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## Exploring The Role of Occupational Therapy in Long-Term Telerehabilitation for Stroke Survivors

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## Exploring The Role of Occupational Therapy in Long-Term Telerehabilitation for Stroke Survivors

Alexandra Murguido OTDS

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### Background

- Strokes are the second leading cause of death and leading cause of long-term disability worldwide and incidence is on the rise (Katan & Luft, 2018).
- The American Heart Association has predicted an increase in the U.S. population who will experience a stroke and an increase in stroke-related health care costs over the upcoming decades, necessitating further research to determine effective, cost-efficient stroke rehabilitation (Linder, 2015).

### Problem

- There is a lack of knowledge and accessibility to sufficient rehabilitation services in the community offered to support for stroke survivors with chronic limitations (Beit et al., 2019).

### Purpose

- The purpose of this quantitative research project is to analyze stroke survivor's perception regarding to occupational therapy services via telehealth.

### References

BeitYosef, A., Jacobs, J., Shenkar, S., Shames, J., Schwartz, I., Doryon, Y., ... Gilboa, Y. (2019). Activity Performance, Participation, and Quality of Life Among Adults in the Chronic Stage After Acquired Brain Injury-The Feasibility of an Occupation-Based Telerehabilitation Intervention. <https://doi.org/10.3389/fneur.2019.01247>

Katan, M., & Luft, A. (2018). Global Burden of Stroke. *Seminars in neurology*, 38(2), 208-211. <https://doi.org/10.1055/s-0038-1649503>

Wolf, S. L., Sahu, K., Bay, R. C., Buchanan, S., Reiss, A., Linder, S., ... Alberts, J. (2015). The HAAP (Home Arm Assistance Progression Initiative Trial: A Novel Robotic Delivery Approach in Stroke Rehabilitation. *Neurorehabilitation and Neuro Repair*, 29(10), 958-968 <https://doi.org/10.1177/1545968315575612>

### Research Questions

- Do stroke survivors with chronic limitations perceive continued participation in occupational therapy services via telehealth would improve their long-term health?
- Do stroke survivors with chronic limitations perceive telehealth as a viable and effective delivery method?
- Do stroke survivors with chronic limitations perceive that they can carry out rehabilitation goals using telehealth?
- Do stroke survivors with chronic limitations who have participated in occupational therapy via telehealth perceive improvements in their recovery outcomes?

### Methods

- This research-based capstone project utilized a quantitative research approach to conduct a analysis of the online survey results. Online survey link distributed to members of stroke support group at Memorial hospital, participants of telehealth pro-bono clinic at Salt-Lake Community College, and a Facebook group.

- 14 participants (Descriptive Data)
- 10-15 min duration to complete survey

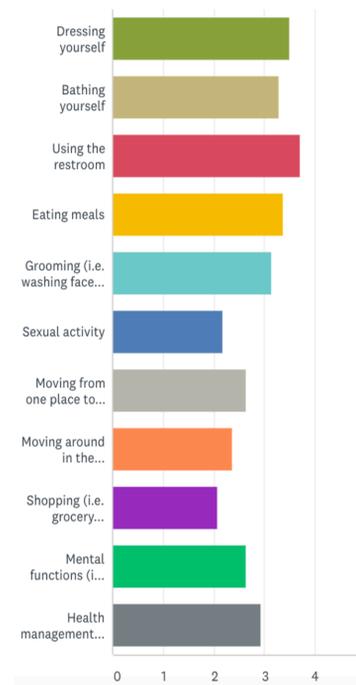
### Theoretical Frameworks

- Occupational Adaptation
- Model of Human Occupation

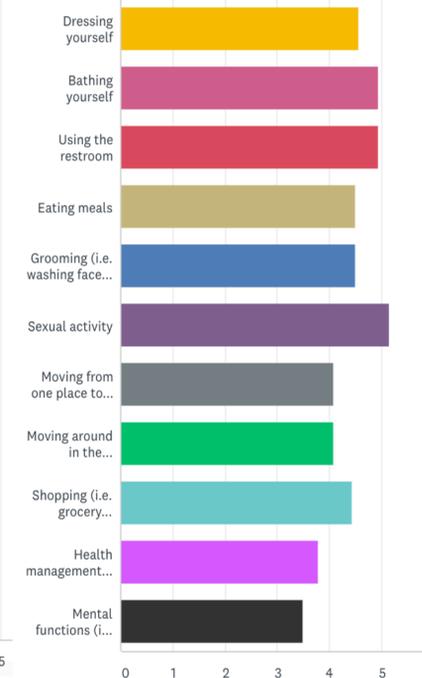
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### Results

A) How satisfied are you with performing any of the following occupations?

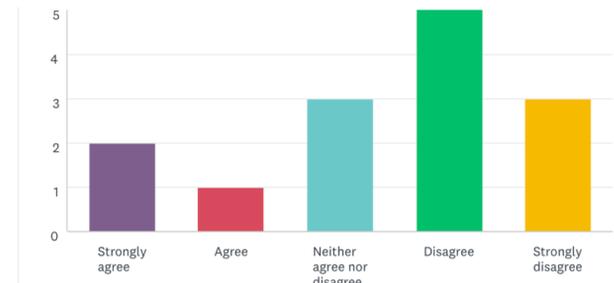


B) In your opinion, would participating occupational therapy services via telehealth improve the following occupations:

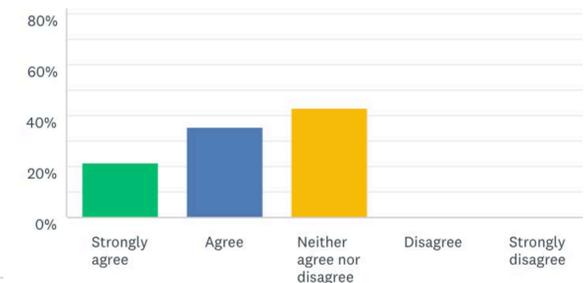


Key for A: 1: Not at all satisfied, 2: Slightly satisfied, 3: Moderately satisfied, 4: Very satisfied, 5: Completely Satisfied  
Key for B: 1: Strongly agree, 2: Slightly Agree, 3: Agree, 4: Neither Agree Nor Disagree, 5: Disagree, 6: Slightly Disagree, and 7: Strongly Disagree.

C) Do you think receiving services via telehealth would be as effective as face-to-face rehabilitation services?



D) Are you comfortable with using technology as a way to participate in therapy services?



### Implications for OT practice

- The survey results suggest a need for long-term rehabilitation tools for stroke survivors to improve their participation in occupational roles.
- Occupational therapists can fulfill this need for more rehabilitation services by providing access to services via telehealth and educating stroke survivors on effectiveness of these services.

### Conclusion

- All stroke survivors participants have completed post-stroke rehabilitation services but continue to have limitations in occupations.
- Stroke survivors are still motivated to continue in their recovery.
- Stroke survivors perceive telehealth services are not as effective as in-person rehabilitation services.