An Educational Video Series for Care Partners and Healthcare Providers Working with Individuals with Traumatic Brain Injuries (TBI)

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Introduction

- Individuals who have sustained a moderate to severe traumatic brain injury (TBI) are at risk of developing chronic health problems resulting in long-term disability and shortened life expectancy.
  - TBI symptoms including behavioral challenges, emotional disturbances, physical limitations, and cognitive changes contribute to the likelihood of long-term disability as well as the need for ongoing assistance when performing activities of daily living.
- Care partner training is an essential component of discharge planning within the scope of occupational therapy practice to prevent client readmission.
- Care partners of individuals with TBI have reported challenges related to role fulfillment due to a lack of knowledge about the diagnosis.
- Healthcare providers have an important role in promoting the self-efficacy of care partners through education on:
  - Coping strategies
  - Advocacy efforts
  - TBI symptom management
  - Access to resources
- There are gaps in the literature regarding virtual approaches for the provision of TBI educational materials.
- *Purpose:* To examine the effectiveness of an educational video series for care partners and healthcare providers working with individuals with TBI
  - May promote both care partner self-efficacy and effectiveness of healthcare provider training by increasing access to educational materials through alternative platforms

Methods

- The primary investigator conducted a needs assessment with healthcare providers at Spain Rehabilitation Center to identify video topics based on educational needs and the TBI Model System.
- Video scripts were created and therapy staff participated in the filming process for 10 three-minute videos including the following TBI care topics:
  1. **Introduction**
  2. **Behavioral Challenges**
  3. **Emotional Disturbances**
  4. **Cognitive Changes**
  5. **ADL Performance**
  6. **Sleep & Sleep Hygiene**
  7. **Advocacy Efforts**
  8. **Community Resources**
  9. **Care Partner Burnout**
  10. **Self-Efficacy as a Care Partner**
- All videos within the series were designed and edited by the primary investigator.
- Participants were recruited through flyers posted in common areas at the facility as well as by word of mouth.
- The video series was made available through a QR code and web link present on flyers. Access to surveys was included at the beginning and end of the video series via a separate web link and QR code.
- Participants:
  - Care partners (n = 1)
  - Healthcare providers (n = 7)
- Qualtrics survey (pre-test/post-test)
  - Statement of consent
  - Demographic information
  - 5-point Likert scale
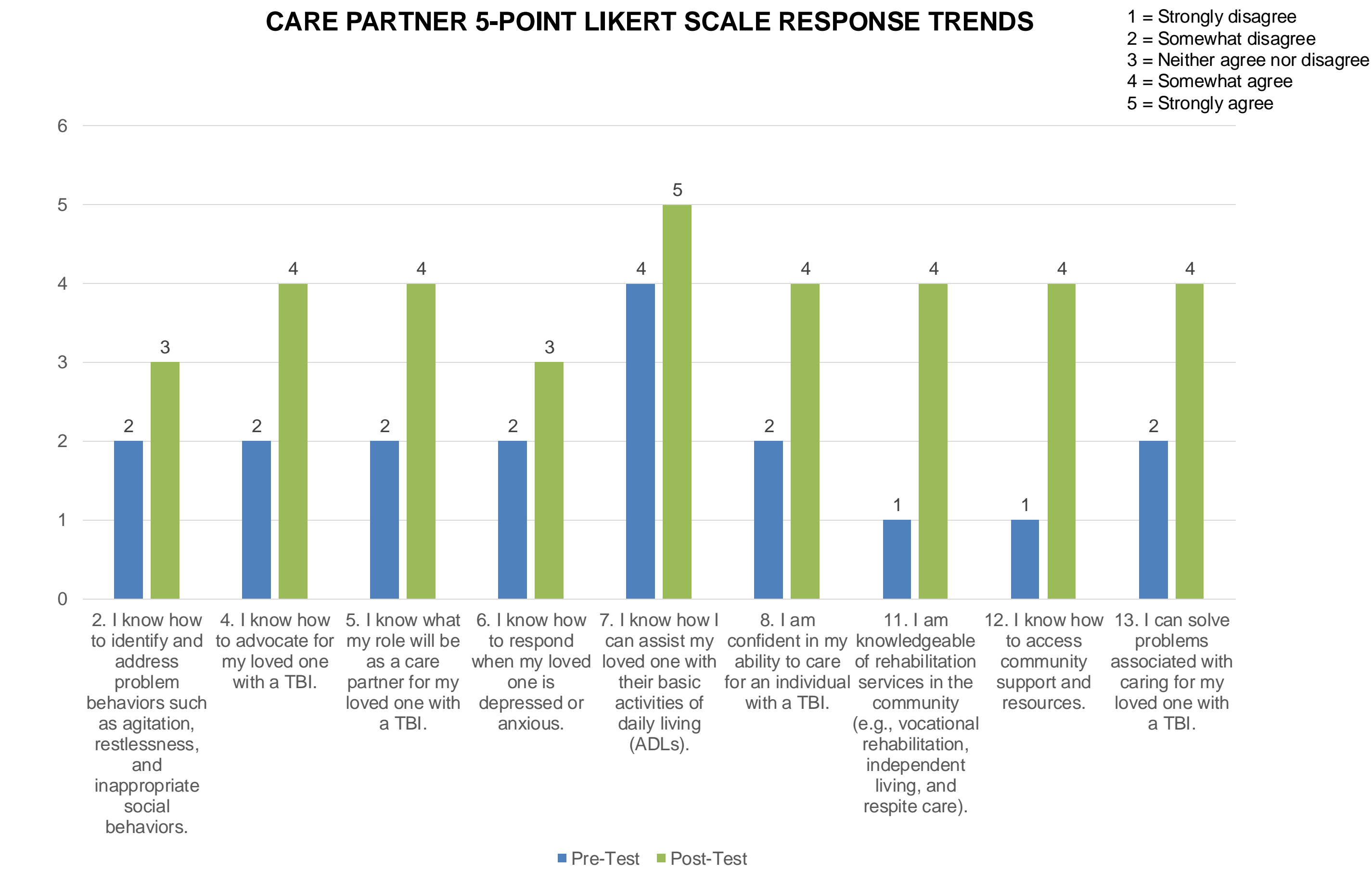 - Open-ended questions

