

## Introduction

Designing and implementing home exercise programs (HEPs) is an essential component of nearly every physical therapist's skillset.

It promotes independence, expedites functional recovery, and provides the opportunity for patients to attain better outcomes without accumulating additional costs of extra appointment times.

The lack of adherence to home exercise programs (HEPs) among patients of outpatient physical therapy practices has been a topic of concern in the medical field.

## Objectives

The objective of this study was to explore barriers to HEP adherence among patients with shoulder pathology.

This study answered the question, "What are the barriers to adherence of HEPs in patients participating in outpatient physical therapy for shoulder pathologies?"

## Results: Non-Influential Factors

### Self-efficacy

- Not a significant factor for HEP adherence.
- Half of the participants (50%) did not believe in full recovery

### Social support

- 5/8 (62.5%) of participants reported having social support (none of these had full adherence)
- Out of the three participants who did not have social support, two-thirds (66%) were non-adherent.
  - One of these participants reported that having such social support would likely be beneficial while the other two did not believe it would be helpful.

### Active lifestyle

- 7/8 (87.5%) of participants viewed themselves to have an active lifestyle, making it difficult to ascertain whether this was an influencing factor to adherence for HEP.

### Limitation in activities

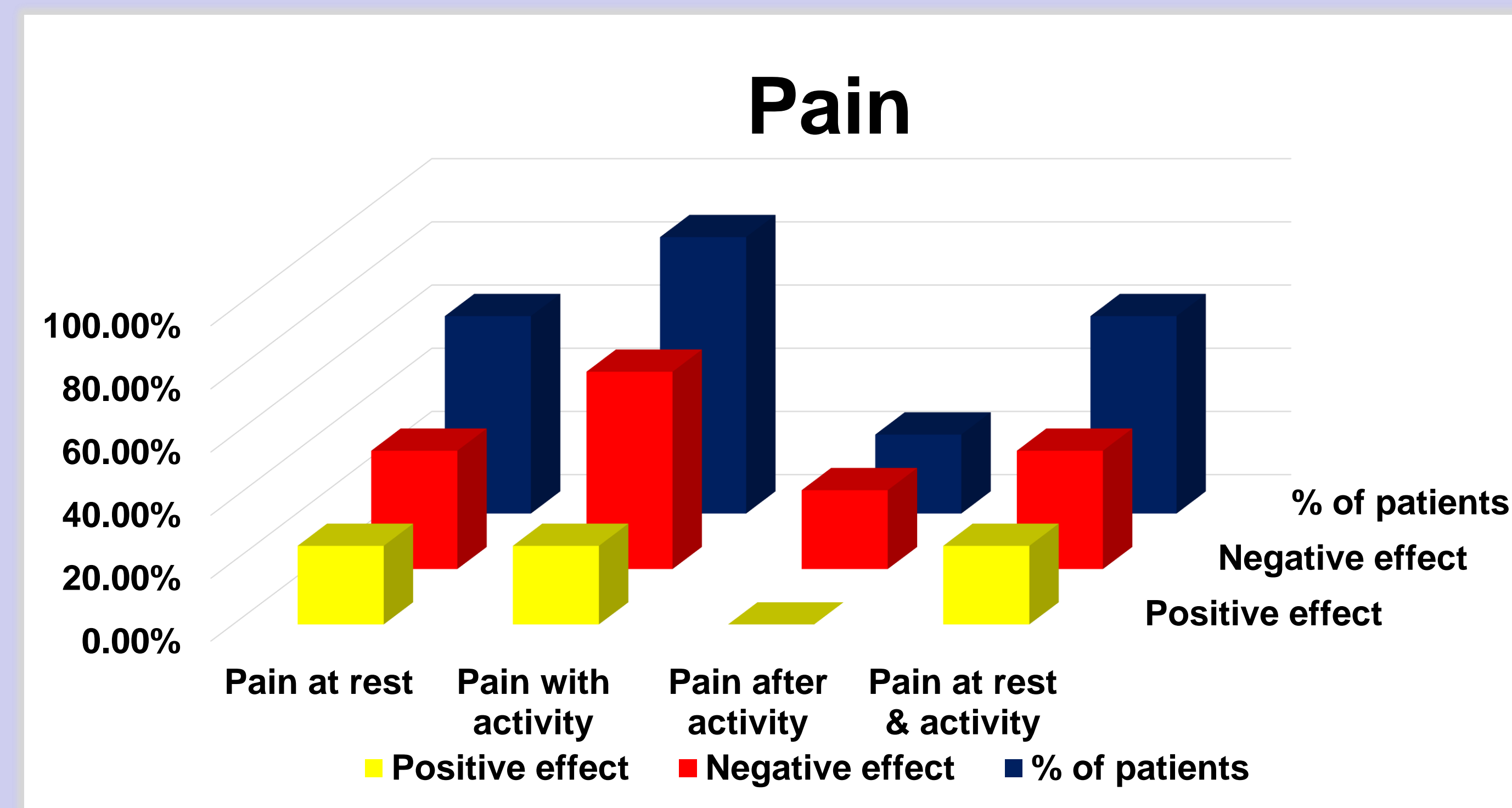
- 6/8 (75%) of participants were limited in their normal activities by their shoulder pathologies.
- Of the six participants who were limited in their normal activities, 5/6 (83%) were non-adherent.
- Both participants who were not limited in activities were non-adherent.

