

Integrating Occupational Therapy and Mindfulness Practices in Chronic Pain Management: A Case Study Analysis

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ABSTRACT

Chronic pain affects 50 million Americans causing limitations in their daily activities and reducing their quality of life (CDC report). This case study investigates the effectiveness of integrating occupational therapy practices with mindfulness approaches to manage chronic pain in adults. It incorporates a biopsychosocial approach to chronic pain. Results of this case study indicate improvement in occupational well-being, demonstrating the effectiveness of the program in improving the participant’s quality of life.

Participant Feedback

Direct quotes from the participant during the post-program interview:

"I feel confident to do things. My breathing got better, and I practiced the breathing techniques that helped me get through the pain."

"My relationship with my husband has been affected in a good way. Now I can share with him things I can do."

"The breathing was another big one. Im practicing the breathing techniques and that's helping me to be able to work through the pain."

"I wasn't doing any exercise before... now I feel confident I can do things... that's big for me."

"I feel like there's one day when I can go back to the gym... that's giving me hope."

"Now I can go shopping to get food to cook... I have a little more bounce in my step."

INTRODUCTION

Chronic pain is defined as pain that lasts three months or longer. It affects people physically, psychologically, and socially; therefore, a multifaceted, biopsychosocial approach is more effective in addressing chronic pain (Trachsell et al., 2023). Integrating biopsychosocial elements with occupational therapy practices, can be utilized as an approach to manage chronic pain and improve quality of life of individuals with chronic pain.

METHODS

This case study evaluated an 8-week virtual occupational therapy program for chronic pain, held via Zoom in partnership with the Karpas Health Information Center at Mount Sinai. 15 individuals participated in our 8-week program and one participant was selected for in-depth case study analysis.

Pre- and post-program assessments using the Brief Pain Inventory (BPI) and Personal Activity Selection (PAS) measured changes in pain and quality of life of the participant. The BPI is a 12-item self-report questionnaire that measures pain severity (worst, least, average, current), and pain interference –how much pain affects daily activities (e.g. walking, work, sleep) in which the participant rated items on a 0-10 scale. The PAS is a self-report tool used to identify the participant’s preferred physical or leisure activities that have been impacted by pain. Then, the participant rated on a scale 1-10 their performance and satisfaction of the chosen activities.

Weekly 90-minute sessions included an **educational component** such as discussions on stress management, how stress can impact pain, discussion on body awareness, how thinking can affect pain, a **physical practice component** including mindfulness such as Tai Chi, yoga, breathing techniques, and the Feldenkrais Method.

Data was analyzed quantitatively, and feedback was gathered through a post-program interview. Qualitative data was gathered through a 7-questions interview that was conducted with the participant via Zoom at the end of the 8-week program. Participant anonymity was ensured. Data was organized through Microsoft Excel sheet.

- **Inclusion criteria:** Be 18+, cognitively intact, able to use Zoom.
- **Exclusion criteria:** Cognitive impairments, acute pain, severe neurological disorders

Participants received weekly instructional videos of each session for practice between sessions.

