



# The Effectiveness of a Webpage to Educate Home Building Professionals and Older Adults on Universal Design

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## Introduction

- Universal Design (UD) is defined as, “the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design” (Williams & Moore, 2011).
- There has been room for individuals to initiate their own misunderstandings and misinterpretations of what UD is (Mustaquim, 2015).
- Stakeholder understanding can be limited, and the concept of UD is commonly considered synonymous with accessible design (Mustaquim, 2015).
- A large challenge in encouraging adoption of UD is finding a way to gather and communicate good examples (O Shea et al., 2018).
- Aside from the varying needs of the aging population, it is important that UD guidelines and principles are well understood by different organizations and/or developers serving the aging community (Mustaquim, 2015).

## Methods

### Recruitment

- Flyers posted in local community-based settings where older adults spend time
- Social media post

### Webpage

- Definition of UD
- Difference in UD vs. accessible design
- 7 principles of UD without definitions
- Images and descriptions of UD examples in architecture, specifically within the home setting

### Data Collection and Analysis

- Use of the online platform, Qualtrics
- basic descriptive statistics through Qualtrics

## Results

### Pre-Survey

- 12 responses
- Older adult's current knowledge on UD before viewing webpage
- 5 multiple choice questions

### Post-Survey

- 12 responses
- Older adult's learned knowledge on UD after viewing webpage
- The same 5 multiple choice questions