## Results: Influential Factors

### INFLUENTIAL FACTORS:

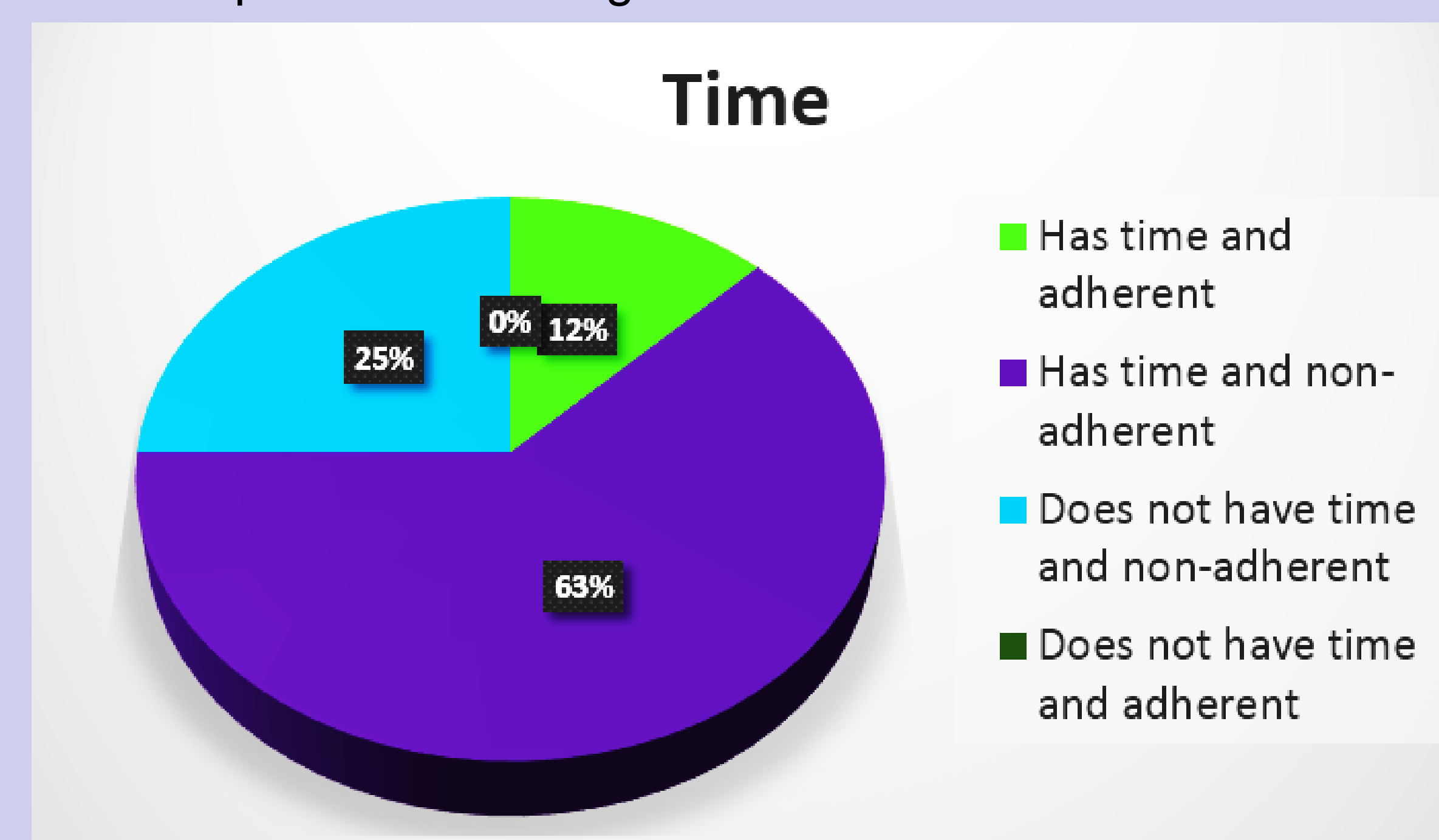
#### Pain

- Pain was the strongest associated factor. 7/8 (87.5%) participants indicated that pain affected adherence in some way.
  - 5/8 (62.5%) negative effect
  - 2/8 (25%) positive effect
- Pain was divided into pain at rest, pain with activity, pain after activity, and pain with both activity and rest.



#### Time

- 25% of the participants reported not having enough time to complete their HEPs and this negatively influenced their adherence.
- 25% of participants prioritized their HEP over other activities and viewed having the time to complete their HEP as a choice of time management.
- 0% of participants who reported not having the time to adhere to their HEPs were adherent.



### 100% POSITIVE RESPONSES:\*

- Satisfaction of physical therapist
- Understanding of HEP instructions
- Positive perception of rehabilitation process

\*The researchers were unable to correlate these factors with 100% positive response. A lack of negative responses in any of these categories may suggest that these were not heavily influencing factors.

## Methods

Based on specific inclusion/exclusion criteria, eight participants were chosen via convenient sampling from four Southwest Florida private outpatient clinics to participate in one-on-one interviews. Interviews were audio recorded and transcribed onto Microsoft word, where the data was uploaded into qualitative analysis software for comparison and analysis.

Themes formulated from the data comparison and analyses were used for stating associations discovered between interviews in relation to HEP adherence.

The results of the study were then compared to the findings of the current literature

## Data Analysis

Comparative analysis allowed for data linking across multiple sections and multiple interviews simultaneously, allowing the researchers to easily cross-examine the interview data. A keyword query was run to cross-compare each interview for commonalities in wording, phrases, and answers for each question. In combination, these were used to develop tables and formulate themes.

## Discussion

In general, participants may have been biased in their responses to the interview questions, given that there was likely the expectation that they should be completing their HEP in its entirety.

Overall, each participant understood the importance of their HEP and attributed themselves getting better at least partially due to their HEP completion, yet total adherence was only reported from one subject out of eight.

Interestingly, participants at first were confident that they were completing their HEP consistently and correctly, however offered slight differing information when probed concerning the various factors of HEP adherence that were discussed.

## Conclusions

In conclusion, pain was the strongest negative influence of HEP adherence. Pain with activity was a particularly significant determinant for whether participants would adjust, modify, or skip their HEP. Reports of lack of time and interruptions while performing HEP also appeared to influence HEP adherence for some participants, while others were intentional upon still completing their HEPs despite inconveniences.