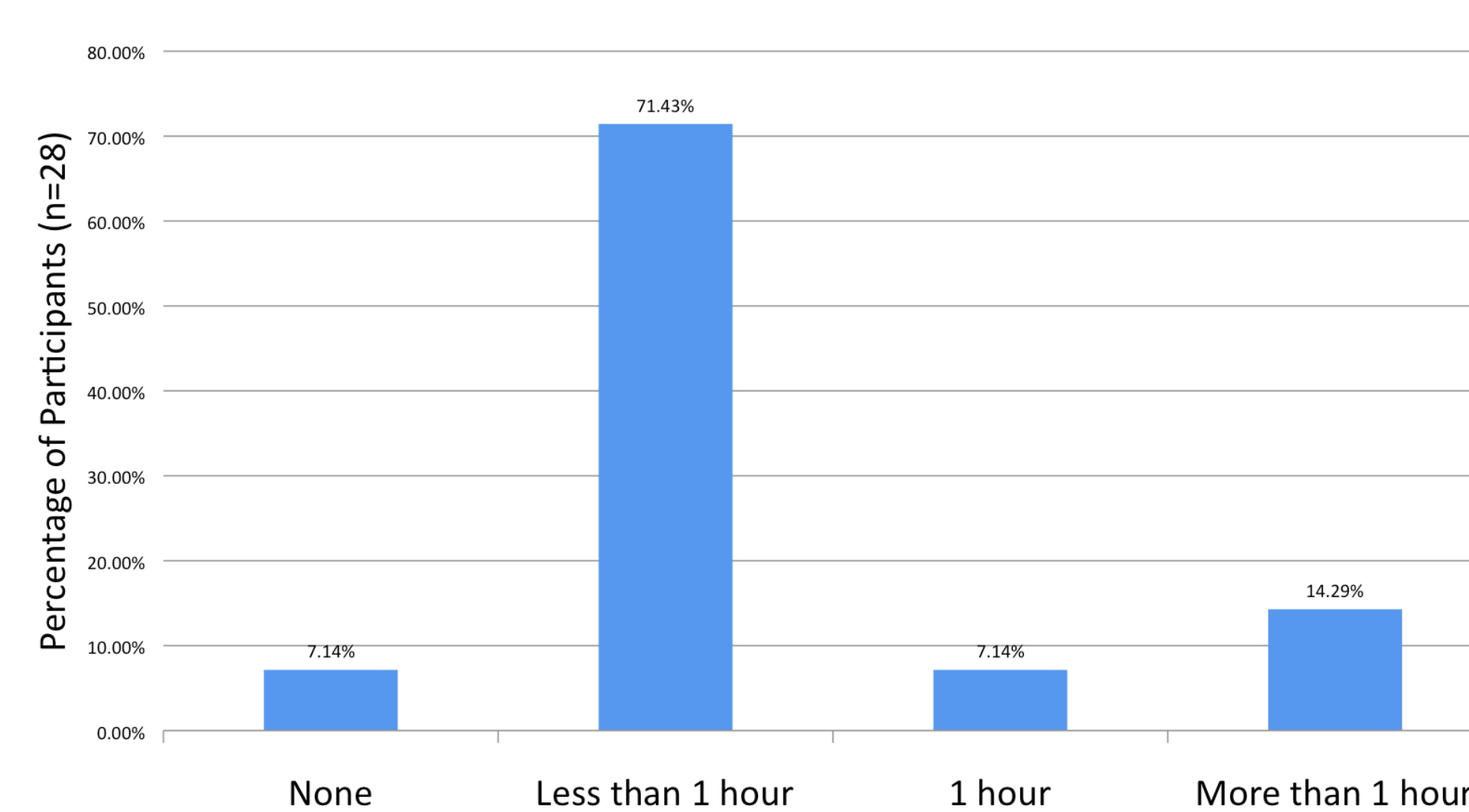
### Employment



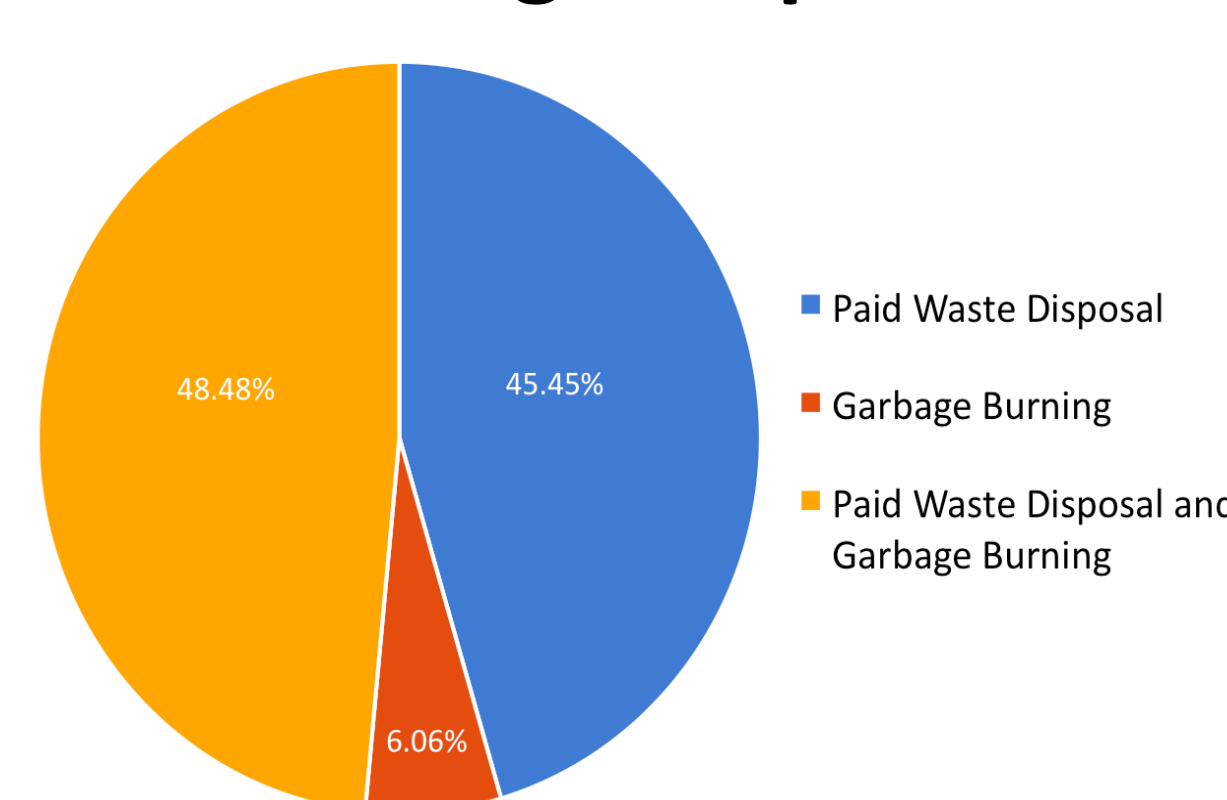
### Safety



### Perceived Proximity to Healthcare Facility

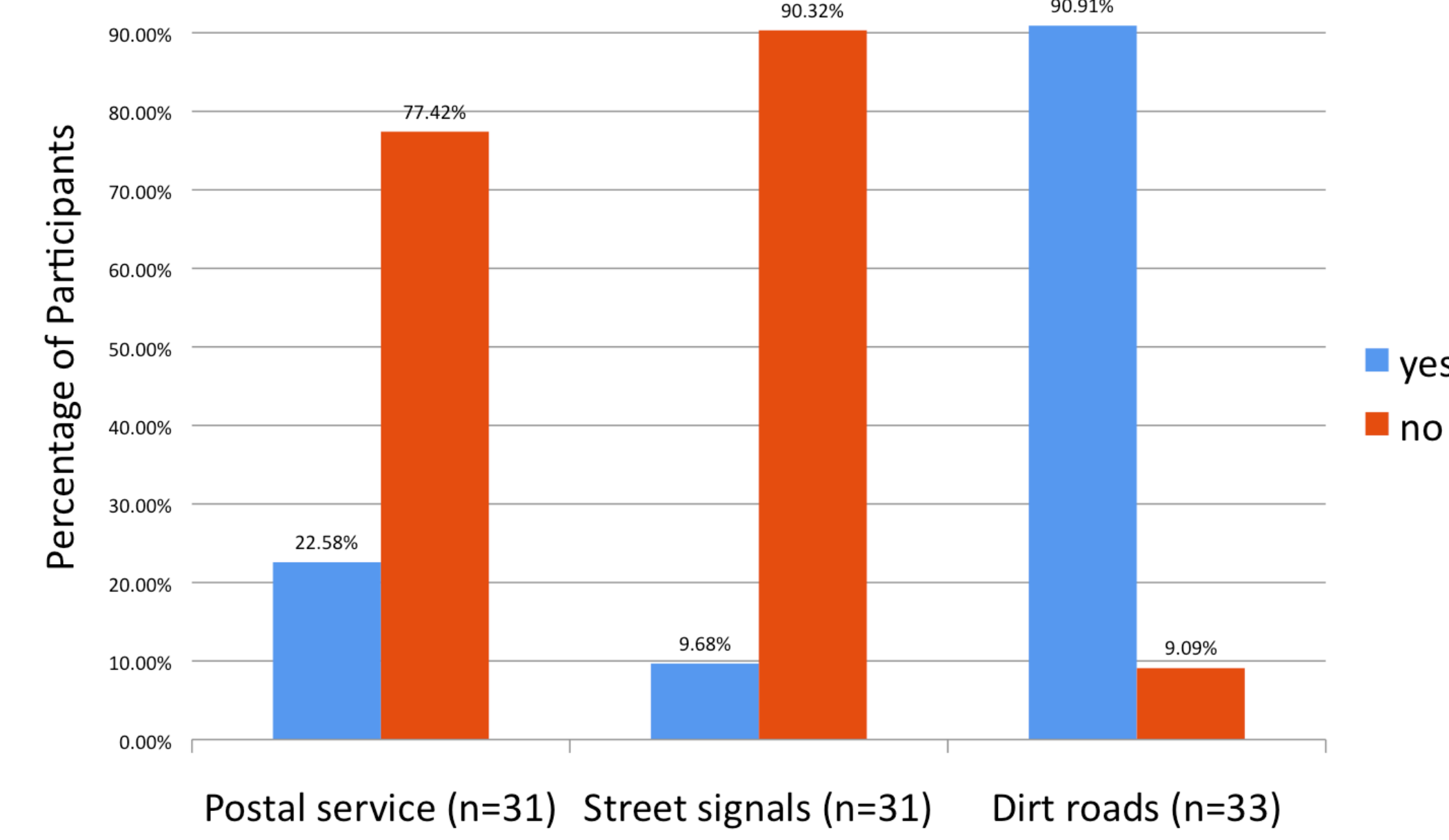


### Garbage Disposal

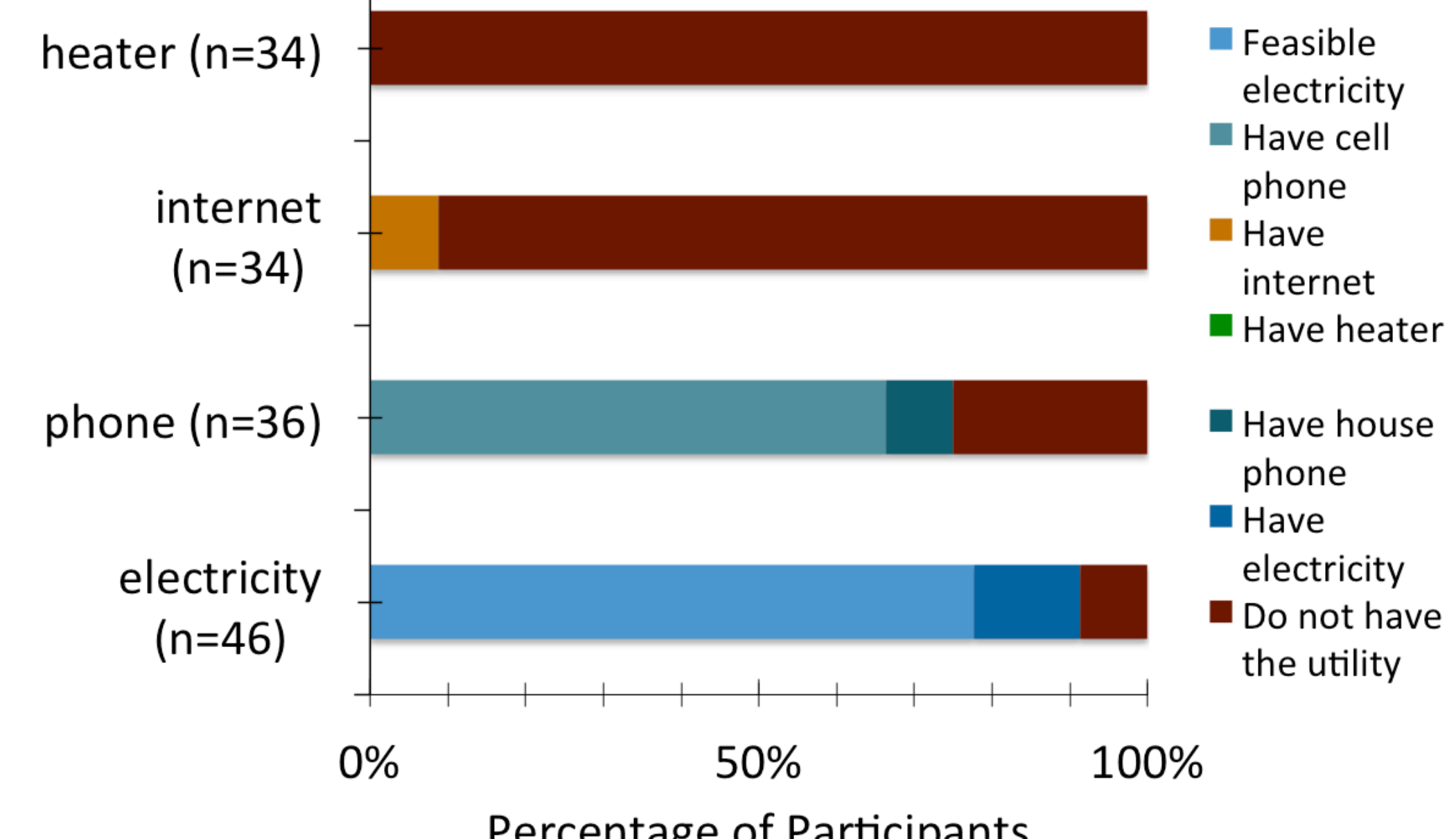


## Results

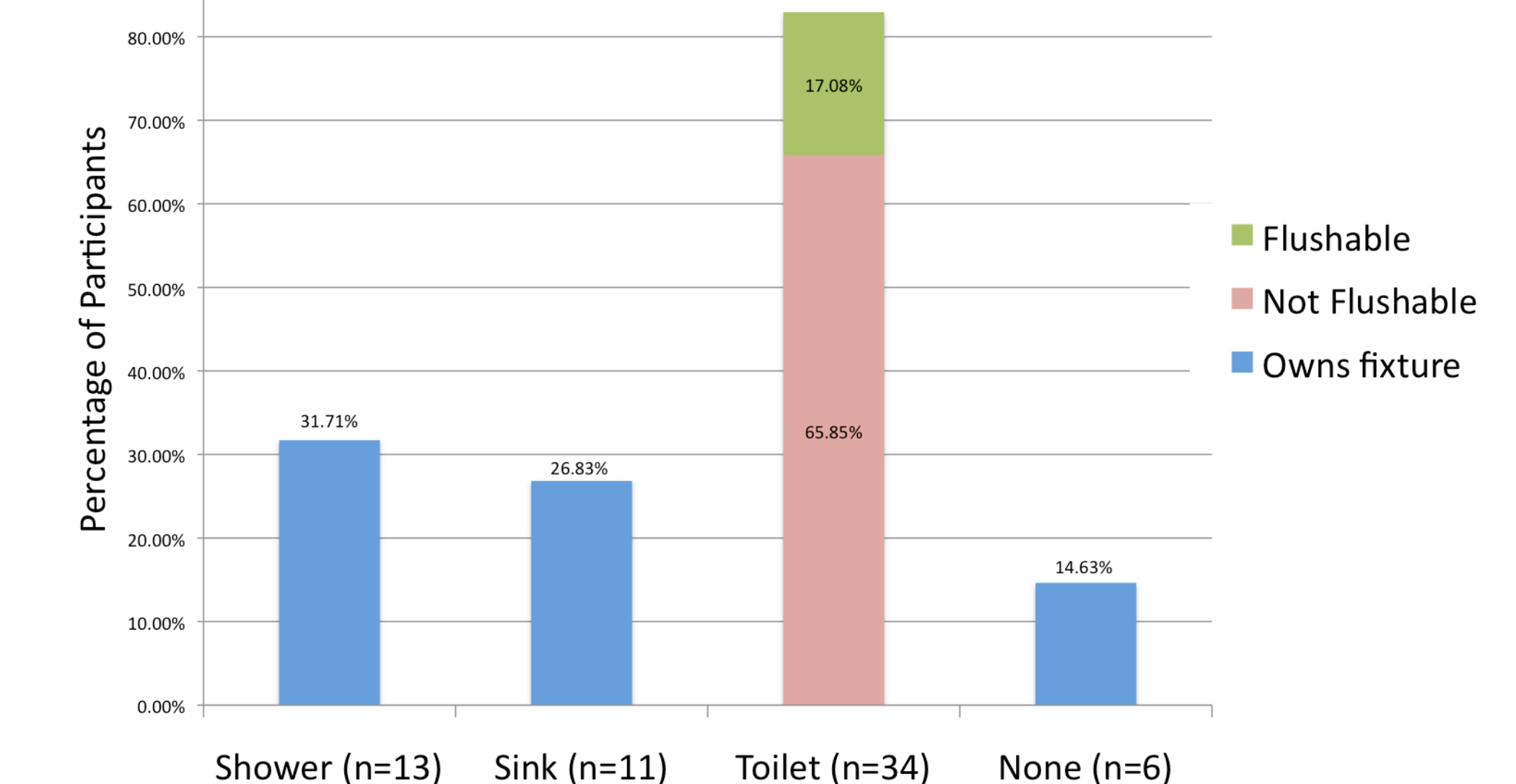
### Community Infrastructure



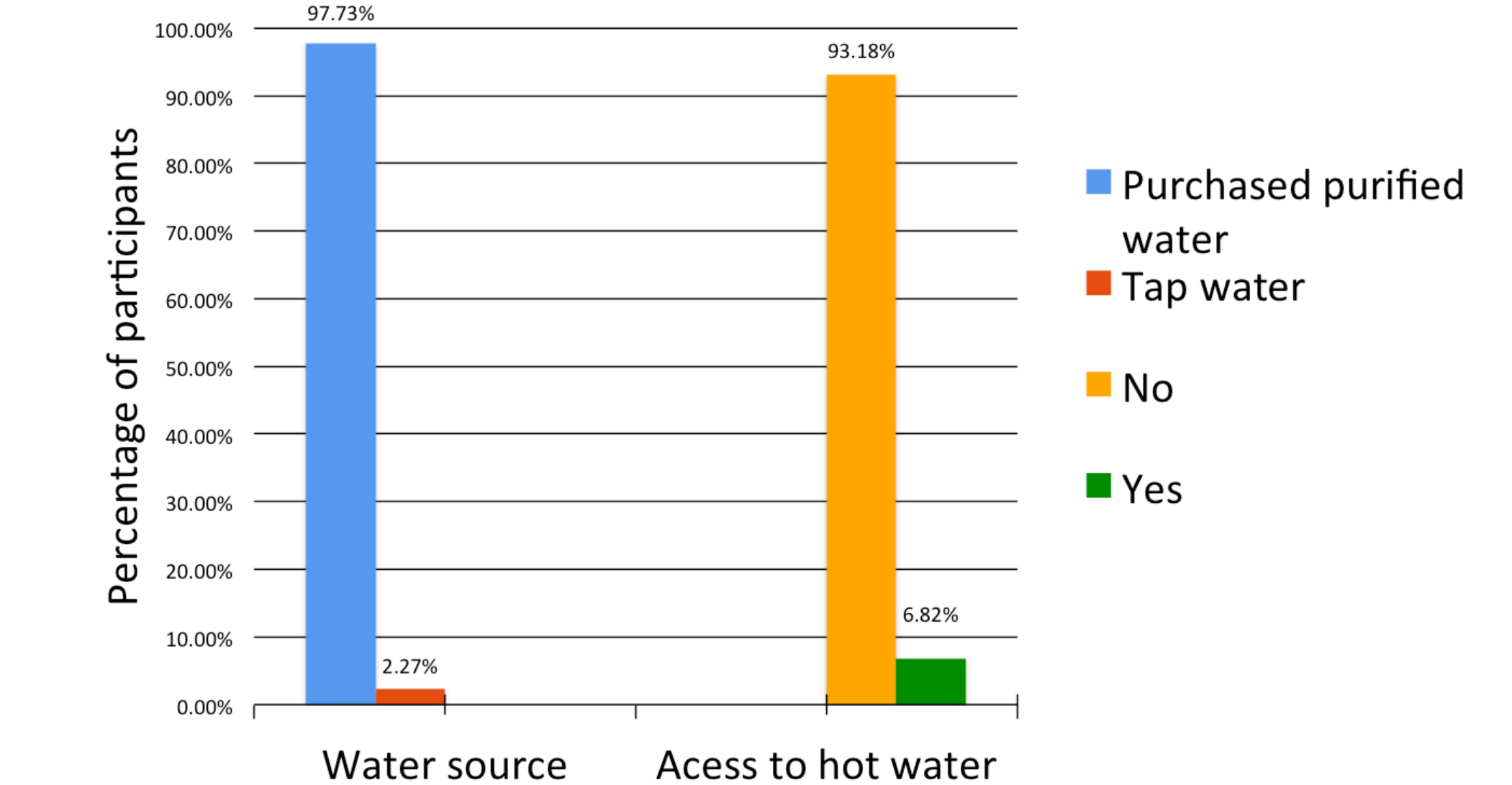
