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## STUDY DESIGN

- Non-Experimental Quantitative Study with two parts:
  - **Stage 1:** A widely distributed survey trying to understand the perspectives of people with PD
  - **Stage 2:** Participation in a virtual group exercise class and completion of a post-class survey

## PURPOSE

Describe the perceptions related to telecommunication based group exercise classes for people with Parkinson's disease (PD)

## BACKGROUND

- No known cure and affects more than 6 million people worldwide
- Exercise is a treatment method used in early and late stages
- Many barriers exist to traditional in-person rehab including lack of time, travel distances, uneven distribution of rehabilitation services, and fear of falling
- The social aspect of videoconferencing compared to face to face is similar

## METHODS

### Stage 1:

1. Participants (N=34) were surveyed regarding their comfort using telecommunication platforms, experience with group exercise classes, and barriers to exercise
2. Survey respondents were invited to enroll in a virtual group exercise class

### Stage 2:

1. Twelve participants participated in exercise classes, led virtually
2. Group class participants were re-surveyed

## DATA ANALYSIS

- Descriptive statistics
- Non-parametric t-test (Wilcoxon): 10 questions pre and post-survey
  - Created a personal identifier during pre-survey that was used to link information in post-survey

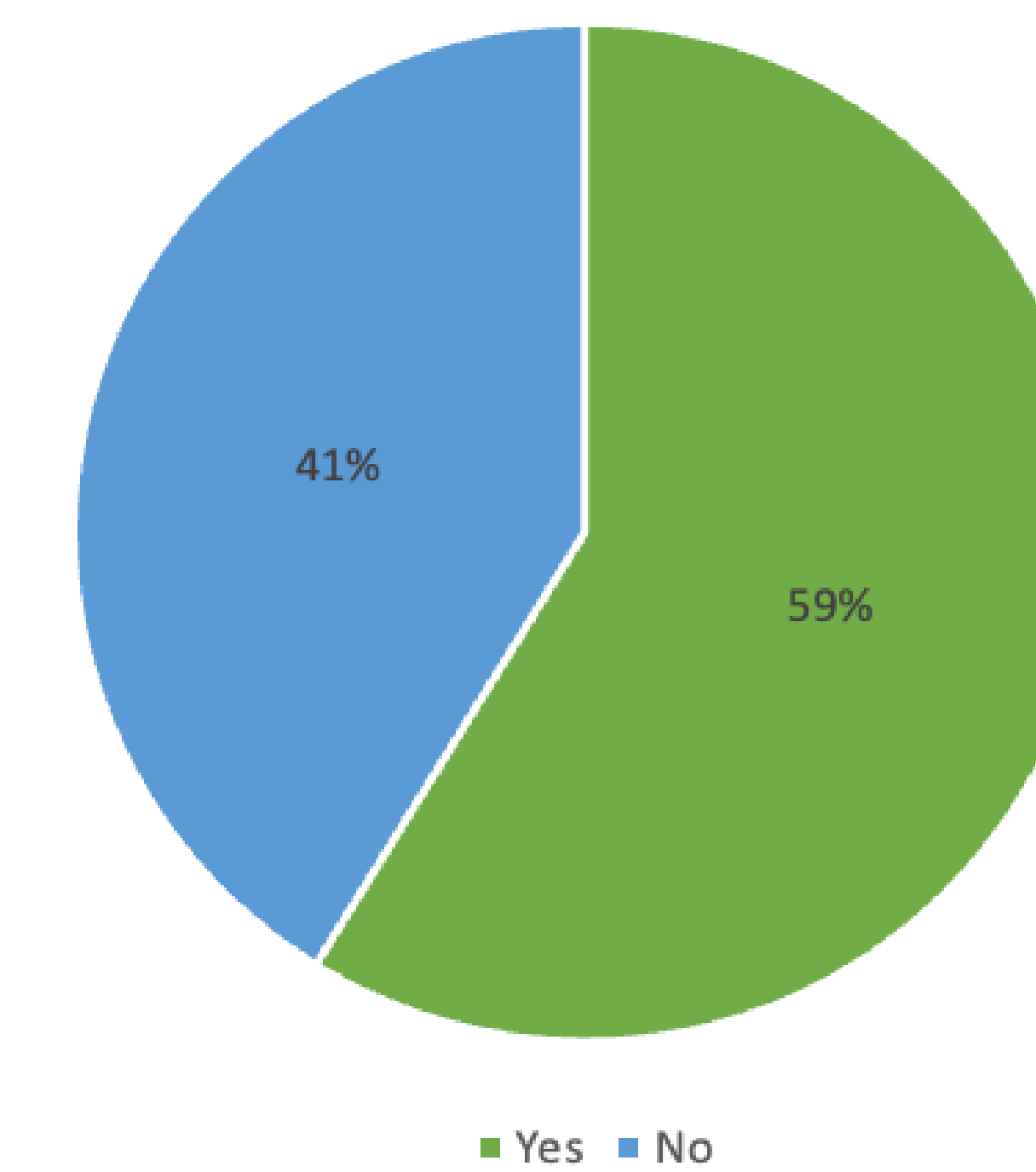


## AGENDA OF VIRTUAL CLASS

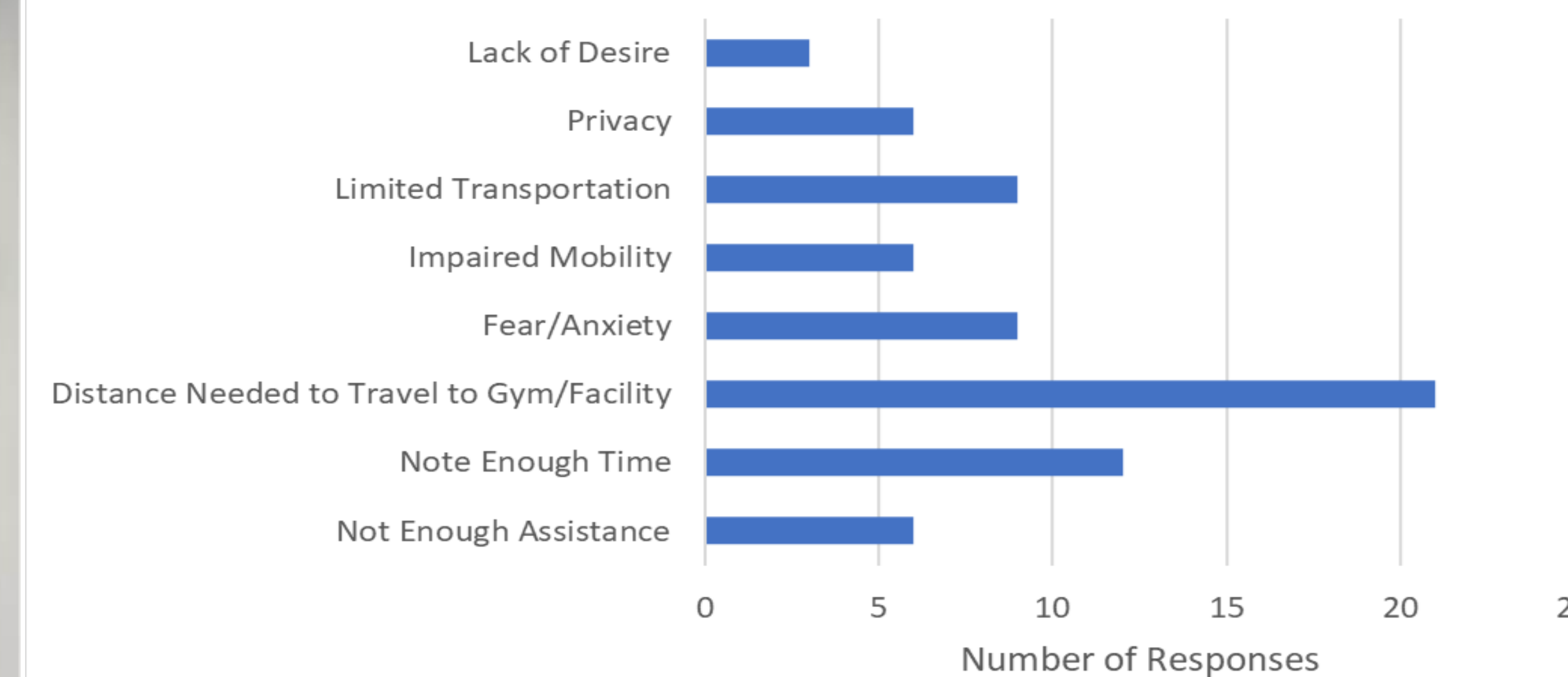
- Social Connectedness
  - Initial Introductions
  - Questions
  - Debriefing at the end
- Exercise Agenda
  - Warm-up
  - Large Amplitude Movements
  - Cardiovascular
  - Cool down

## RESULTS

Do You Have Access to a Parkinson's Group Exercise Class in Your Area?



Would Any of the Following Lead You to Choose a Virtual Group Exercise Class Over an In-Person Class (Select All That Apply)



