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Neurofeedback Within the Scope of Occupational Therapy With Clients with Substance Use Disorder: A Scoping Review

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BACKGROUND

- Substance use disorder (SUD) is the inability to control frequent alcohol and/or drug use that significantly impairs many facets of life (social, mental, occupational, and physical) (SAMHSA, 2022).
- Neurofeedback (NFB) is a non-invasive biofeedback technique that employs auditory or visual feedback to reinforce healthy brainwave activity (Marzbani, 2016).
- However, there is no systematic understanding of how neurofeedback therapy can be used with clients with SUD within the scope of the occupational therapy (OT) practice.

PROBLEM

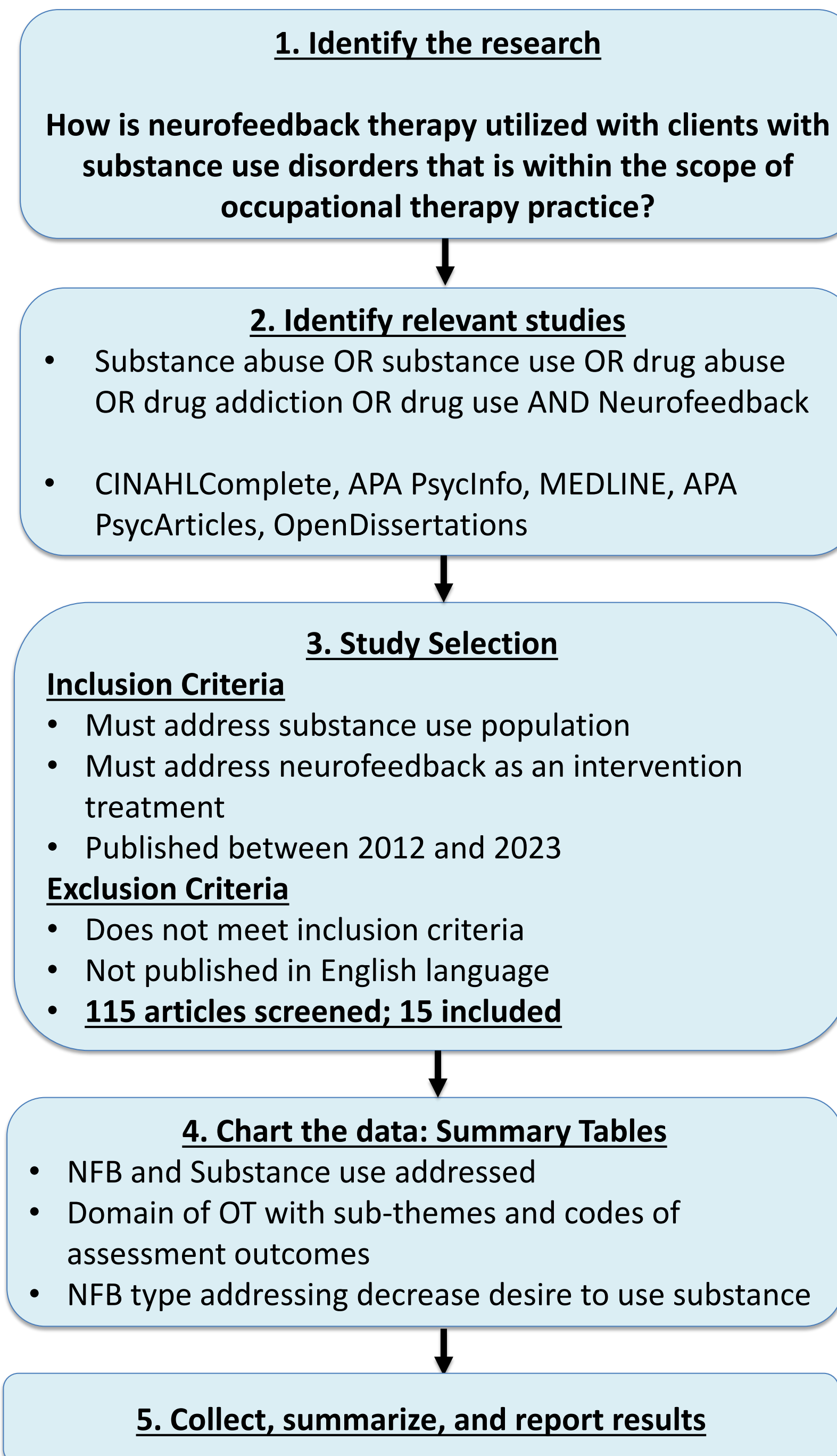
The use of neurofeedback therapy in clients with SUDs has not been systematically reviewed to identify its use within the scope of OT practice, leaving it difficult for OT practitioners to integrate neurofeedback into OT for clients with substance use disorders.

PURPOSE

To conduct a scoping review of the literature to identify how is neurofeedback therapy utilized with clients with substance use disorders that is within the scope of OT practice?