RESULTS

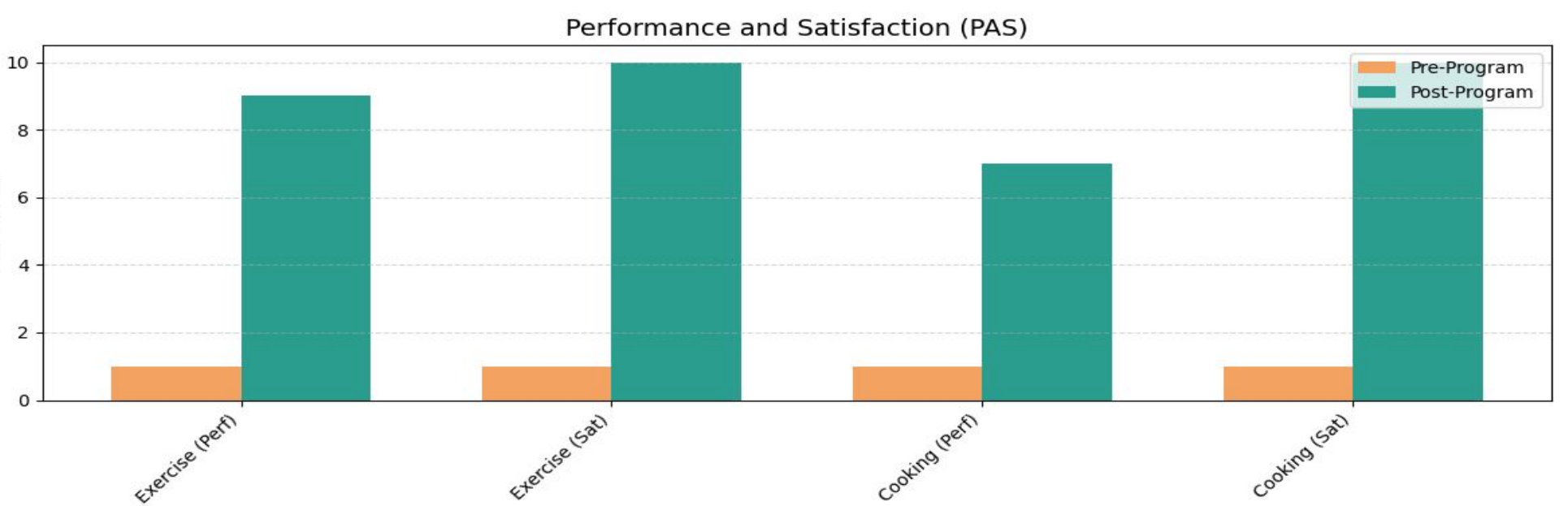
Quantitative data from the **BPI** showed improvements in **sleep** and **enjoyment of life** following the program. The **PAS** revealed a notable increase in both **performance and satisfaction in general exercise** and **cooking**, two activities the participant identified as meaningful pre-program.

Qualitative feedback from the 7-question **post-program interview** reflected several key outcomes:

- The participant reported **increased confidence** to move and engage in activities, sharing, *“I can do things, and that’s big for me.”*
- She experienced **greater body awareness**, stating she learned how to assess her body and recognize signs—especially through **breathing techniques**—to better manage pain. She emphasized how the program gave her **hope** and a new perspective on her capabilities.
- The intervention led to **improved communication** with her husband, increasing his understanding and support.
- She valued the **weekly instructional videos**, using them to reinforce learning and ensure correct form.
- She stated she plans to **continue practicing the exercises** beyond the program.

DISCUSSION

The results of the case study suggest that integrating occupational therapy interventions with mindfulness practices is effective for managing chronic pain. This approach was shown to support functional gains and enhance quality of life. The participant developed greater body awareness and confidence, sharing, *“I learned how to assess my own body,”* and, *“I feel confident now that I can do things.”* These internal changes reflect the value of empowering, strengths-based interventions. The virtual format and access to weekly practice videos supported continued engagement and flexibility. The participant expressed commitment to continue the exercises post-program, showing strong potential for long-term self-management. Psychosocial benefits were also reported, including improved communication with her husband and renewed hope of returning to the gym. These outcomes reflect the holistic goals of occupational therapy—enabling meaningful participation in daily life. Though limited to one participant, these findings support further exploration of integrated, accessible approaches to chronic pain management.



CONCLUSION

This case study highlights the effectiveness of an integrated occupational therapy and mindfulness-based program in managing chronic pain through a biopsychosocial lens. Quantitative data from the BPI and PAS indicated improvements in pain interference, sleep, and occupational performance. Qualitative feedback revealed enhanced body awareness, improved coping strategies, and increased confidence in daily movement and exercise. The participant reported stronger self-management skills, improved interpersonal communication, and greater hope for long-term wellness. These findings suggest that a biopsychosocial approach of a virtual occupational therapy program can significantly enhance the quality of life for individuals living with chronic pain.