- There were varied perspectives regarding intensity, quality, and safety of virtual group exercise class compared to in-person class:
  - 60.6% said it was equal in quality
  - 51.6% said it was equally intense
  - 30.3% said it was equally safe
- A majority of participants (80%) said that virtual group exercise class would help them maintain their regular exercise regime
- After participating in virtual group exercise class:
  - There was an improvement in the perception that virtual group exercise class provides an environment for PD patients to make connections with other people with PD (P=0.02)
  - There was an improvement in the perception that virtual classes were comparable to in-person classes in their ability to form connection with other people (P=0.01)

## CONCLUSIONS

People with PD are familiar with telecommunication platforms and feel that virtual group classes could help them maintain their exercise regimens. They reported distance and insufficient time as primary reasons that they would choose virtual group exercise over in-person exercise. They have varied perspectives regarding the quality, intensity, and safety of virtual group exercise classes compared to in-person classes. Their perception of connectedness to others with PD increased after participated in a virtual group exercise class.

## LIMITATIONS

- Gathered a majority of our participants through Research Match so potential bias due to increased technology comfortability
- Small sample size

## CLINICAL RELEVANCE

- Online group exercise classes should be offered to people with PD to decrease perceived obstacles to exercising while still maintaining the same level of exercise and social connectedness.
- Additional virtual peer support opportunities may be beneficial to increase social connectedness

## REFERENCES

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