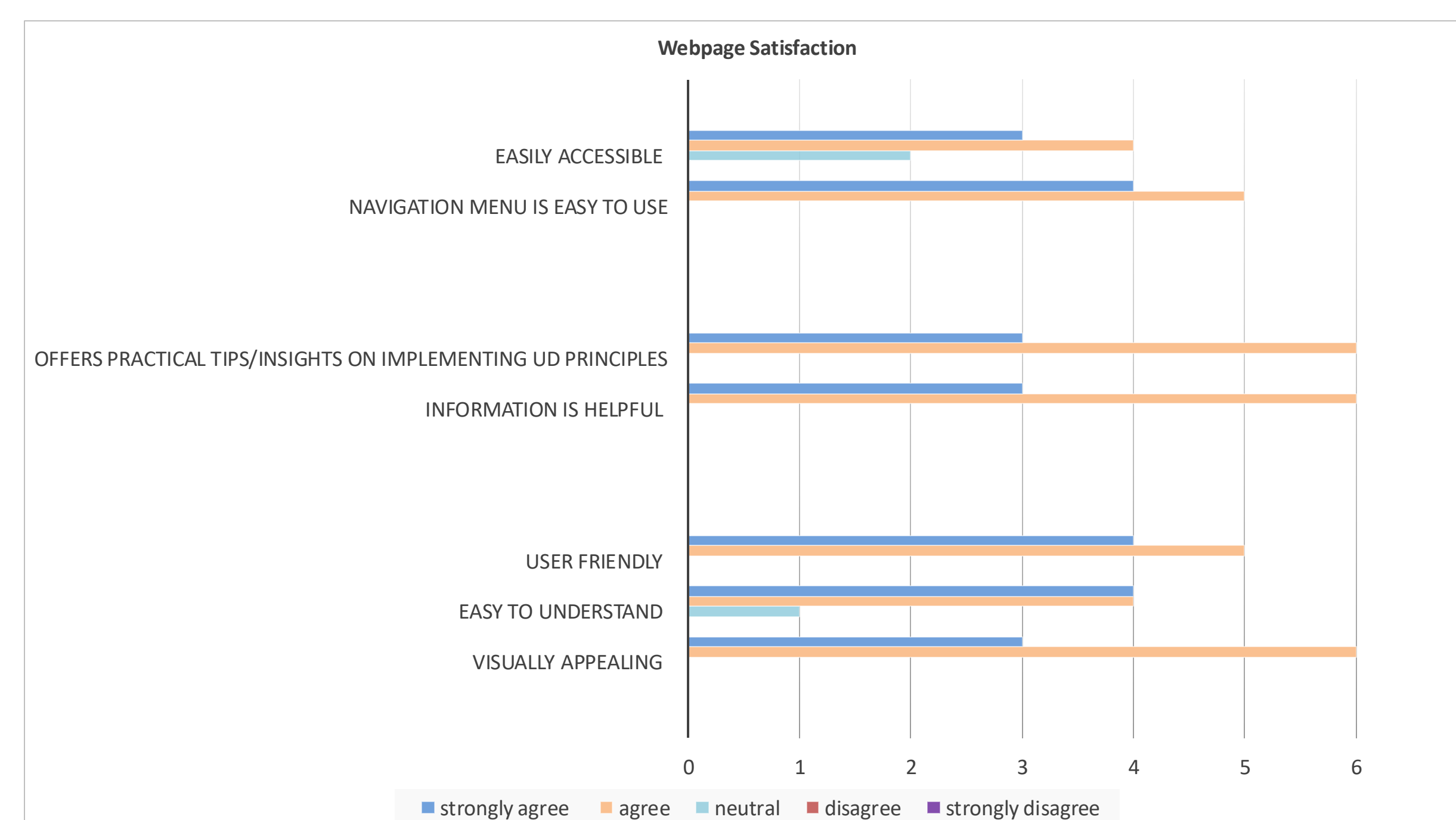
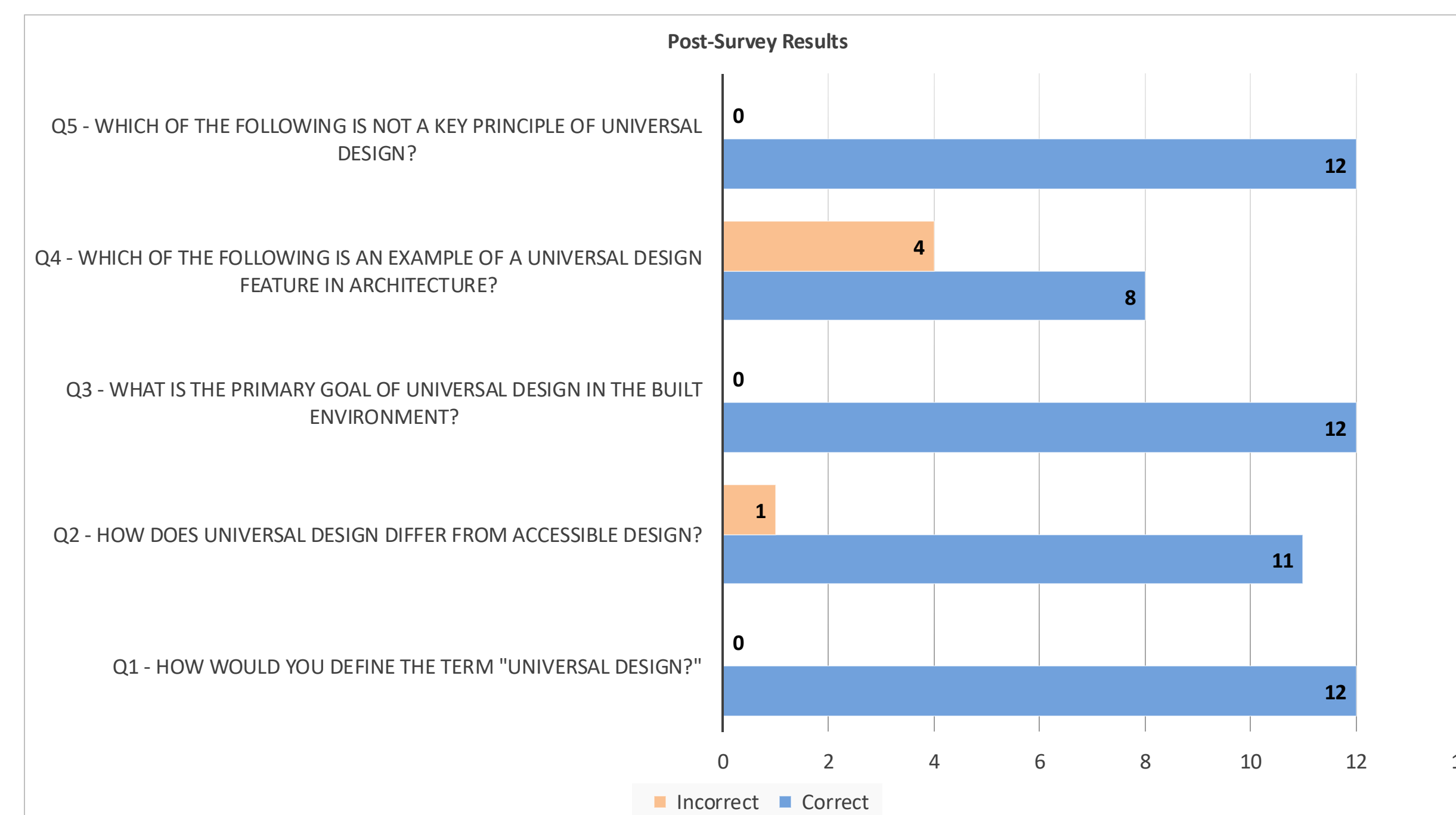
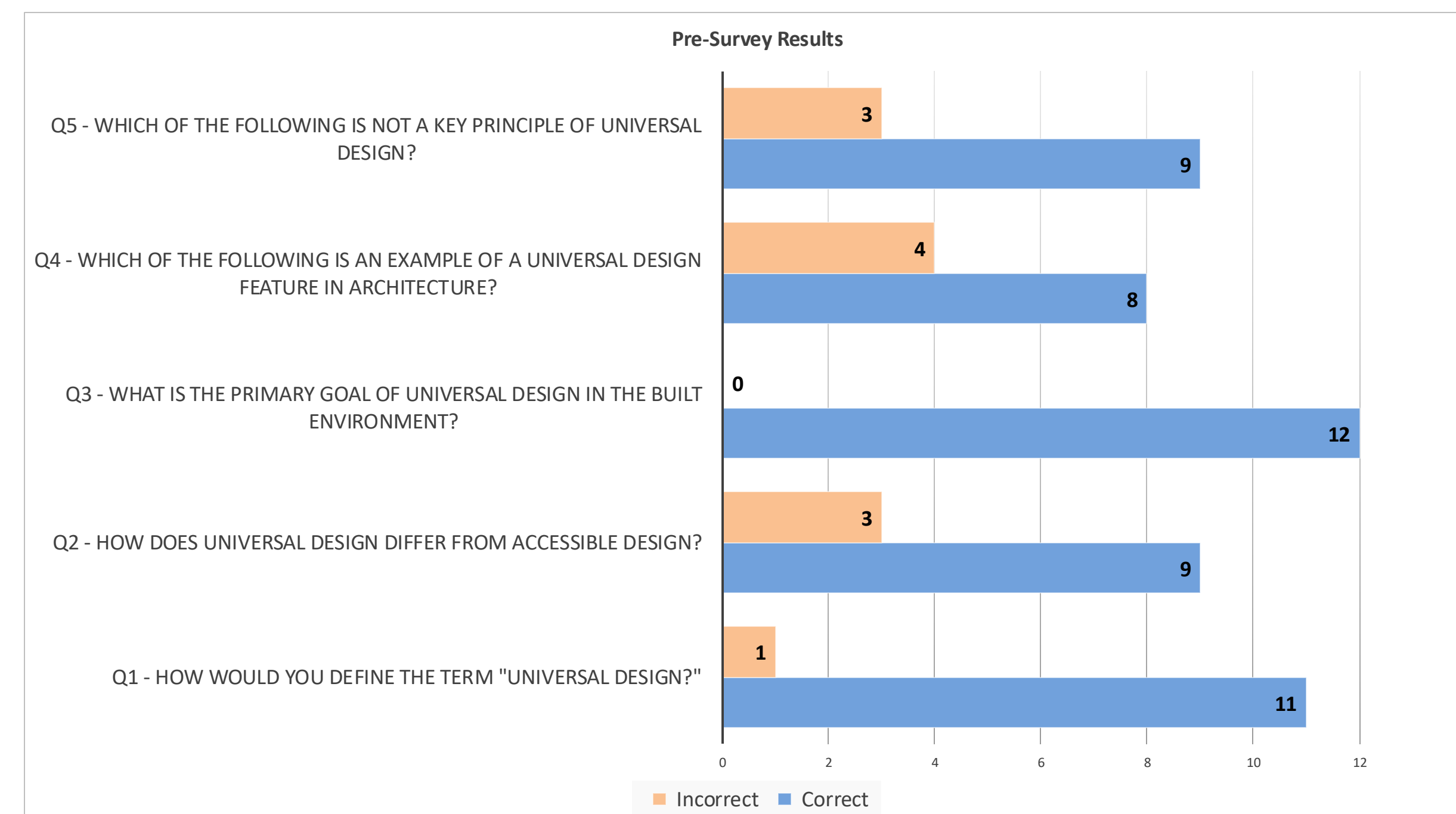
### Webpage Satisfaction and Feedback Survey

