

Special Article - Fall Prevention

Falling on Your Feet: Dance and Holistic Wellness in Later Life

Bailey C^{1*}, Reynolds J², Hearne C³, Gavin C³ and Iftkhar N⁴

¹Department of Nursing Midwifery and Health, Northumbria University, UK

²Department of Social Work Education and Community Well Being, Northumbria University, UK

³Helix Arts, 1st Floor, Broadacre House, Newcastle upon Tyne NE1 6HQ, UK

⁴Company of Others, Newcastle Upon Tyne, England

*Corresponding author: Cathy Bailey, Department of Nursing Midwifery and Health, Northumbria University, Room H005, Coach Lane Campus East, Newcastle upon Tyne, UK

Received: March 17, 2017; Accepted: April 13, 2017;

Published: April 20, 2017

Abstract

This article considers role of dance participation in holistic, later life, health protection. A bi-weekly, 12 week, exploratory, ways to well-being, dance intervention 'Falling on your Feet' was designed and managed by X Arts organization and choreographer X and funded by the National Health Service (NHS) England. It reports on findings from the qualitative evaluation that ran in parallel with the programme. Key questions focused on self-reported value of dancing maintaining a healthier and socially connected older age. The intervention attracted 38 community dwelling people aged 65 years and over, 32 of whom consented to the evaluation. Discussion groups, short telephone interviews, observations, a public performance and professional dancer feedback, captured participants' self-reported benefits.

Participants knew the importance of maintaining and improving strength and balance in later life and reported a range of positive impacts on their physical, cognitive and emotional wellbeing. They valued co-choreography, acquiring the confidence to find their creativity and express this through dance, with group and paired dancing adding to social connections and emotional expression. Particularly striking were their positive expressions of self-ownership, self-possibility and positive future self well into older age. The findings warrant objective investigations into self reported, positive impacts of dance on strength and balance, social and emotional loneliness and overall self efficacy in later life. 'Falling on your Feet' connected with the human scale of health promotion.

Keywords: Dance; Later life; Falls; Qualitative evaluation

Introduction

Many older people, including those living alone, lead independent and fulfilling lives. However much of the world is ageing with countries such as Japan, Italy, Greece, Germany, France, Portugal, Finland, Bulgaria, Sweden, and Malta having 18% to 26% of their population aged 65 years and over, with countries such as UK and US, not far behind [1]. Ageing is associated with higher levels of disease and disability [2], an increasingly sedentary lifestyle, this sometimes associated with falls and fear of falling [3,4] and relatedly, making greater demands on health and social care costs.

In a recent systematic review on impacts of arts participation on health outcomes for older people, [5] suggest that ageing populations have led to increased interest in health protection and wellness interventions for older people, particularly community programmes developed from evidence based practice. The authors distinguish between art therapies, often delivered in clinical settings by health professionals and therapeutic use of the arts, the latter encompassing professional artists designing and managing, creative or performing arts programmes in community settings. With the potential to reach wide populations, the goal is to promote health and wellness, potentially with a focus on disease prevention or living well with a disability, rather than on healing or ameliorating the effects of disease and disability.

A popular art form, social dance is enjoying a revival; certainly in the US and the UK through TV programmes such as 'Strictly

Come Dancing. A 2011 review of the international evidence on the health benefits of dancing for older people [6] cites physical health benefits of regular dance for older people, including: aerobic exertion increasing breathing and heart rates with potentially, positive heart health benefits and low level resistance exercise, that may improve balance, agility and gait and reduce the risk of falls [7,8]. However, there is still lack of firm evidence, clearly associating regular dance with a reduction in falls [9].

Noice and Kramer [10] recently reviewed the scientific literature on older adults and health impacts of active participation in the arts, including dance. The review focused on wellness studies, in particular those designed to investigate physical, psychological, cognitive and emotional health improvement through arts participation. Participants were aged 60 years and over, able to independently perform activities of daily living and in general good health. In relation to dance, eight studies met the quality criteria. Of these, a randomized control trial [11] randomly assigned two groups who had not participated in regular dance or sports activities for 5 years, to a 6-month dance course (1hr/week under a professional instructor) or to a 'usual activities' group. Pre and post testing identified significantly higher performance on a number of cognitive and physical measures for the experimental group, compared with controls. Another study compared a mainly exercise-based freestyle dance regime (FR) with a more cognitively complex, choreographed performance of the same basic moves (CB), both taught by an experienced dance instructor [12]. Findings demonstrated a significantly better performance on a

standard reaction time task for the CB group.

