



ABLE BODIES BALANCE TRAINING

By Sue Scott, MS

For most of us, balance happens automatically . . . we never give it a thought. But achieving and maintaining balance is not so simple. Consider how much “automatic balance” we need just to get ourselves to the car each morning: We grab car keys, Blackberry, coffee cup and a briefcase; walk from door to car. On the way, we manage kids: get them into car with school work, lunches and seatbelts; we filter their endless chatter for crucial content.

Then we open our car door, turn a bit and descend into the driver’s seat. Whew! Kind of amazing, right? But we do it every day, easily. We are true truly amazing creatures.



All of this intricate, dynamic interconnectedness between goals and actions seems hardwired or innate. And, for the most part, it is. But advancing age or compromised health can easily compromise balance systems and cause them to falter. Research shows that as balance skills and confidence lessen, fall risk rises. Individuals who fear falling will become more sedentary and less able, capable and confident. Affected individuals will need help to recoup. This is your opportunity.

Enter stage left, a WITS, ABLE-Bodied balance mechanic . . . that could be you.

MULTIPLE CAUSES; MULTIPLE SOLUTIONS

Balance difficulties, also called postural instabilities, often have multiple causes. Many of which are typical in older, frail and sedentary adults. Muscle weakness, joint stiffness, postural asymmetries, gait abnormalities, arthritis, cognitive impairment, fear of falling, vestibular dysfunction, peripheral artery diseases, poor vision, difficulty with sequential movement, poor sensory integration and medications are only a partial list of significant factors (Rose, 2003; Myers et al., 1996; Salkeld et al., 2000; CDC Fact Book, 2001).

But Exercise Science has some good news. Many causes of balance problems suggest there are many solutions that address those problems. I call this the silver-lining perspective for problem solving. But it is especially true for balance training. A comprehensive, multiple-component exercise program, uniquely tailored to older adults is possible, effective and not difficult.

YOU CAN DO THIS

As a trainer who works with older and frail adults, a solid understanding of balance and its complexities is crucial to designing effective exercise programs. You will need to understand balance components separately, as well as how they work together. You’ll need to learn evaluative skills that will help you spot problems and come up with exercise strategies that address them. You will want to know how the variables can be enhanced or challenged; as those skills are the heart balance training. Understanding these basics will ensure you know how to select tools (specific kinds of exercise activities) from your very smart “toolbox” that work on deficits or otherwise enhance balance. Ideally and clearly, your skills, knowledge and practical

applications as a balance trainer are what set you apart from other trainers and positively impact your clients.



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This article is the first of a short series that will feature fun and creative activities to train the many components of balance. The work is based on my program, ABLE Bodies® Balance Training, a multimodal exercise program for older and frailer adults. It is evidenced-based and follows American College of Sports Medicine and American Heart Association guidelines for exercise (Mazzeo et al., 1998; Nelson et al., 2007; Scott and Rosenberg, 2005). A 2004 randomized controlled trial, supported by the Active Aging Partnership and Robert Wood Foundation, proved ABLE Bodies techniques significantly improved balance, gait speed, strength and flexibility in frail and older adults. Authors concluded the multi-modal, comprehensive structure of the program contributed to its success (Scott and Rosenberg, 2005). More recent published literature (Erickson and Kramer 2007; Colcombe and Kramer, 2003, King and Horak, 2009, Zoeller, 2010; Petrella, et al; 2004) brings to mind that other important qualities inherent to ABLE Bodies® programming (engaging, educational, sensori-motor, progressive, appropriately challenging and fun) likely also contributed to its success.

IT'S NOT JUST STRENGTH TRAINING

Muscle weakness is correlated with poor balance; and it follows that improving strength improves balance. But we can do better. A comprehensive, multi-modal program, including strength training, will affect a much broader scope of balance-related deficits and abilities (Barnett, et al 2003; Berg and Kairy 2002; Campbell et al., 1999; Day, et al., 2002, Rose 2003). Multi-modal or multiple-component training simply means weaving specific, known-to-be-helpful, types of training into one comprehensive exercise program. For example:

- Flexibility training can improve aspects of balance by restoring or improving your clients' range of motion and contributing to better mechanical efficiencies. Additionally, stretching is a very soothing way of re-acquainting your clients to their bodies. Tying breaths to movement while stretching is very powerful kind of somatic and mind/body learning.
- Improved posture means better structural alignment for balance and enhances mechanical efficiencies. Posture training helps clients gain awareness and appreciation for how alignment and core stability affect their balance.
- Strength is vital to everyday motor skills, balance, and endurance. Task-specific strength training will help most with everyday tasks. Make your training specific to the tasks with which they struggle.
- Agility and balance training can be practiced and enhanced. Like strength training, a functional emphasis stands to have the most positive impact on everyday living skills. Add, subtract and change complexity of tasks to make balance and agility training even more effective.
- Train sensory-motor components, such as vestibular function, vision, and somatic awareness to help older adults improve sensory integration (their ability to know where they are in space).