Results

PARTICIPANT DEMOGRAPHICS

Care Partners

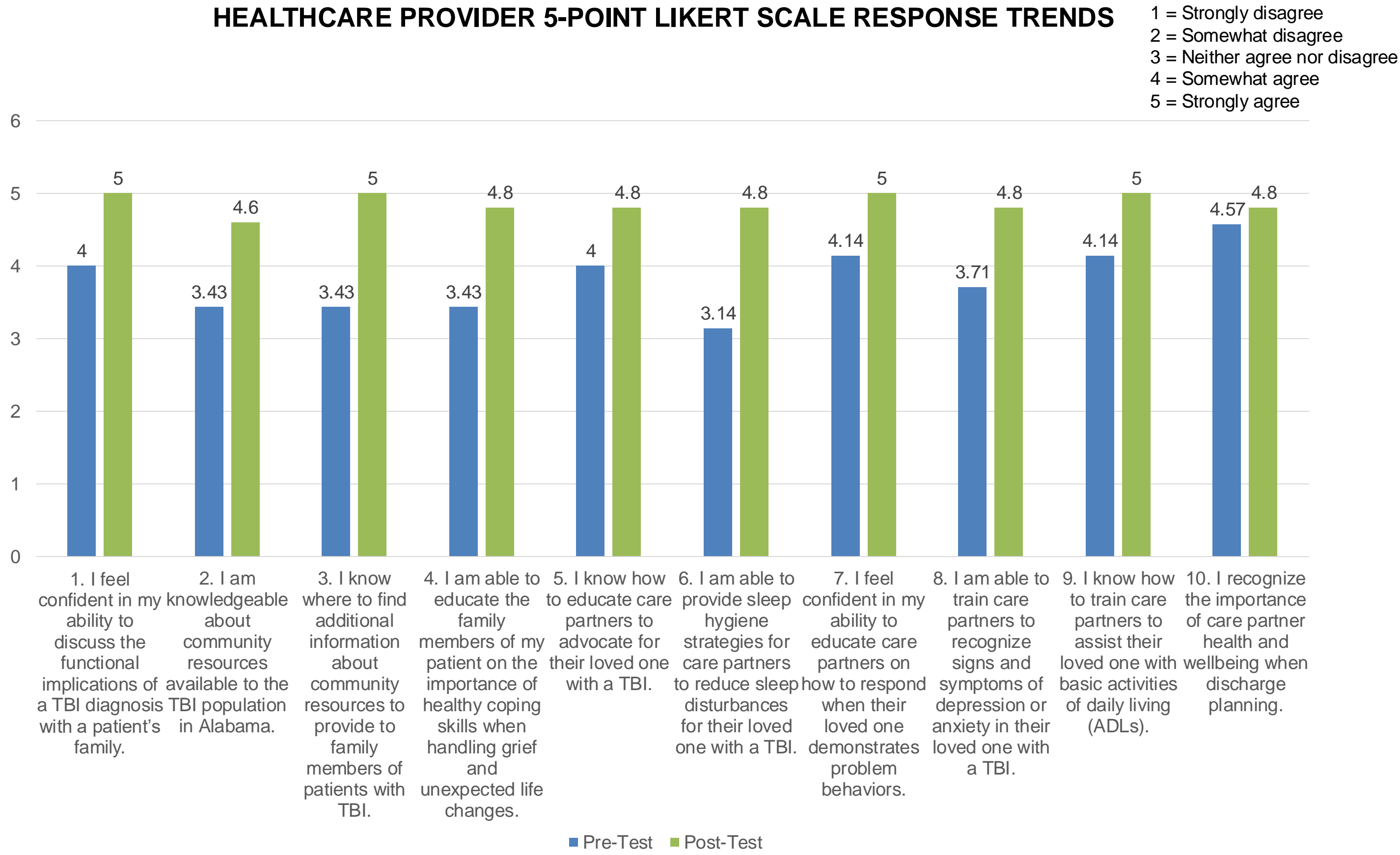| Age	Gender	Relationship Status	Education Level	Vocational Status	Previous Care Partner Experience
41-64 years old (n = 1)	Female (n = 1)	Single (n = 1)	Some college (n = 1)	Employed full-time (n = 1)	No (n = 1)

