

Abstract

This bachelor thesis focuses on behavioral tests of cognitive function that apply to both human subjects and laboratory animals in the context of Alzheimer's disease. It also analyzes translational studies that have used these tests. Alzheimer's disease is a severe neurodegenerative disorder that affects millions of people worldwide and has a profound impact on cognitive function. The thesis focuses on tests that are key to understanding the cognitive deficits associated with Alzheimer's disease and allow comparisons between animal models and human subjects. The work discusses tests of spatial navigation, working memory, attention, and cognitive flexibility. The focus is on spatial memory, and its neural subtext, as spatial memory is one of the first areas to be affected. The importance of virtual and touch-screen tasks and possible translation problems are also discussed.

Key words: Alzheimer's disease, translational research, behavioral tests, spatial memory, working memory, Morris water maze, radial arm maze