

# COMPARISON OF FUNCTIONAL TRAINING VS TRADITIONAL TRAINING ON ADL'S IN THE OLDER ADULT: A SYSTEMATIC REVIEW

**Katie Boydston, Megan Ware, Wesley Daughdrill, Jarrod Joel, Sherry Colson**

Department of Physical Therapy, School of Health Related Professions,  
University of Mississippi Medical Center, Jackson, MS, USA

**Corresponding Author:** Sherry Colson

**Email:** [scolson@umc.edu](mailto:scolson@umc.edu)

**Doi:** <https://doi.org/10.34107/KSZV7781.10459>

## ABSTRACT

Age related loss of muscle strength can impact the older adult's ability to perform activities of daily living (ADL). Both traditional and functional strength training has shown to improve overall strength in the elderly. The purpose of this systematic review is to investigate whether traditional or functional training has a greater impact on improving ADL performance in older, community dwelling adults. Databases were utilized for article searching. Key search words included: functional training, traditional training, older adults, and ADLs. Results were screened by title, abstract, and full text, respectively. Inclusion criteria consisted of: written in English, publication 2010-2020, participants' community-dwelling  $\geq 65$  years old. Studies focusing on participants with medical conditions were excluded. Five articles remained after screening. 722 participants were included in the five studies. One of five studies showed no significant difference in ADL performance between traditional and functional training. Three of five studies indicated a significant difference in favor of functional over traditional training in a least one ADL outcome measure. One study showed significant within group improvements for both traditional and functional training but did not indicate between group differences. The findings indicate while both functional and traditional training improves ADL's, functional training showed more significant gains.

**Keywords:** Functional training, traditional training, older adults, activities of daily living, ADL's

## INTRODUCTION

Multiple physiological changes occur as a result of normal aging. Musculoskeletal changes include a decrease in lean muscle mass, reduction in nerve cells, increase in fat deposits, decrease in water, increase in collagen cross linkage, and a decrease in elastin. Cardiopulmonary changes include a decrease in maximum heart rate, a decrease in maximum aerobic capacity, and a decrease in the flexibility of the arteries [1]. As a result of these changes, as a person ages they will experience a decline in overall muscle strength, a decline in endurance, and a decrease in overall flexibility of the muscles and joints. These changes can lead to decreasing ability to perform the activities of daily living (ADL's) needed to live independently and safely. Both traditional training which consists of strengthening with weights or resistance bands and functional training which uses everyday activities to facilitate strengthening has been shown to improve strength in people over 65 [2]. However, the research has limited information on the impact of traditional vs functional strength training on a senior's ADL status. The purpose of this systematic review is to investigate whether traditional or functional training has a greater impact on improving ADL performance in older, community dwelling adults