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Work Hardening and Mindfulness Training for Individual's Living with Traumatic Limb Loss

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BACKGROUND

Roughly two million individuals are living with limb loss in the United States. Traumatic injuries account for 45% of amputations in the US (Ziegler-Graham et al., 2008). Following a traumatic amputation, individuals experience a decline in occupational participation secondary to negative psychological complications, decline in physical functioning, and difficulty performing within their previous environments (Pomares et al., 2020). Work is an occupation that majority of our population participates in. Work provides an individual with many benefits such as fulfillment, economic independence, and social participation; however, it can also be harmful to an individual's quality of life if it is impacted in a negative manner (Edgelow et al., 2020).

PROBLEM

Occupational abandonment is a large issue in individuals with traumatic amputations due to low self esteem, self efficacy, decreased physical performance, and difficulty functioning in desired environments (Kearns et al., 2018).

PURPOSE

This project aim is to mitigate occupational abandonment through a combination of mindfulness and physical training to increase self efficacy and quality of life within this population.

OBJECTIVES

- Conduct a needs assessment and observation with stakeholders.
- Develop a manual for the work hardening and mindfulness training program for individuals with traumatic amputations re-entering the workplace.
- Implement program with individuals who have experienced a traumatic amputation.
- Assess the efficacy of the program and manual.

METHODS

- 17 respondents to Needs assessment
- 2 participants
- Setting: The Adaptive Training Foundation "ATF"
 - Non-Profit gym for adaptive athletes of all abilities. ATF serves 70% veterans and 30% civilians

Needs Assessment: Administered needs assessment to 30 past participants of ATF

Development: Developed program using client-centered interventions and exercises.

- Assessed participants goals and created physical development program.
- Developed mindfulness program: coping mechanisms, breath work, reflection, and other various interventions.

Implementation: Completed three 1.5-hour workouts and 6 mindfulness training sessions over 7 weeks.

Assessment: Assessed the efficacy of the 7-week program utilizing the UW-SES and WHQoL-BREF.

PROGRAM

General Program Goals:

1. Increase participants self efficacy
2. Increase participants self-esteem through improvements in physical performance
3. Provide participants with healthy coping mechanisms
4. Increase participants physical performance in desired environments
5. Increase participants engagement in previously desired occupations

Theoretical Framework:

Model of Human Occupation (MOHO)

Interventions:

1. Mindfulness Techniques
2. Aerobic conditioning
3. Anaerobic conditioning
4. Education on balanced routines, habits, and healthy coping mechanisms
5. Social participation

Program Manual



CONCLUSION / FUTURE DIRECTION

The findings of this program display that an increase in self efficacy and quality of life accompanies an increase in physical performance within previously desired tasks and environments. These findings can be seen in the increase in UW-SES scores and in the rise in WHQoL-BREF scores from week one to week 7.

Moving forward, a program with a minimum duration of four months would be beneficial for this population. This extension in duration would allow the participants to reach their long-term goals of returning to work in a safe capacity. The inclusion of rehabilitation specialists in non-traditional settings, like ATF, to further assist in physical development and work re-entry protocols.

References

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