Healthcare Providers

Age	Gender	Job Title	Years of Experience Working in an Inpatient Rehabilitation Setting	Years of Experience Working with Individuals with TBI
18-40 years old (n = 7)	Female (n = 7)	Occupational Therapist (n = 3)	Less than 5 years (n = 4)	Less than 5 years (n = 6)
		Physical Therapist (n = 2)	5-10 years (n = 3)	5-10 years (n = 1)
		Speech-Language Pathologist (n = 2)		

CARE PARTNER 5-POINT LIKERT SCALE RESPONSE TRENDS

1 = Strongly disagree
2 = Somewhat disagree
3 = Neither agree nor disagree
4 = Somewhat agree
5 = Strongly agree

Care partner survey responses that did not change from the pre-test to the post-test after watching the video series included questions 1, 3, 9, 10, 14, 15.

HEALTHCARE PROVIDER 5-POINT LIKERT SCALE RESPONSE TRENDS

1 = Strongly disagree
2 = Somewhat disagree
3 = Neither agree nor disagree
4 = Somewhat agree
5 = Strongly agree

Healthcare provider survey responses for the pre-test were averaged between 7 total participants. Post-test responses were averaged between 5 total participants.

OPEN-ENDED RESPONSES

Which video did you find the most beneficial to your role as a care partner or healthcare provider in the TBI population?
- Community Resources
- Sleep
- Care Partner Burnout
- Behavioral Challenges

How will participation in this study impact your clinical practice skills?
- "It will help me to better train my patients' families on how to care for their loved ones. It has also given me community resources I can share with patients and their families for post discharge."
- "It helped me understand the importance of care partner training to ensure a safe transition home!"
- "Participation will help me better treat/educate both patients with TBI and their caregivers."

Discussion

The following topics were identified based on survey response changes from pre-test to post-test for care partners and healthcare providers. These topics were also reported to be the most beneficial within the video series supporting care partner role fulfillment and healthcare provider training.

1. ACCESS TO COMMUNITY RESOURCES
- A care partner reported increased confidence in their ability to identify rehabilitation services in the community after watching the video series.
- A care partner reported increased confidence in their ability to successfully access community support and resources after watching the video series.
- Healthcare providers reported increased confidence in their ability to identify community resources available to the TBI population in Alabama after watching the video series.
- Healthcare providers reported increased confidence in their ability to find additional information about community resources to provide to family members after watching the video series.

2. CARE PARTNER BURNOUT
- A care partner reported increased confidence in their ability to solve problems associated with caring for their loved one with a TBI after watching the video series. They also reported increased confidence in their ability to fulfill care partner roles reducing their risk for burnout.
- Healthcare providers reported increased confidence in their ability to educate care partners on the importance of healthy coping skills when handling grief and unexpected life changes to prevent burnout.

3. SLEEP HYGIENE STRATEGIES
- Healthcare providers reported increased confidence in their ability to provide sleep hygiene strategies for care partners to reduce sleep disturbances after watching the video series.

LIMITATIONS & AREAS FOR IMPROVEMENT
- There was limited care partner participation due to a small number of patients admitted with TBI during the data collection process.
- Fewer responses from healthcare providers on the post-test survey versus the pre-test survey contributed to mixed findings.
- Extended time was required to film and design the video series resulting in a short amount of time for data collection.
- TBI education classes for care partners could have encouraged care partner participation in the project by troubleshooting any technical issues that may have arisen when accessing the video series.
- Translation services were not available during project implementation impacting the accessibility of the video series for Spanish-speaking individuals.

Conclusion

IMPLICATIONS
- To support care partner training in an inpatient rehabilitation setting, occupational therapy practitioners should consider virtual platforms to provide wholistic educational resources to family members while in-house.
- Increased access to educational materials including how to access community resources after transitioning home can support care partner self-efficacy and advances in healthcare provider training.

FUTURE PROJECTS
- Based on open-ended survey responses, future endeavors to advance TBI education could include more in-depth information regarding sleep strategies and behavioral challenges, specifically agitation.
- An increased timeline to implement an educational video series may contribute to more significant findings.

References

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Acknowledgement & Contact information

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SCAN THIS QR CODE TO WATCH THE VIDEO SERIES: