

## 8. SWACSM Abstract

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### Live Long and Prosper: A Systematic Review of Equipment-Based Training Programs for Older Adults

CHARISMA BYRD, B.S., PATRIC LEE, B.S., KATIE LOPEZ, B.S., SARAH PEARCE, B.S., LANDEN WONG, ALEXANDRA T. AUSLANDER, PH.D., MPH, M.S., ZAKKOYYA H. LEWIS, PH.D., & LARA KILLICK, PH.D., MPH

Kinesiology and Health Promotion; California State Polytechnic University; Pomona, CA

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*Category: Masters*

*Advisor / Mentor: Killick, Lara (lkillick@cpp.edu)*

#### ABSTRACT

**PURPOSE:** Within the US, people are experiencing longer life expectancy, yet these extended lifespans have not necessarily translated into years living in good health. Degenerative diseases such as osteoporosis and sarcopenia are particularly prevalent amongst older adults. Research shows that regular resistance exercise carries distinct preventive health benefits to combat these conditions. Therefore, the purpose of this study was to conduct a systematic review into the effectiveness of equipment-based resistance training programs for older adults (65+ years) on physical function. **METHODS:** Five databases were searched (PubMed, Web of Science, Science Direct, Medline, and Sports Medicine & Education Index) in July 2021. Inclusion criteria were participants aged 65 and older, programs that utilized equipment, and intervention studies. Exclusion criteria were non-intervention studies, assessment interventions, animal-based studies, no assessment of physical function, no exercise program, or not published in English. A total of 331 articles were identified, 282 after removing duplicates. Four screeners reviewed the articles independently. Currently, 68 articles are included for the systematic review. **RESULTS:** Our review will describe the impact of these interventions on static flexibility, walking efficacy, body composition, and other physical factors resulting from a resistance training program in older adult communities. **CONCLUSIONS:** The anticipated outcomes of the review will inform the implementation of equipment-based resistance training programs with older adults.