

Reporting on Pilot Experiences in a Multi-Phased Fidelity Study of an Equipment-Based Resistance Program for Older Adults

RODOLFO MEJIA, NASIM EYVAZLOU, CODY ANTONIO, MARLENE VILLA, ALEXANDRA AUSLANDER, ZAKKOYYA H. LEWIS, & LARA KILLICK

Department of Kinesiology & Health Promotion; California State Polytechnic University, Pomona; Pomona, CA

Category: Masters

Advisor / Mentor: Lewis, H. Zakkoyya (zakkoyyal@cpp.edu)

ABSTRACT

Within the US, people are experiencing longer life expectancy, yet these extended lifespans have not necessarily translated into years living in good health. Research shows that regular resistance exercise carries distinct preventive health benefits for older adults. A growing body of literature explores interventions designed to engage older adults in resistance exercise. **PURPOSE:** The purpose of this study was to pilot the proposed assessment strategy for a multi-phased fidelity study of an equipment-based resistance training program designed specifically for older adults. **METHODS:** A three-phased study has been designed. Phase 1 consisted of a systematic literature review to identify salient measures of internal and external validity for equipment-based resistance training programs for older adults. Phase 2 was a pilot study at one location with 10 participants. The Senior Fitness Test and a pre-post survey were being used to measure the physical function and quality of life outcomes of the program. Four dimensions of internal validity (adherence, exposure, quality of delivery, participant responsiveness) were measured via seven observational tools, pre-post surveys and post-program focus groups. These observational tools included a session checklist, teacher movement analysis, demonstration analysis, instructor feedback analysis, system for observing fitness instruction time (SOFIT), and time analysis. Phase 3 scales up the evaluation program to 5 locations across 3 years. **RESULTS:** We report our experiences in the pilot phase. We evaluate the degree of internal validity of the seven observational tools and present pilot feedback from instructors, participants and the research team. The completion rate of the observational tools was lower than expected ranging from 26 to 74%; this was due in part to missing data from the learning management system. The SOFIT and time analysis yielded the highest percent agreement (>90%) but not all of the data was viable. **CONCLUSION:** We recommend changes to the observer training, program delivery, data collection procedures, and data management to inform Phase 3 of the study, the implementation of equipment-based resistance training programs with older adults at multiple locations.