



Improving Knowledge and Confidence in Hand Therapy Practice

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DCE Site Description

California Rehabilitation and Sports Therapy is a network of outpatient clinics with more than 30 locations across Los Angeles and Orange Counties. They are affiliated with the Physical Rehab Network (PRN), which includes over 200 clinics. The clinics offer occupational therapy (OT) and physical therapy (PT) for patients of all ages and diagnoses. OT services provided are solely for hand therapy.

Identified Needs

- Improving general hand therapy knowledge.
- Improving advanced hand therapy knowledge.
- Provide more function/occupation-based hand therapy interventions.

Literature Review

- A lack of occupation-based methods utilized in hand therapy can lead to occupational therapists defaulting to a bottom-up approach, missing the opportunity to apply effective interventions and emphasize the uniqueness of OT (Henrichon & Toth-Cohen, 2022).
- Studies show that entry-level programs covering hand therapy curricula must expose students to specific criteria for them to be successful in this practice setting (Stormbroek & Buchanan, 2018).
- A by-product of this self-doubt or poor confidence can lead to new grads feeling inadequate and questioning whether they are able to work as an occupational therapist (Moir et al., 2021).

Individualized Learning Objectives

- By 14 weeks, the capstone student will develop a hand therapy 101 booklet for practitioners, future occupational therapy students, aides, and volunteers.
- By 14 weeks, the capstone student will evaluate and analyze the effectiveness of a hand therapy 101 booklet for practitioners, future occupational therapy students, aides, and volunteers.
- By 14 weeks, the capstone student will have increased their advanced clinical practice skills in hand therapy.

Project Description & Implementation

- To create and implement a Hand Therapy 101 booklet consisting of general and advanced hand therapy knowledge to be used by all California Rehabilitation and Sports Therapy clinics currently practicing hand therapy located in Orange County and Los Angeles County.
- Incorporating knowledge of upper-extremity anatomy, evaluation methods, provocative testing, and occupation-based interventions for various upper-extremity diagnoses.
- Provide easily accessible knowledge about hand therapy for those interested and currently practicing in the field.
- Promote the value of OT and advocate for the profession in a PT dominated company.

Program Evaluation & Outcomes

- Evaluation method:** Mixed-methodology.
 - Google settings modified to account for missing answers.
- Demographics:** 12 same participants for each survey
 - Five OT's, four aide's, two OT students, and one volunteer.
- Quantitative data:**
 - Nine out of 12 participants reported change of two or more points on Likert scale for increased knowledge and confidence of hand therapy.
 - A 40% increase was seen through two 15 question hand therapy knowledge quizzes from pre/post-test surveys.
- Qualitative data:** Five open-ended questions, aiming to collect qualitative data regarding shortcomings of hand therapy practice, perceived knowledge and confidence within the field, and effectiveness of the scholarly deliverable implemented.
 - "Do you feel as though you have the knowledge and confidence in this field to effectively treat patients with a variety of upper-extremity diagnoses? Please explain."
 - "Do you believe occupation-based interventions are utilized enough within this setting? Please explain why or why not."
 - "What would you change to improve the contents of the booklets?"

Quantitative Data Results

Figure 1)
Which structure is NOT associated with cubital tunnel?

