



Trinity College Dublin

Coláiste na Tríonóide, Baile Átha Cliath

The University of Dublin



Gotta Dance!

Deirdre Connolly, Lynn O'Toole, Lauren Boland and Carmel Cooney, Discipline of Occupational Therapy, Trinity College, Dublin

Loretta Yurick & Robert Connor: Dance Theatre of Ireland (DTI)

Roisin Ryder, Community Health Co-ordinator, Fatima Groups United

Maire Davey: Arts Officer, Participation and Learning, Dun Laoghaire Rathdown County Council

Siobhan Mangan: Senior Health Promotion Officer, Health Service Executive

Discipline of Occupational Therapy

Dance Theatre Ireland Partnership

- Well-Dance presentation at ActivAge conference 2013

Dr. Francis Hegarty, Loretta Yurick & Robert Connor (DTI) and Olwen Grindley, Dancer/Osteopath.

- January – March 2014: Two Well-Dance programmes delivered by DTI simultaneously:

- F2 family resource centre, Fatima, Dublin 8
- Dance Theatre of Ireland, Dun Laoghaire

- January 2015: funding awarded to DTI from DLRCC /HSE Arts in Health Partnership
 - Three programmes in three locations in Dun Laoghaire-Rathdown borough for 20 weeks January to June 2015



Well-Dance

To retain and enhance the natural capacities for movement and creativity

- Creative movements and contemporary dance
- Imagination, rhythm, musical variety, interaction/connection
- Routines include stretching, stepping patterns, direction changes, upper body gestures, rhythmic detail, creative expression
- Musicality, imagery, full body sequences, improvisation, moving through space, warm up and cool down
- Dancing individually, in pairs and small groups
- Increases in complexity weekly: cognitive sequencing, recall, self-expression, quick decision making

<https://vimeo.com/99333270>

Impact of Well-Dance on activity participation and quality of life

Study 1: January to March 2014; Study 2: January to June: 2015

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Impact of a Dance Programme on Health and Well-Being for Community Dwelling Adults Aged 50 Years and Over

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Study

- January 2015: DLRCC/HSE Arts & Health project in Dun Laoghaire-Rathdown.
- DTI funded to deliver three 20-week programmes in three locations in Dun Laoghaire-Rathdown area from January to June 2015
- Well-Dance delivered in DTI studio and two community centres
- Participants recruited through local voluntary organisations by Arts officer in DLRCC

Research aims

To explore the impact of Well-Dance on:

- Activity participation
- Physical function
- Falls efficacy
- Mood
- Quality of life
- Experiences and opinions of Well-Dance

Mixed methods studies – convergent parallel design (Creswell, 2011).

Quantitative and qualitative data pre and post programme.

Outcome measures:

•Quantitative measures

- Frenchay Activities Index (Turnball et al., 2000): Frequency of participation in self-care, home and community-based activities
- Falls Efficacy Scale (Yardley et al., 2005): Fear of falling across a range of daily living activities
- EQ-5D-3L: Health related quality of life
- Timed Up and Go (TUG) (Podsiadlo and Richardson, 1991).
- Geriatric Anxiety Scale (Segal, June, Payne, Coolidge, & Yochim, 2010)

Qualitative measures

- Focus groups before and immediately after participation in Well-Dance

Demographics

Time 1 (n=83)			Time 2 (n=47)			Time 3 (n=44)		
Location	DTI	37	Location	DTI	22	Location	DTI	19 (51%)
	Shankill	18		Shankill	12		Shankill	16 (88%)
	Dundrum	28		Dundrum	13		Dundrum	9 (32%)
Gender	Male	Female	Gender	Male	Female	Gender	Male	Female
	6	77		3	44		5	39
Mean age	70.7 (SD6.6)		Mean age	70.2 (SD6.5)		Mean age	70.6 (SD5.2)	