Noice et al., also suggest that cognitive improvements are likely to fit with current theories of brain plasticity and cognitive reserve. In an earlier article focusing on creativity and ageing and positive impacts of the arts on health and illness in later life, [13] suggests that neuroscience has advanced understanding of the brain's plasticity, its ability to adapt and remain vital [14]. He contends that creative and arts related activities stimulate the brain, which in turn creates new synapses (contact points between cells). More synapses lead to better communication among brain cells and an improvement in brain reserve. This might explain [11] study findings as briefly outlined above, in relation to complex choreographed dance moves, leading to better performance on a standard reaction time to cognitive and physical measures, than those doing more exercise based dance moves.

Cohen [13] also suggests that participation in the arts may foster sense of control mechanisms, such as a sense of mastery [15]. For example, participating in and 'mastering' a dance class with choreographed moves, can lead to feelings of empowerment that new challenges can be accomplished and indeed, can open up new possibilities. Participants taking part in a dance intervention with a performance element, have self reported additional personal accomplishment and satisfaction in a successful performance and the sense of purpose that the end performance provides to the dance experience [6]. Connolly and Reading, [16] report on a number of studies wherein participants in weekly dance sessions, self-reported improved self-confidence through perceived, physical improvements and also, through taking part in a group performance [17].

Studies focusing on dance and social engagement point to the benefits of social support found in group participatory arts activities, such as dancing [18,19] and the positive impacts of sharing stimulating or productive activities [20,21], such as learning dance moves together. Others however caution that well validated and designed research is still needed to substantiate some descriptive findings such as dance enabling non verbal and expressive communication and, being a sociable and enjoyable activity [16].

With some caution about research design, there is growing evidence of physical, psycho-social and cognitive benefits of dance that in turn, may provide good health protection in later life. However in the UK, the Centre for Policy and Ageing, dance and health report [6] asserts that dance may still be overlooked by policy makers and commissioners focusing more on sports based activities and exercise. Whilst such activities are of real value to health and well-being across the life-course, dancing too, is an activity that the literature suggests, when delivered appropriate to a person's ability, can be an enjoyable social activity with positive impacts for physical and cognitive health and emotional wellbeing. Below we introduce the 'Falling on your Feet' dance intervention programme.

The Dance Intervention: Falling on Your Feet

Through an innovative National Health Service (NHS) England funding call, X Arts, an arts production company with a thirty-year track record of producing creative programmes with artists and communities facing multiple disadvantages, designed and piloted a

bi-weekly, 12 week dance for health programme for people aged 65 and over, living independently in an urban area in X in the North East England. The aim of the intervention, 'Falling on your Feet', was to promote the physical and mental health and well-being benefits of group, social dancing in later life. A participant recruitment plan was initiated with a number of referral routes, including local health professionals, patient forums and wider third sector partners and this was strengthened by a strong local media campaign including coverage via local BBC Radio X and ITV news.

X Arts produced 'Guidelines for Dance' exercise documentation, outlining the dance intervention and advising participants to consult with their GP, if they had not participated in exercise for a while. A short self reported health questionnaire was provided and participants were asked to advise the dance professional leader of any changes in their health condition which may affect their ability to dance and exercise throughout the programme. Such 'screening' is common within community delivered services and ensures safe and common sense practice.

38 older adults, 30 females and eight males, showed interest in the taster phase of the programme, with up to 18 participants regularly attending the twice weekly classes. These participants also co-produced a choreographed piece of dance, with nine of them gaining the confidence to participate in a final performance. Known reasons for attrition included health problems, not associated with the dance intervention, family and other commitments. Participants were aged between 65 to 85+, just over half (n=20) were aged 65-69, of the remaining 18 over 69, five chose not to disclose their age. A number of self reported long term conditions were captured by the health questionnaire including diabetes, arthritis, heart related conditions and poor mental health, in particular anxiety and low level depression. Many had not danced for a long time, apart from at 'occasions' such as weddings.

Dance classes took place in a local, accessible, community centre, in a large, light and airy room, on good bus routes and with ample parking. Classes were delivered from January 2016, led by X X, a choreographer and professional dancer, with experience of running 'Dance for Health' classes. Each class was planned for about an hour with tea and biscuits at the end, a chance to chat and be sociable.

Values Based Evaluation

A values based evaluation designed and managed by X University, ran in parallel to the intervention [22]. This is a participatory, reflective and ongoing (process) approach, rooted in three questions: What's important to the participants (values)? Clarifying what's important (why these values?); Identifying and mapping values-based aspects (processes and outcomes). The evaluation wished to find out the views and opinions of those taking part in the dance class, whether taking part in a regular dance class can help promote the benefits of physical activity for those aged over 65 years, whether there are wider benefits and what was of value to the participants and why. The evaluation was also responsive to what emerged from the process.

Following X University ethical approval, 32 participants consented to take part and from the mid-point data collection phase, 18 participants were still available for data capture. Table 1 gives detail of evaluation data collection. Using short telephone

Table 1: Evaluation Data Collection.

