

Increasing Functional Fitness Using Internet-based Video Conferencing

PROGRAM/PRACTICE OVERVIEW

The exercise focus of many older adults is on enhancing quality of life and functional ability. However, many exercise programs and associated fitness equipment have highlighted weight loss and body building which has its origins in the “aesthetic” era of fitness nearly two decades ago. Older adults may feel that formal exercise programs and fitness equipment are not appropriate for their age, fitness level, or living situation. The purpose of this program was to explore how an exercise program could be more effectively delivered to older adults helping a manner to tailor it to their everyday needs.

A team composed of a public health educator, fitness specialist, gerontologist, and a technologist created and delivered group instruction through internet-based video conferencing using the television. Unique to this program was the content focus on both basic exercises for improving strength and flexibility, coupled with an emphasis on relevant “biomotor” or “life movement” abilities. The equipment industry calls these exercises “user defined” movements. The team also visited the individual participants, performed health screenings, and set up the technology in their homes prior to starting the exercise program.

A 50+ year-old instructor taught age-specific functional exercise from a distance learning studio twice per week for 5 weeks for 45 minutes a session. The instructor could interact with the eight 60–80 year-old participants through video conferencing technology. Participants could see the instructor and all the other participants on their television sets.

PRACTICAL POINTS

The group exercise program content had a functional or “user defined” emphasis. The instructor gave instructions from a university distance learning studio through an internet-based video conferencing system which allows the viewers and the instructor to see and interact with one another. The movements demonstrated by the instructor were muscle specific exercises with a focus on improving the quality of the participants’ lives. For example, rather than stating that a bicep curl exercise was being performed, the instructor talked about how one carries their groceries with the biceps. The basic bicep curl exercise was then referred to as the “carry your groceries” exercise. A bilateral overhead shoulder press was referred to as an exercise to improve putting things away in the


closet. It became known as the closet exercise. Paper plates were used to perform hip rotation exercises while sitting and standing. These exercises became known as the “preventing hip replacement” exercises. Participants were encouraged to cognitively consider why they were performing specific exercises. Performing the exercises in the context of their homes helped to reinforce the practical significance of functional exercise.

ADOPTABLE APPLICATIONS

Internet-based video conferencing for group exercise presents an opportunity to expand group fitness offerings to the home environment. The participants felt they were in a group exercise class in their homes. The instructor could see each

Internet Videoconferencing



 POLYCOM PVX/ViaVideo: H.323 Videoconferencing at IU

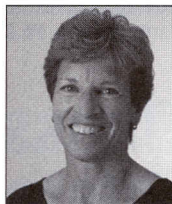
- 2-way voice and video connections over the internet (IP)
- T.R.U.E. T.I.M.E. Research Study: Targeting Rural Underserved Elders with Technological Innovation for the Management of Falls and their Environment



Innovative Initiatives

participant and provide individualized cueing, exercise modification, and encouragement. Participants expressed satisfaction with the program content and were able to associate exercise training with everyday activities. The program also encouraged new networks and exercising between program participants outside of the group exercise time. For example, some participants formed a walking group. An unexpected outcome of our program was the participant's interest in paying for the exercise session to continue if we could arrange this. Our project was a pilot study but showed clear potential as a practical means of delivering fitness services to this growing population. Functional/user defined exercise training via internet-based video conferencing has great potential for increasing quality of life and functional ability for the older adult population.

Web site: www.indiana.edu/~Fexex

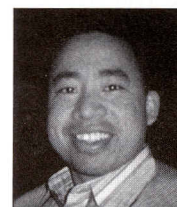


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ACSM's HEALTH & FITNESS JOURNAL

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ACSM's *Health & Fitness Journal*® has launched a new column, *Innovative Initiatives* that features unique, inventive, and successful health/fitness programs and practices. Programs and professional practices featured in this section must be practical and stand out among what is generally available today. The goal of this new column is to create an idea-generating forum to share practical, successful, and unique programs/practices with other health/fitness professionals. Highlighted programs/practices will be described clearly so that other health/fitness professionals can adapt the program at their facility.

If you have a program or practice that would be ideal for the new *Innovative Initiatives* column, please contact the journal's editorial office at HFJournal@acsm.org or call (317) 637-9200, ext. 109.