Outcome measures

Measure	Average score Time 1	Average score Time 2	Average scores Time 3
Frenchay Activities Index (scores range 0 to 45)	33.8	33.7	34.7
Falls Efficacy Scale (max score: 16-64)	21.3	21.2	20.7
Timed up and Go (TUG)	9.2 seconds	8.1 seconds <i><u>T1 and T2</u></i> <i><u>(p=0.002)</u></i>	8.4 seconds <i><u>T1 and T3</u></i> <i><u>(p=0.002)</u></i>
Geriatric Anxiety Scale (0 to 75)	7.7	5.7 <i><u>T1 and T2</u></i> <i><u>(p=0.031)</u></i>	7.2
EQ-5D-3L (0- 100)	79.8	79.6	85.7 <i><u>T1 and T3</u></i> <i><u>(p=0.010)</u></i>

Level of concern for falling

Level of concern (category scores)	Time 1 (n=81)	Time 2 (n=43)	Time 3 (n=43)
Low (16-19)	48%	54%	56%
Moderate (20-27)	38%	37%	35%
High (28-64)	14%	9%	9%

Participants with a history of falls (n=23)

Similar profile as the whole group

- Mean age: 70.7
- Majority married or widowed
- Significant difference in TUG between Time 1 and 2 ($p=0.050$)
- Falls efficacy and Quality of life improved at all three time points
- Anxiety scores improved from Time 1 to Time 2.

Impact on physical abilities

*“I’m more **flexible**. I must say my legs feel a lot more flexible because of all the different exercises. Because I never did a lot of those exercises, they’re very different to what you’d normally do - **you’re moving a lot of different muscles**”.*

*“I have angina and normally I wouldn’t be able to do that sort of exercise. And I was doing it and **I haven’t suffered with any chest thing** at all since I did it, so I think it’s great”*

*“I went to the clinic the other day and **my diabetes is the best it’s ever been**”*

*“**The pain is gone** – I can do anything now **and I’m gardening** – I used to be afraid because of the pain, but now I’m out there pulling and dragging”*

Impact on cognitive abilities

*“And it’s not just physical, because you have to try and **remember the sequence** and that’s where a lot of people our age begin to have problems is in remembering the sequencing”*

*“Well I mean I think it’s all about **concentrating** because your mind has to keep working. You have to be thinking. And then when he says “change”, you have to know which way you have to go to change, and that’s what I like about it”*

*“And just **being aware of the world around us and our connection with the ground** and being aware that this is your body and where your feet are”*

Impact on mood

*“We’re all real **happy**, you’re always very happy at the end of it, everyone is in great form at the end of it”*

*“Your **confidence**, having more confidence in yourself, you’re not kind of protecting yourself as much. I’m not as nervous as I was”*

*“Yeah I feel the benefit of it. I feel the better for coming, you know. I do yeah. It **makes you feel good**”*

*“In some of the exercises we were supposed to be flying around like angels and for the moment it felt you were an angel. And it was just a **great bit of fun**, as well as you felt you were doing something for your own benefit, for your health”*

Perceptions of Well-Dance

*“And each week they keep stretching you a little bit more and the focus is on **ability to do**. They **treat you as capable people** rather than as people who should do a restricted form of everything”*

*“I think psychologically it’s quite comforting that somebody came up with this idea that people might be interested in dance. Because **so much talk about older people is all about their health problems** and going for a little walk. It’s not very imaginative what is out there for older people in terms of movement”*

*“For older people I think it’s great because you do feel that you’re kind of past it, or you’re moving on, and then suddenly this thing happens and it’s really good. **You realise that you can do more than you ever thought you could**”*

Conclusions and Implications

- Dance appears to appeal to active older adults
- Well-Dance had a significant impact on physical functioning: impacts on ability to complete ADL and IADL
- Those who reported falls in previous year had significant improvements in TUG: potential as a falls prevention intervention
- Well-Dance significantly improved Quality of Life which facilitates positive health behaviours.
- Mood: 18% of adults above 50 years in Ireland experience sub-clinical levels of anxiety: physical activity has a protective effect of on mental health
- Well-Dance aligns with Irish health policies recommending increased physical activity (*Healthy Ireland, National Positive Ageing Strategy, National Framework for Chronic Disease etc*)
- Need an RCT to confirm these findings



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Thank You