Movement Matters: 
Dance As An Innovative Health Promotion Strategy

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Climate For Change: Ageing Into The Future
May 5th, 2010 - Melbourne, Australia
• Fewer than 25% of older adults participate in the recommended amount of exercise (Ory et al., 2003)

• Individuals 65+ have the lowest exercise rate of all Canadians (Statistics Canada, 2003)
Arts @ SERC is launched!

Movement Matters!

The Sheridan Elder Research Centre (SERC) is pleased to announce our most recent research initiative, Learning Through the Arts@SERC.

To celebrate the launch of this exciting area of research interest, adults 50+ are invited to experience Learning Through the Arts@SERC first hand. Join Gillian Saunders-Heron, Head of Sheridan’s Dance Discipline, Music-Theatre Performance Program, this June for 4 beginner ballet classes designed for older learners. Rediscover a past passion or take this opportunity to experience ballet for the first time!

When:
June 9th, 16th, 23rd, 30th
10:30 A.M. - 11:30 A.M.

Where:
Sheridan Institute of Technology and Advanced Learning
1430 Trafalgar Road, Oakville
Dance Studio H117

Cost: Free!

To register or for more information:
Contact Pat Spadafora, Director, SERC, by email at: pat.spadafora@sheridan.on.ca
or by phone at:
905-545-9400 x 6618

Register before May 20th to begin Learning Through the Arts@SERC.
Space is limited!
• F. said that she found the ballet tough and strict but loved the challenge it presented to her

• “I feel more flexible”

• “The class focused on hips and core body strength to increase stability and safety while walking, that’s what I needed!”
Dance pilot at Humber Heights: Dance teachers’ observations

- Increased understanding of body awareness
- Increase in balance
- Cognitive understanding of arm opposition improved dramatically
- Noted that one participant who used a walker and was quite hunched over, was standing taller by the end of the 12 weeks
- Memory improvement
- Participants loved the music and there were many discussions about where they were in their lives at the time of the recordings (Thursday classes)
Research questions:
Can yoga function as an effective alternative to gym-based programs for both improving **physical strength** and **self-reported quality of life**?

Will participation in a yoga program alter participants’ attitudes towards exercise in general?

Participants:
Six community-dwelling women who participated in a once-weekly Iyengar yoga class for 12 weeks

**Mean age** = 70
Yoga Pilot: Methodology

**Physical Measures (pre and post)**
- Balance (Berg Balance Scale)
- Flexibility
- Aerobic endurance
- Upper and lower body strength

**Experimenter-administered scales**
- Montreal Cognitive Assessment (cognitive function screen)
- World Health Organization Quality of Life – Brief Form (WHO-QOL BREF)
- Philadelphia Geriatric Centre Morale Scale

**Self-administered questionnaires**
- Positive and Negative Affect Schedule (PANAS)
- Participant Health Questionnaire (PHQ)
- Exercise Habits questionnaire
- Barriers to exercise questionnaire

**Journals**
Each participant was given a journal in which to record their experiences with the yoga class and any yoga they might practice between classes.
Results

Physical Measures

Endurance improved by an average of **8 steps** within 2 minutes

*Two other measures showed marginally significant improvements:*

- Left shoulder flexibility
- Left hip abductor flexibility

Questionnaire Results

Participants scored significantly better on **Domain 1: Physical Health** on the WHOQOL-BREF with an average improvement of 3 points
Results - continued

Interviews

Two main points emphasized:
• enjoyment of classes
• many participants felt differently about ways to obtain physical exercise

“\textit{I haven’t breathed like that in years}”

Journals

In their journals, most reported feeling some qualitative benefits in how they felt both physically and mentally

“\textit{Before yoga class, I can’t remember when I last took a deep breath and stretched the old body to its limits – great feeling of satisfaction}”

“\textit{Good to feel simple exercise improve mental health}”
Pilot #2: Riverside Glen and Winston Park
• Original enrolment: 19 adults (mean age: 85)
• 8 completed a majority of classes
• All participants completed the following measures, pre- and post- dance course:
  – Senior Fitness test kit
  – Berg balance scale
  – WHO-QOL BREF
  – PANAS, PHQ
  – Exercise habits questionnaire
  – Exercise barriers questionnaire
Compared to baseline, preliminary results indicate improvements in the following:

- Lower body strength (30-second chair stand)
- Upper body strength (30-second arm curls)
- Hamstring flexibility (seated sit-and-reach)
- Shoulder flexibility (back scratch test)
- Walking speed (8-foot get-up-and-go test)

* People who did not complete the classes either did not demonstrate improvement or declined.
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Participants’ qualitative reports:

"I never thought I would ever be able to do that"

"I haven't done that since I was a child and it felt so good"

"I feel taller and lighter"

"I feel straighter"

"I think we're ready to take this [show] on the road"

"I feel stronger"
Movement Matters: Factors that influence participation

- Participant memory problems
- Staff involvement
- Participants’ self-limiting beliefs
- Perception of ability level vis-à-vis other participants
Thank you!

For additional information, please contact

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Visit our web site for updates:

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Read our blog, Aging Matters, at:

http://agingmatters.blogspot.com