Each mode incorporated into your training should also encompass principles of exercise specificity. There needs to be clear reason to include it - a link to either their balance deficit or real life. Exercise science principles clearly state that effective exercise interventions should be as specific as possible to the systems involved and the desired goals, either in part or in whole (Mazzeo et al., 1998; Day et al., 2002; Lord et al., 2003; Rose, 2003; Myers et al., 1996; Shupert and Horak, 1999).



IF YOU BUILD A TOOLBOX, THEY WILL COME

So . . . how can you add and mix these amazing tools into your programs and toolboxes? How will you know which tools to use, when and for whom? Today's trainers should consider ABLE Bodies Balance Training® for their older or frail clients. ABLE Bodies is a program designed for these trainers. Early chapters explain balance components, in depth and in everyday terms. Participant and balance safety is emphasized throughout; you'll learn how to provide and progress balance support and activities. You'll learn about medical conditions; and how to set up an emergency plan. In chapter 3, we'll discuss how you can set up and lead your first programs. Then come all the cool tools! To my way of thinking physical activities are the tools of our trade; what we work with. Having the right tool for the job will always be integral to your success with a client. Being a tool master is fun, creative and will set you apart from others. In ABLE Bodies Balance Training, chapters 4-9 there are over 150 tools/activities for better flexibility, posture, core stability, strength, balance, mobility, and endurance. While most of the activities are exercises and skill practice, you will also find a handful of conceptual learning activities. Conceptual activities are always at the front of chapters and are hands-on physical activities with important "Take Home Messages". Participants will learn a concept intellectually and with their bodies. Venus DiMilo Arms (ABBT, page 63) and Belly Button Training (ABBT, starting on page 239) are two popular, fun examples.

One well-used feature of the book is each activity includes a practical application, as well as suggestions for making the activity easier, harder, or more balance specific. The appendix includes 16 lesson plans, complete with practice sessions and homework. Practice and homework will enhance what they learn from you in class. The lessons are flexible enough to be spread out over 16 weeks or even up to a full year. The built-in ability to vary exercises to suit your clients is a most helpful tool offered by ABLE Bodies®. Overall, all ABLE Bodies activities are designed for older and frail adults living in retirement and assisted-living communities.



IT'S ALL ABOUT POTENTIAL

As you begin to understand the intricate nature of balance, and are able to juxtaposition it alongside the potential of fitness and your training skills, you too will begin eagerly weaving these activities and others, smartly into your own multi-modal programs. Whether you work with individuals or groups, re-tooling exercise training to be more balance-specific and multi-faceted will make your programs engaging, interactive, fun, and yes, more effective.

Check out ABLE Bodies, book or the new DVDs for a few great new tools that will help your older adults be more able, capable and better balanced.



ABOUT THE AUTHOR

Sue Scott, MS, founder of Renewable Fitness and creator of ABLE Bodies® lives in Happy Valley, Oregon, where she works as an exercise consultant, and a balance and active living specialist. Scott has presented ABLE Bodies concepts and research at ACSM, IDEA World, ICAA, APHA, IAHSa and other conferences, locally, nationally and internationally.

In addition to ABLE Bodies, Scott has worked on other projects. In 2007 and 2008, she worked as lead trainer for Dr. Fay Horak at Oregon Health and Science University (OHSU) designing an agility exercise program for Parkinson's disease (King and Horak, 2009). With financial support, we hope to publish an exercise manual later next year. Currently, Scott is working on a cognitive health coaching project with Holly Jimison, PhD, also at OHSU. This interesting project pairs brain training games with aerobic and sensorimotor exercise for subjects 75 years and older.

Sue has over 15 years of experience working exclusively with older adults and fitness. In addition to research, consulting and workshops, Scott currently teaches at Rose Schnitzer Manor at Cedar Sinai Park and in other communities. She is certified as an American College of Sports Medicine (ACSM) health and fitness specialist and is recognized as an IDEA Health & Fitness Association master trainer.

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ABLE BODIES BALANCE TRAINING

ABLE Bodies Balance Training, the book, is available from Human Kinetics and includes links to their website for downloadable activities and handouts. For more information, visit www.humankinetics.com.

New in 2010, ABLE Bodies Balance Training, the DVD series, is available exclusively from WITS. Order now to get started using ABLE Bodies Balance Training.

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