Time Period	Evaluation Activity
Beginnings	Telephone interviews with participants: <ul style="list-style-type: none"> • Expectations and personal goals • Reasons for attending • Personal Goals • Worries
Group Discussion following first dance class	Group discussion post first class, facilitated by Choreographer and dance professional: <ul style="list-style-type: none"> • Expectations and personal goals • Reasons for attending • Worries
Weeks 2&3 : Post-it Notes feedback	Capturing individual early feedback: Q1. Anything happened since last week that you think might be related to taking part in the dance class? Q2. Anything you thought about the dance class that you would like to share? Q3. Any other comment
Mid-point Observation	Researcher observing dance class: <ul style="list-style-type: none"> • Gathering, warm up and physical set up for dancing • Interaction between participants & between dance professional and participants • Pace and delivery and ambience of venue • Post dance tea and chat
Mid-Point structured Group Discussion	Group discussion post class 6 (activity based): <ul style="list-style-type: none"> • Coming to a dance class is: <ul style="list-style-type: none"> ◦ Good for your health ◦ Good for meeting people ◦ Fun! Steps – what brought you to the class and being in a group
Falling on your Feet Public Performance 8 th October 2016	Feedback included: <ul style="list-style-type: none"> • Researcher audience participation and reflective notes • Pre and post-performance discussion with some audience members
End-point Group Discussion	Based on Values Approach to Evaluation: <ol style="list-style-type: none"> 1. What's important to the participants (values)? 2. Clarifying what's important (why these values?) 3. Identifying and mapping values-based aspects (processes and/or outcomes)?
X Arts Summative Feedback	One to one interview conducted by X with X X, CEO and X, Senior Project Manager , this to include the organisation's values reflections on 'Falling on your Feet' in relation to the 3 values questions as noted above.
End-point telephone interviews	These were carried out with those who took part in the beginning interviews and both the beginning and end-point interviews are reported as Vignettes in Table Two
Artist Feedback weekly sheet	X, Choreographer provided structured feedback following the weekly class: <ul style="list-style-type: none"> • Summary of Activities and main aims • Are there any changes you will make to your plan for the next or future sessions? • Any memorable comments of actions by participants or support staff during or after the session? • Can you share any examples when and how participants demonstrated an increase in confidence motivation or skills? • Any other comments

interviews, group discussion and structured feedback, pre dance intervention expectations, early impressions, mid-point feedback and post intervention reflections were captured. One of the evaluation team also observed a dance class. With verbal agreement, the public performance and post-performance audience question and answer session, also forms part of the evaluation data as does a sample from the weekly written feedback from X, the choreographer. At the end of the project, reflective, one to one interviews were carried out with X Arts, X (CEO) and X, (Senior Project Manager and Creative Producer).

Telephone interviews were not audio recorded, responses were written down and word processed and each lasted about 20-30 minutes. Eight participants comprising of two couples and four individuals, consented to the pre-intervention interview and of these, six were available for post intervention interview. One couple unfortunately withdrew due to ill health. Table Two offers two individual vignettes and one from a couple wishing to be interviewed together. With permissions, group discussions were audio recorded.

Inductive thematic analysis [23] guided the analytical process carried out by the two members of the evaluation team. Only one member supported data collection, the other was able to counter

potential 'immersion bias' as they had not spent time with the participants. Firstly the data within and across all written and verbal (audio transcribed) material collected was grouped under similar codes. Codes were then compared, each to the other and the collapsing or further grouping of the codes into larger categories, denoted further analysis [24]. As presented below, categories were grouped into substantive themes grounded in the data. In compliance with confidentiality agreements all names are pseudonyms.

Value Based Findings

- Valuing Dance
- More than Dance
- Beyond Dance: A new perspective on life

Valuing dance

It became clear participants know what helps to nurture, maintain and sustain a healthy, happy life. Their expressed reasons for taking part in the dance programme, highlighted their awareness of what they need to stay physically, mentally and emotionally well and connected to others: "To move more"; "To get more flexible"; "Meeting people you haven't met before"; "Company, enjoyment."

Table 2: Participant Vignettes.

