

## **Abstract**

**Title** The Relationship Between Physical Activity and Managing Symptoms of Bipolar Disorder: A Systematic Review

**Objectives** The primary aim of this thesis was to explore the relationship between physical activity and the management of symptoms of bipolar disorder based on the available literature.

**Methods** This study was conducted as a systematic review in accordance with the PRISMA methodology. Relevant studies were identified through searches in the following databases: PubMed, Web of Science, Scopus, and EBSCOhost. The search strategy included a combination of keywords and Boolean operators: "bipolar disorder" OR "Manic-depressive illness" OR "Mood disorders" AND exercise OR "physical activit"\*.

**Results** Based on this strategy, a total of 1,420 potentially relevant studies were identified. After removing duplicates and applying inclusion and exclusion criteria, 30 studies were included in the synthesis. Analysis of the included studies demonstrated that physical activity and exercise can positively impact the management of bipolar disorder symptoms. Interventions focused on physical activity contributed to the reduction of depressive symptoms and improvement in mood, increased levels of brain-derived neurotrophic factor (BDNF), particularly in women, enhanced social functioning and sense of coherence, and reduced levels of anxiety, stress, and improved quality of life.

**Conclusions** Physical activity represents a promising complementary treatment modality for patients with bipolar disorder. While existing research confirms its positive effects, further longitudinal and controlled studies are needed to better understand the mechanisms of action and optimize intervention strategies.

**Keywords:** bipolar disorder, sports activity, physical exercise, systematic review study, PRISMA