

## **ABSTRAK**

Abhratu Rezi Nabilah

PENGARUH SENAM OTAK TERHADAP PERUBAHAN KOGNITIF PADA LANSIA DI PANTI WREDA BHAKTI LUHUR SIDOARJO

xvi + 76 Halaman + 9 Tabel + 17 Lampiran

Fungsi kognitif adalah proses mental dalam memperoleh pengetahuan dan kecerdasan, yang meliputi pola pikir, ingatan, pemahaman, perencanaan, dan implementasi. Penurunan kognitif pada lansia berarti lansia tidak mampu mengingat dan melakukan aktivitas sendiri serta bergantung pada orang lain. Peneliti ingin mengetahui pengaruh latihan otak memengaruhi perubahan kognitif pada lansia di Panti Jompo Bhakti Luhur Sidoarjo.

Desain penelitian yang digunakan *pre-eksperimental* dengan *One-Group Pretest-Posttest Design*. Sampel penelitian ini merupakan lansia di Panti Wreda Bhakti Luhur Sidoarjo sebanyak 36 lansia dipilih menggunakan teknik *purposive sampling*. Pengumpulan data menggunakan lembar kuisioner *Mini Mental State Examination* (MMSE). Data di analisis menggunakan Uji *Paired Sample t-test*.

Fungsi kognitif lansia sebelum diberikan senam otak rata-rata 22,00 dengan gangguan kognitif sedang, sedangkan setelah diberikan senam otak rata-rata 23,77 dengan kognitif normal. Hasil Analisa membuktikan bahwa senam otak berpengaruh terhadap peningkatan kemampuan kognitif pada lansia dengan nilai *p-value* (*sig.*) yang mencapai 0,000 lebih kecil dari  $\alpha$  (0,05), terkait dengan peningkatan fungsi kognitif di Panti Wreda Bhakti Luhur Sidoarjo.

Senam otak berpengaruh terhadap peningkatan fungsi kognitif lansia, bahkan dapat meningkatkan fungsi kognitif pada lansia yang mengalami gangguan kognitif. Diharapkan lansia rutin melakukan senam otak secara teratur sehingga fungsi kognitif lebih meningkat dan terhindar dari gangguan fungsi kognitif yang lebih berat.

Kata kunci : Senam Otak, Fungsi Kognitif, *Mini Mental State Examination* (MMSE)  
Daftar bacaan : 38 buku

## ABSTRACT

Abhratu Rezi Nabilah

THE EFFECT OF BRAIN EXERCISE ON COGNITIVE CHANGES IN THE ELDERLY AT PANTI WREDA BHAKTI LUHUR SIDOARJO

xvi + 76 Pages + 9 Tables + 17 Appendices

*Cognitive function is a mental process in acquiring knowledge and intelligence, including thinking, memory, comprehension, planning, and execution. Cognitive decline in the elderly can lead to difficulties in remembering and performing daily activities independently, making them dependent on others. This study aims to determine the effect of brain exercise on cognitive function changes in the elderly at Panti Wreda Bhakti Luhur Sidoarjo.*

*This study uses a pre-experimental design with a One-Group Pretest-Posttest Design. The research sample consists of 36 elderly individuals residing at Panti Wreda Bhakti Luhur Sidoarjo, selected using a purposive sampling technique. Data collection was conducted using the Mini-Mental State Examination (MMSE) questionnaire. The data were analyzed using the Paired Sample t-test.*

*The cognitive function of the elderly before undergoing brain exercise had an average score of 22.00, indicating moderate cognitive impairment, while after the brain exercise, the average score increased to 23.77, indicating normal cognitive function. The analysis results showed that brain exercise had a significant effect on improving cognitive function in the elderly, with a p-value (sig.) of 0.000, which is less than  $\alpha$  (0.05), confirming a significant improvement in cognitive function among the elderly at Panti Wreda Bhakti Luhur Sidoarjo.*

*Brain exercise positively influences the improvement of cognitive function in the elderly and can even enhance cognitive function in those experiencing cognitive impairment. It is recommended that elderly individuals practice brain exercises regularly to further improve cognitive function and prevent more severe cognitive decline.*

*Keywords : Brain Exercise, Cognitive Function, Mini-Mental State Examination (MMSE)*

*References : 38 books*