

**“Out of Resistance Comes Strength”: A Multi-Phased Fidelity Study of an Equipment-Based Resistance Program for Older Adults**

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**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. Research shows that regular resistance exercise carries distinct preventive health benefits for older adults. The purpose of this research is to conduct a multi-phased study to evaluate the fidelity 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 is a pilot study at one location with 10 participants. The Senior Fitness Test and a pre-post survey are 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, and participant responsiveness) are being measured via seven observational tools, pre-post surveys and post-program focus groups. These observational tools include a session checklist, teacher movement analysis, demonstration analysis, instructor feedback analysis, the system for observing fitness instruction time (SOFIT), and time analysis. Phase 3 scales up the evaluation program to 5 locations. Measures utilized in Phase 3 will be informed by the results of the pilot study. **RESULTS:** Our paper presents the pilot evaluation protocol. By the end of the pilot, we will evaluate the degree of internal validity, estimate the effect on physical function and quality of life outcomes, and present program feedback from instructors and participants. **CONCLUSION:** The anticipated outcomes of the study will inform the implementation of equipment-based resistance training programs with older adults.

**Southwest Chapter**