### Utility Usage



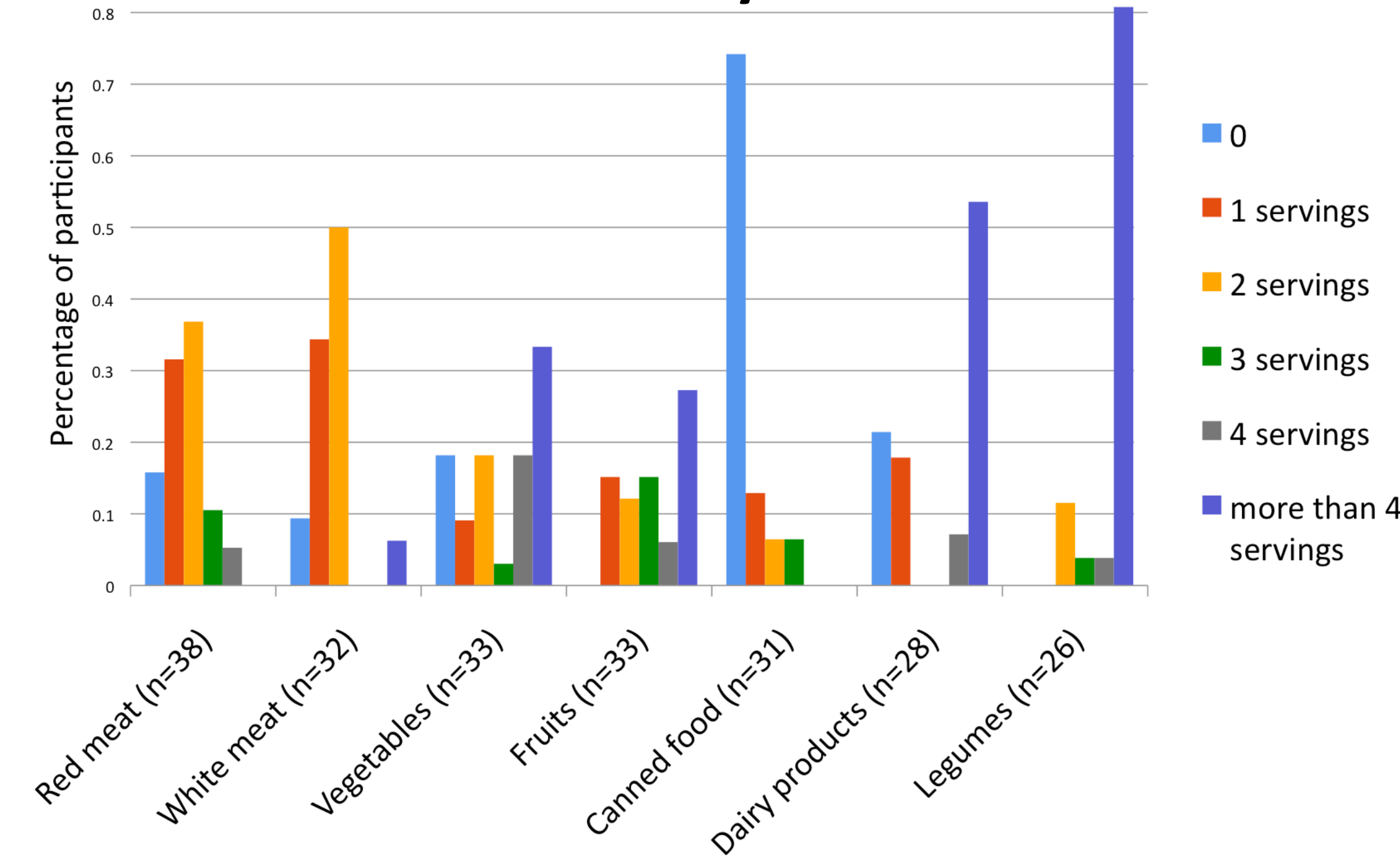
### Bathroom Fixtures



### Access to Water



### Weekly Diet



## Discussion

- Based on our representative sample of the community the majority of the residents are females.
- Although the majority of community members have access to electricity, most do not have a heater.