METHODS

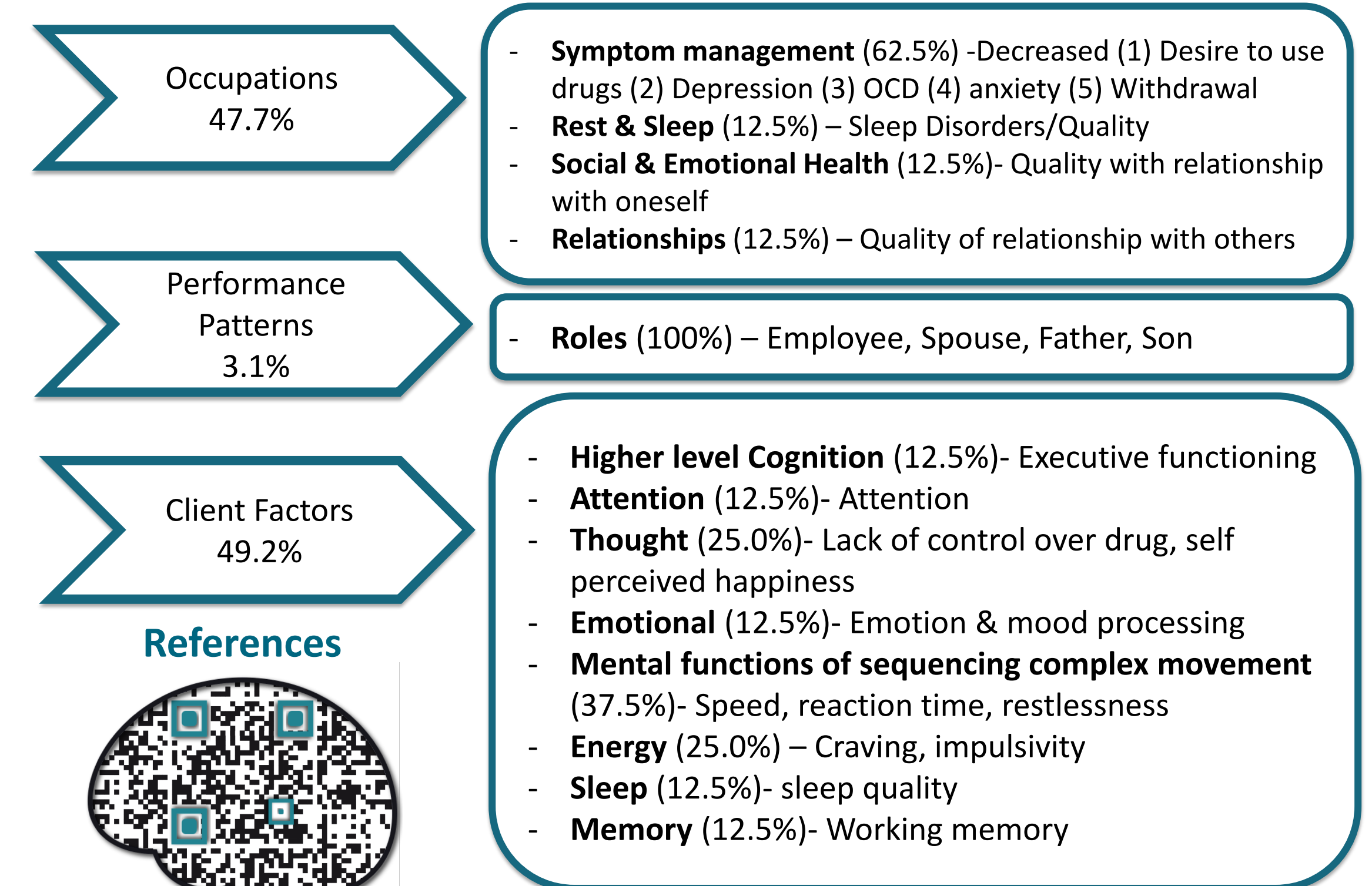
5 Step Scoping review methodology (Arksey & O' Malley, 2005)



RESULTS

Assessment Outcomes:

The Domain of Occupational Therapy included 15 of 15 articles addressing different sub themes depending on the area of discussion of topic.



DISCUSSION & IMPLICATIONS

Neurofeedback literature utilizes distinct code words: self-regulation, quality of life, desire to use, and withdrawal symptoms, which are aspects that are addressed within the scope of OT practice.

- Decreased desire to use a substance is the most frequently addressed code and is associated with symptom management in the OTPF.
- NFB is fairly new to the SUD population. No significant reasons were found for using a specific type of neurofeedback for an SUD.
- Overall results for neurofeedback demonstrate its effectiveness among individuals with SUD
- MOHO constructs were seldom addressed in the literature.

- The overall literature acknowledges that NFB addresses multiple aspects of the Occupational Therapy Practice Framework (OTPF) and is significantly within the scope of OT.
- Educating OT practitioners on NFB and it's fit with our practice could potentially influence the use of neurofeedback within OT practice settings enhancing outcomes to improve the quality of life for people recovering from SUD.