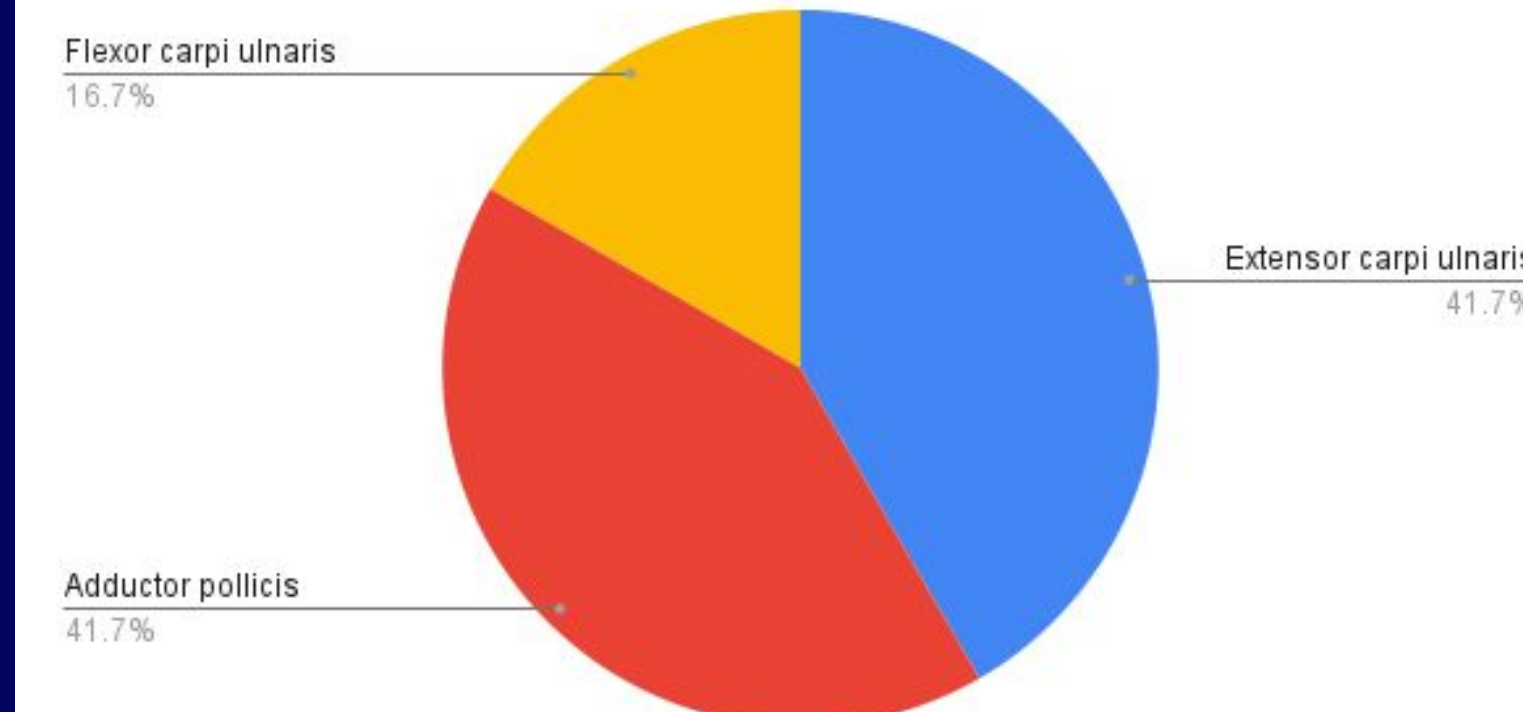


Figure 2)
Which structure is NOT associated with cubital tunnel?