- Majority of the participants do not have a water heater and instead use a stove to heat water.
- Knowledge of nearby healthcare facilities is inconsistent among participants.
- Food consumption is highest for legumes and lowest for canned foods. Participants indicated that canned foods are more costly and therefore are only consumed when donated (data not included).
- Highest number of participants are unemployed due to the fact that most are housewives (data not included).
- As a drinkable water source, the majority of community members purchase purified water rather than utilize tap. This was reported to be due to unsanitary water sources (data not included).
- Majority of the participants have access to a toilet, however, 79.4% of the toilets do not flush.
- Majority of participants reported no access to a postal service, no street signs in the community, and no paved roads in the community.
- Majority of participants feel safe in their home and community, however, majority of participants do not have access to police services.

## Future Directions

- Expand the scope of the health assessment to increase sample size and recruit more study participants from the community.
- Create a healthcare resources catalogue for the patients in our clinic and residents in Colonia Margarita Moran and surrounding communities.
- Test quality of drinking water.
- Utilize the information from our results to tailor health education presentations and future community projects to better meet the needs of the community.

## Bibliography

- Malkin, Elizabeth. "Mexico's Universal Coverage is a Work in Progress." NY Times, January 29, 2011.
- Morin, Amy. "Brief Survey of Challenges of Mexican Healthcare System." Healthcare Global, September 13, 2013.
- Pan American Health Organization (PAHO). Mexico. 2010.
- World Health Organization (WHO). Life Expectancy: Life Tables by Country, Mexico. 2011.

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