The Impact of An Intensive Comprehensive Aphasia Program on Participants'

Perception of Their Own Resilience

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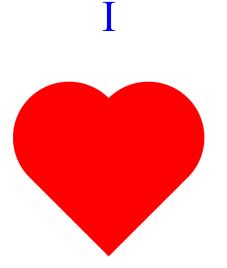
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Motivation



Speech-Language Pathology & Psychology

Introduction

- Stroke: acute health condition where blood supply is cut off from the brain
- Common complications post stroke: psychological conditions
 - 33% of people with a history of a stroke have poststroke depression (Towfighi et al., 2017)
 - 25% of people with a history of a stroke have an anxiety disorder (Thomson & Jensen, 2019)
- Resilience: coping well with adversity or traumatic circumstances that result in change (Fletcher & Sarkar, 2013)

Introduction

- Aphasia: language disorder that is a result of a brain injury
- Can impact production and comprehension of speech, and ability to read and write
 - About 33% of stroke survivors acquire aphasia (National Aphasia Association)
- Intensive comprehensive aphasia programs "ICAPs": short-term group therapy programs that provide multiple hours of intensive therapy per day
- Main goal of ICAPs are to improve language function



Introduction: Research Question

Do individuals living with aphasia perceive gains in resilience after participating in University of Delaware Aphasia Summer Intensive (UDASI)?

Methods: Study Design

- **Study Design:** A pre-/post-test design
 - University of Washington Resilience Scale: eight-item selfreport measure about how the individual perceives their resilience
- **Participants:** 9

| | Not at all | A little bit | Some what | Quite a bit | Very much |
|--|---------------|-----------------|--------------|----------------|--------------|
| I maintain a positive outlook even in bad circumstances. | | | | | |
| When something happens that makes me feel stressed, I usually calm down quickly. | | | | | |
| When I experience a set-back, I keep moving forward. | | | | | |
| Although I feel bad sometimes, I usually bounce right back. | | | | | |
| During stressful times, I am usually calm and relaxed. | | | | | |
| I do what is important to me, even when stressed. | | | | | |
| When something stressful happens, I keep going. | | | | | |
| When things go wrong in my life, I can pick myself up and start again. | | | | | |

University of Washington Resilience Scale

Methods: UDASI Format

- 2 weeks: 5 days/week from 9 a.m to 12 p.m. at University of Delaware STAR Tower
- 30 treatment hrs
- 3 blocks of speech therapy for 45 mins each per day
 - Individual, small group, computer session, or large group
- Daily theme
 - Functional activities to target individualized therapy goals

| Date | Theme |
|---------|----------------------------|
| July 15 | All About You |
| July 16 | Banking/Finance |
| July 17 | Groceries |
| July 18 | Day In The Life/Cooking |

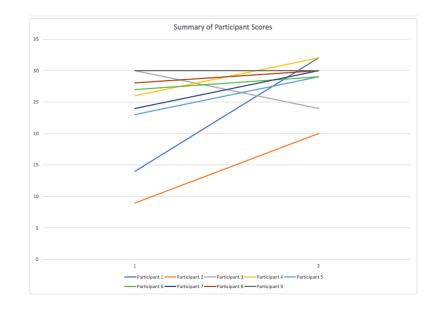
Daily Program Themes

UDASI Video



Results

- Paired samples t-test showed no statistically significant difference between pre-and post-test scores as a group
- Scores were trending towards statistical significance



Results

- Scores analyzed for the minimally detectable difference (MDD) (Revicki, Hays, Cella, & Sloan, 2008)
- MDD: the smallest score change determined to be clinically important or significant to the clinician and/or patient
 - 6/9 showed an MDD; one in the opposite direction
 - \circ 3/9 did not show an MDD

| Participant | Pre-Test Total Score | Post-Test Total Score | Difference | Showing MDD? |
|-------------|-------------------------|--------------------------|------------|--------------------------------|
| 1 | 14 | 32 | 18 | Yes |
| 2 | 9 | 20 | 11 | Yes |
| 3 | 30 | 24 | -6 | Yes (Opposite Direction) |
| 4 | 26 | 32 | 6 | Yes |
| 6 | 23 | 29 | 6 | Yes |

Findings

Findings: may conclude that for 5/9 participants meaningful change occurred in the their perception of their own resilience from the beginning to the end of UDASI



Discussion

APA Resilience Building Factors

Factors In ICAPS

| 1 | Social Connections | \checkmark |
|---|---|--------------|
| 2 | Establishing & Working Towards Goals | \checkmark |
| 3 | Practicing Self-Care | \checkmark |

(American Psychological Association)

Factors Possibly In ICAPS

| 1 | Change is a Part of Life | ? |
|---|--|---|
| 2 | Growing from Experiences | ? |
| 3 | Positive View of Oneself | ? |
| 4 | Long-Term Perspective During Adversity | ? |
| 5 | Maintain Hope | ? |

Limitations and Future Directions

| Limitations | Future Directions |
|--|--|
| All the participants have aphasiaImpaired language abilities | Rebecca Hunting Pompon and team have modified <i>UWRS</i> to an aphasia-friendly version Validation temporarily suspended due to COVID-19 but will continue later this year |
| Sample size Nine participants Power and the generalizability of the study is limited | Larger sample size Precise data Helps eliminate misleading statistics Greater power/desired effects Attrition |
| Researchers unable to identify participants' source of change | Qualitative study Interviews experiences, perspectives, and responses on the UWRS |

Conclusion

- 5/9 participants did indicate and perceive their resilience to increase to a clinically meaningful amount
- Remaining questions within the domains of ICAPs, resilience and aphasia, and resilience and ICAPs
- Areas of further exploration: sources of change between test measures, replication, larger sample size, aphasia friendly version *UWRS*
- Provide the most appropriate intervention while simultaneously increasing resilience
 - Increasing resilience mental health may improve decreasing
 psychological conditions

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Questions?





