

ABSTRAK

Seiring bertambahnya umur, lansia akan mengalami penurunan adaptasi terhadap lingkungan yang ditandai dengan menurunnya kondisi fisik dan kesehatan lansia sehingga lansia rentan mengalami jatuh. Fenomena jatuh pada lansia seringkali terjadi karena adanya gangguan kognitif pada lansia. Hal tersebut dikarenakan kurangnya aktivitas fisik pada lansia sehingga mempengaruhi fungsi kognitif lansia. *Four square step exercise* dan *square stepping exercise* adalah latihan yang mampu meningkatkan fungsi kognitif. Tujuan dari penelitian ini untuk mengetahui perbedaan pengaruh *four square stepping exercise* dan *square stepping exercise* terhadap fungsi kognitif lansia. Metode yang digunakan adalah metode *true eksperimental design* dibagi menjadi 2 kelompok. Penelitian ini dilakukan pada 27 April – 27 Mei 2024 di Banjar Umahanyar, Abiansemal, Badung. Sampel penelitian berjumlah 22 orang dibagi menjadi 2 dan setiap kelompok terdiri dari 11 sampel. Kelompok 1 diberikan latihan *four square stepping exercise* dan kelompok 2 diberikan *square stepping exercise*. Hasil analisis data kelompok 1 pada uji normalitas menggunakan *shapiro wilk test* didapatkan hasil *pre test* 0,427 dan *post test* didapatkan hasil 0,663 sedangkan pada kelompok 2 didapatkan hasil *pre test* 0,333 dan *post test* 0,129 sehingga dapat disimpulkan data berdistribusi normal. Uji hipotesis menggunakan uji *paired sample t test*. Pada kelompok 1 didapatkan hasil $p=0,000$ dan kelompok 2 didapatkan hasil $p=0,000$. Hal ini berarti ada pengaruh pemberian *four square stepping exercise* dan *square stepping exercise* terhadap fungsi kognitif. Hasil perbedaan pengaruh antara *four square step exercise* dan *square stepping exercise* diuji menggunakan uji *independent samples t test* dan didapatkan hasil $p=0,444$. Kesimpulannya, pemberian *four square stepping exercise* dan *square stepping exercise* sama baiknya dalam meningkatkan fungsi kognitif, namun tidak terdapat perbedaan pengaruh yang signifikan pada kedua latihan tersebut.

Kata kunci : lansia, *four square stepping exercise*, *square stepping exercise*, fungsi kognitif.

ABSTRACT

As age progresses, the elderly experience a decrease in their ability to adapt to their environment, which is characterized by a decline in their physical condition and health, making them more susceptible to falls. Elderly falls often occur as a result of cognitive impairment. This is caused by the elderly's lack of physical activity, which in turn impacts their cognitive function. Four-square step exercise and square-stepping exercise are exercises that can improve cognitive function. The purpose of this study was to determine the difference in the effect of four-square stepping exercise and square-stepping exercise on the cognitive function of the elderly. The true experimental design method is divided into two groups. This research was conducted on April 27–May 27, 2024, in Banjar Umahanyar, Abiansema, Badung. The research sample consisted of 22 people, divided into two groups, with each group consisting of 11 samples. Group 1 was given four square stepping exercises, and group 2 was given square stepping exercises. The data analysis of group 1 using the Shapiro Wilk test yielded pre-test results of 0.427 and post-test results of 0.663, while group 2 showed pre-test results of 0.333 and post-test results of 0.129, indicating that the data is normally distributed. The paired sample t test is utilized for hypothesis testing. In group 1, the results obtained $p = 0.000$, and group 2 obtained $p = 0.000$. This means that providing four square stepping exercises and square stepping exercises has an effect on cognitive function. The difference in influence between four square step exercise and square stepping exercise was tested using the independent samples t test, with a result of $p = 0.444$. In conclusion, giving four square stepping exercises and square stepping exercises is equally good at improving cognitive function, but there is no significant difference in the effect of the two exercises.

Keywords: elderly, four square stepping exercise, square stepping exercise, cognitive function