- 9 responses
- 7 questions using Likert-scale responses to rate perception, usefulness, and visibility

### Participants

- 91.7% female
- 8.3% male
- 33.3% a high school graduate or equivalent
- 33.3% with some college or technical school
- 16.7% with a bachelor's degree
- 8.3% with a master's degree or higher

## Results continued



## Discussion

- More in depth information on UD would be beneficial in increasing knowledge further
- Including technology to improve understanding of a variety of subjects can be generalized across populations
- Use of contrasting colors and simple design is most effective
- Online educational resources should be easy to navigate, comprehend, and view to maximize usefulness

### Limitations

- Lack of feedback from architects
- Use of email for relaying study instructions
- Display error within Qualtrics
- Webpage presentation across variety of devices
- Not carrying participant number throughout entirety of study
- Lack of voluntary feedback

### Future Research

- Increase sample size to include architects
- Recruitment of adults with a greater range of disabilities
- Identify the effectiveness of a webpage vs. a website

## Conclusion

- Older adults should be considered in technology production to promote inclusive learning across all generations
- Creators of online learning resources should consider presentation and navigation to create less opportunity for confusion
- Educating on UD allows for identification of barriers in the environment that may inhibit older adults from participating in desired occupations
- UD in the role of occupational therapy helps support client's needs and increases safety

## References

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