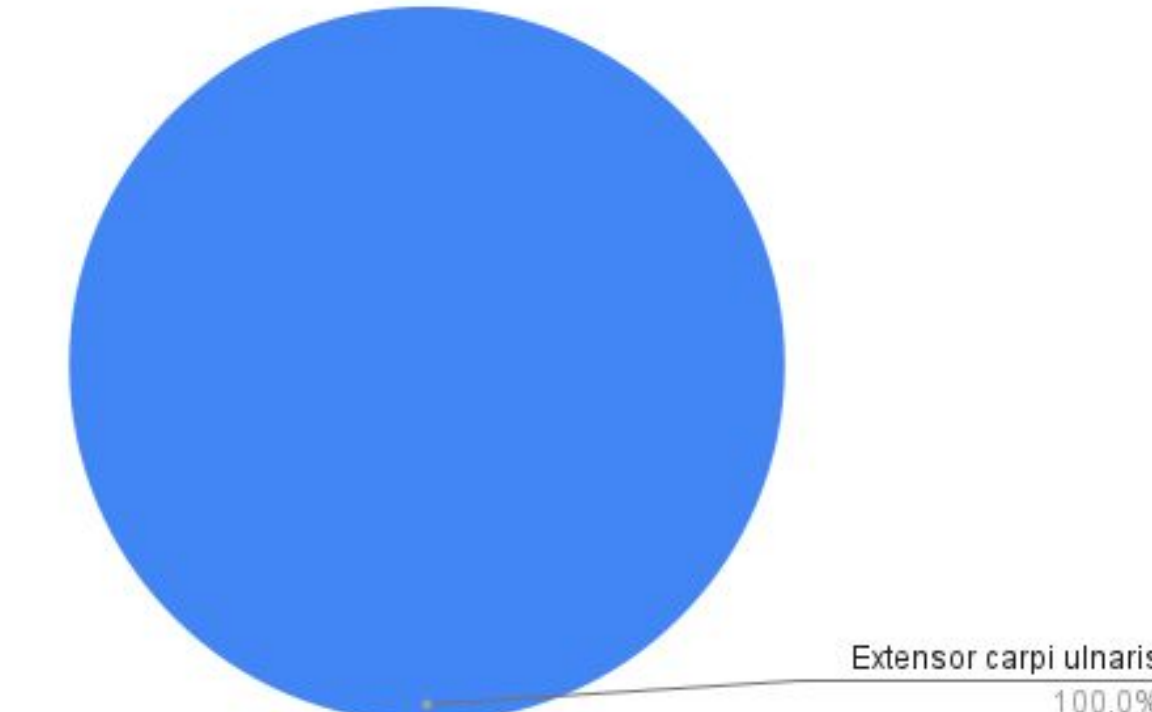
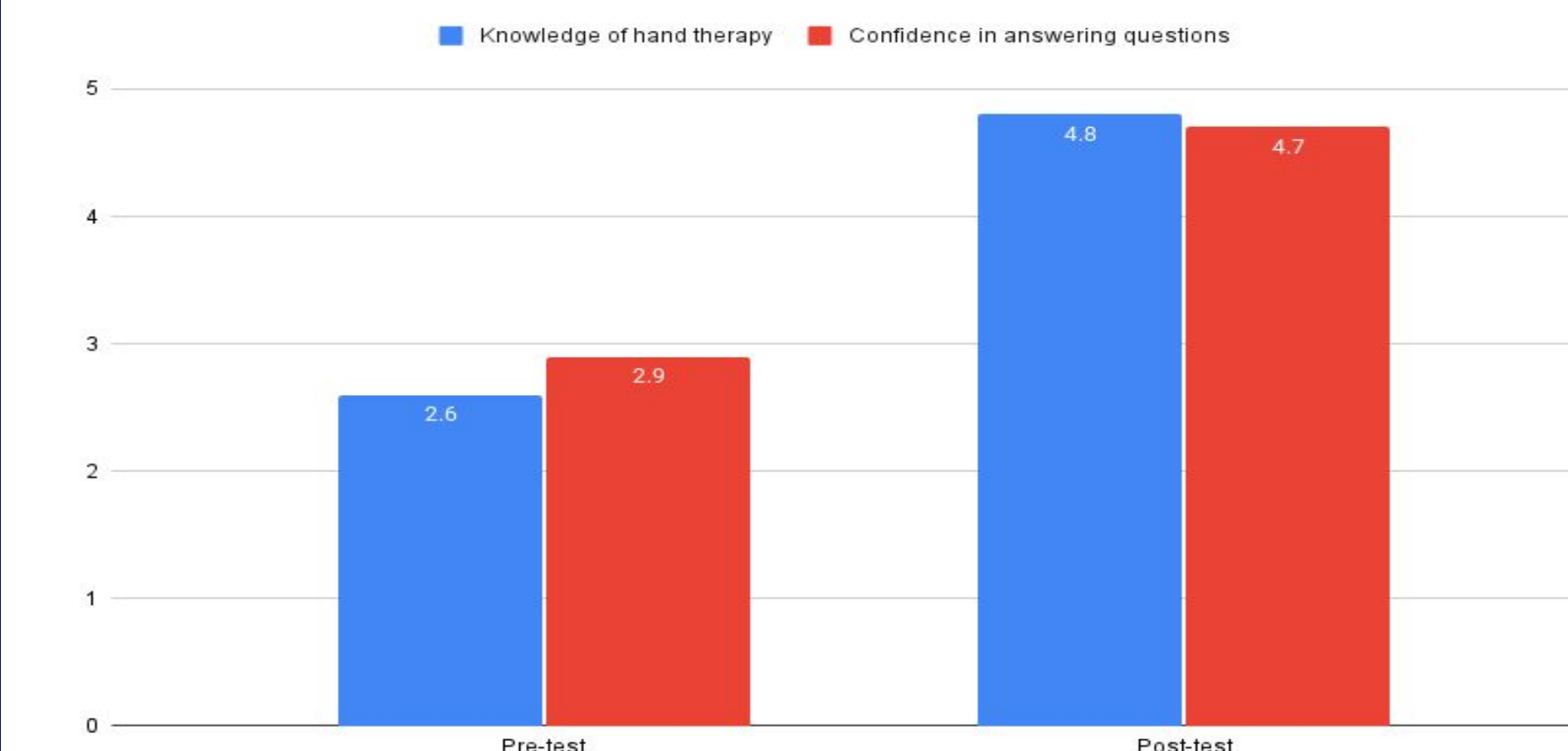


Figure 3)
Hand therapy knowledge & confidence pre- and post-booklet implementation.



- Nine of 12 participants reported an increase of two or more points for questions pertaining to perceived knowledge and confidence of hand therapy
- p=0.0001

Qualitative Data Results

- Theme 1: Time and space are limiting factors for occupation-based interventions.
- Theme 2: Increased knowledge and confidence via a Hand Therapy 101 booklet.
- Theme 3: The booklet is a great resource for training new staff and students due to limited time.

Discussion

- Results show an increase in participants perceived knowledge in upper-extremity diagnoses, evaluation methods, and occupation-based interventions to be used in hand therapy practice.
- Results show an increase in perceived confidence in hand therapy practice, supporting the effectiveness of a Hand Therapy 101 booklet.
- Continued advocacy of OT within a hand therapy setting is essential to reducing role blurring with PT.
- Having more resources within curricula and fieldwork can increase students knowledge and confidence within the field.

Implication & Conclusion

- The sample size was a limitation in this study.
- Future studies should utilize a larger sample size with more specific open-ended questions to gather more data.
- Besides general knowledge, advanced practice within hand therapy (e.g. splinting, wound care, manual therapy) should be implemented within OT curricula.
- Implementing a Hand Therapy 101 booklet was a success in increasing knowledge and confidence in hand therapy knowledge for current staff, aides, and volunteers.

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Scholarly Deliverables & References

- Includes an easily accessible PDF of the Hand Therapy 101 booklet.
- Physical copies may also be requested.

