

INTRODUCTION

- The mind-body connection can play a large role in the diagnosis and treatment of a variety of illnesses and disorders.
- When recovering and rehabilitating from a physical injury, the mental health of the patient should be considered within the treatment plan.
- Behavior, emotion, and motivation are a crucial part of the therapeutic process in rehabilitation and should be investigated more thoroughly (5).
- Anxiety and depressive symptoms are prominent in not only psychological disorders but also physical injuries (6).

OBJECTIVE AND METHODS

- The purpose of this Capstone Project was to further investigate and understand the various physiological and psychological interactions that occur within the rehabilitative process.
- Multiple physical therapy sessions were observed at Children's Hospital of Philadelphia and JFK Johnson Rehabilitation Institute, and during these sessions, the psychological and physiological interactions were noted and then compared with previous literature.
- The second half of the project consisted of heavy literature review of all relevant publications.
- The literature covered the importance of physiological and psychological interactions, along with its application to the therapeutic process.

RESULTS & DISCUSSION

- Emotion and behavior fluctuate throughout the rehabilitation process and sometimes, emotional changes persist past the end of physical therapy (7).
- The presence of the therapist in a physical therapy session is shown to increase patient motivation → higher chance of patient overcoming a challenging motor task (5).
- Patients with more severe physical limitations and longer recovery journey can be given Cognitive Behavioral Therapy to help encourage movement and reduce fear of movement (3).

CONCLUSION

- Individuals undergoing physical therapy for an injury can have alterations in mental health due to the injury and these changes such as low motivation, isolation, lack of self-esteem, and helplessness should be noted and treated via CBT (2).
- Chemical imbalances, in the brain and body caused by psychological disturbances can lead to physical symptoms (8).
- Motivation by the therapist aids in increasing internal motivation of the patient, and this can lead to better results in certain motor tasks.
- Psychological changes from physical injuries are common and should be investigated thoroughly.

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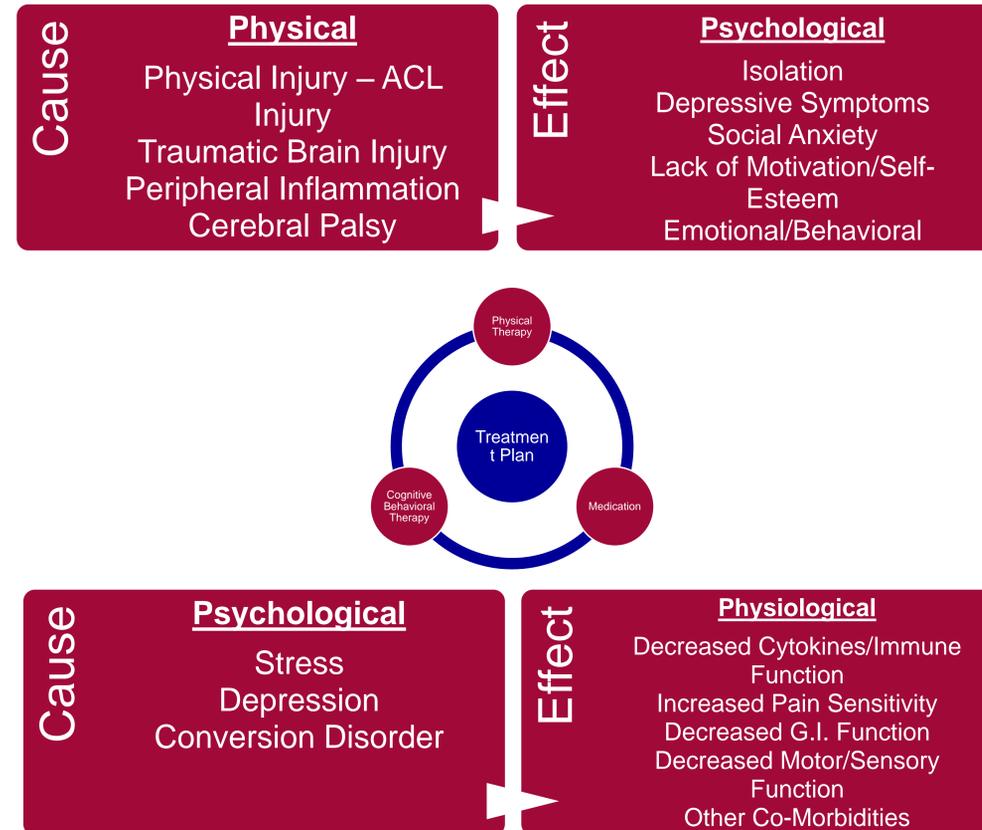


Figure 1. The figure above contains a list of various physical and psychological occurrences and their respective effects (1)(4)(8)(9).