Participant	Vignette
Esther*, aged 83	Esther heard about 'Falling on your Feet' through local media coverage. She has taken part in the Great North Run [a half marathon] 30 times, but she hung up her trainers after her 80 th birthday. Esther is interested in keeping fit and doing more Dance, as she used to enjoy country dancing. She really wants to meet new people, keep active and misses not going out and is willing to give anything a go. Esther keenly attended **FOYF for 3 sessions, and shared the immediate benefits of socialising and the group support, but then suffered a fall due to the wind sweeping her off her feet. Unfortunately she did not have the confidence to return to the workshops. She would love to take part in a future programme.
Alf , aged 84	Alf recently recovered from a heart attack and on the suggestion of his GP needed to get into light exercise. He is currently under-going cardio rehabilitation twice a week, but feels ready to give something a go. Alf is also diabetic and very aware of his health and looking forward to FOYF. In his first session Alf shared how he was glad there was another man in the group, as he wasn't sure what to expect. Despite ongoing hospital treatment, Alf became very committed to the group and became one of the nine participants who, with X, the professional choreographer, co-choreographed the piece that was publicly performed. He also spoke of forming new friendships and interests. He built some special supportive friendships which have continued outside of the FOYF group.
Shirley (65) and Fred (80)	Shirley and Fred are active within their local community and enjoy taking part in groups such as a choir. Shirley has suffered from diabetes and Fred has had bouts of inactivity which he would like to change and loves to dance! Shirley and Fred have taken a keen role in supporting and advocating the FOYF programme and have developed their role as peer mentors for the members of the group. They have both shared significant health improvements since their ongoing involvement in FOYF as well as a significant shift in their motivation and skills, both physically and mentally. Shirley noted following a recent visit to her GP her diabetes has improved, which she self-reports is due to the involvement in FOYF.

* All names are pseudonyms, ** FOYF: Falling on your Feet.

One participant was still working, this within a relatively new career and valued the dance programme as a way of managing work related stress:

"I'm retirement age but I'm still working, I've started a whole new career. And a lot of it is stressful, so I came for an escape really . . ."

Some participants highlighted the role of "mental agility" in achieving and maintaining physical balance, and supporting memory: "I had one or two health problems, balance gone and memory and I thought I am going to do this." Others spoke about hoping to improve confidence in their balance and physical abilities, reflecting on how this can be lost after experiencing a fall; "I've been doing Pilates for years as I know balance is very important but confidence is very important so it's really hard..."; "B [friend] lost her confidence to go out after she fell".

Participants acknowledged that dance is an enjoyable activity with universal appeal. Some participants emphasised their love of dance was the motivating factor for attending the sessions:

".....and I just dance freestyle- I've always loved dancing, if there's any music anywhere I always get up and dance, I can't sit down – my feet won't behave themselves!"

Participants also suggested that dance was not just for those who had danced in younger years or who love to dance now; dance was something that was "for everyone"; all ages, men and women, previous "dancers" or completes novices. Four regular participants were men, one attending as part of a couple. They talked about how they enjoyed and valued the programme, reflecting on the added value of this dance activity compared to activities that men typically attend, such as choirs and cricket. One of the participants, Fred who is introduced in the vignettes in Table Two, emphasized that the dance sessions also presented an opportunity for men to express emotion in a way that is often missing from other activities.

The fact that Falling on your Feet was specifically for over 65s was also valued; "The over 65 aspect because that was the main. . . [emphasis here] . . . that I said I have to go along to that"; "If it's only

people over 65 I probably can do it."

Finally there was a pragmatic value, the dance class providing a welcome addition to their existing weekly timetable of activities; "[I have] nothing at the end of the week"; "I liked the fact it was a Monday and a Friday because I have nothing on those days."

More than dance

Participants described the range of benefits and positive impacts, from physical to social, emotional and cognitive impacts, illustrating that this programme was so much more than dance:

Physical wellbeing: "I'm breathing better, my balance and walking is better, I'm even standing better";

"I've got moving at last – actually moving again... And the diabetes has come down a bit because of the exercise – and so the Doctor was pleased and that's an actual health benefit- measurable".

"I think sometimes the pace is too much [in more traditional exercise/dance classes] and we haven't got the stamina and I think this is one of the things she did [choreographer] built it up gently and we have become more flexible."

"It puts us under pressure to exit our comfort zone"; "It is stretching us."

Mental health and emotional wellbeing: "This is my first activity [since retirement]and it has woke me up, there's more to life, I was at a bit of a loose end, going for walks and watching TV but this has made me realize there is another stage in life";

"X [choreographer] brought out of us what we didn't know we had in us";

Participants talked about gaining confidence that impacted on other aspects of their lives:

"[I] don't see my granddaughter very often because she lives up in Edinburgh and she was saying [over the phone] 'Grandma you sound so much more confident'".

The role of the group in confidence building was reflected upon:

“[It’s like] Birds learning to fly...they know there is safety to return. They can do it as they can return to the safety of the home and it’s a bit like that here”;

This increase in physical and emotional confidence was also attributed to the individual attention participants received from the professional dancers;

“When you go to a Zumba class you are one of a crowd, you’re on your own – you’re lucky if the teacher says well done - whereas X [choreographer] knows the names of everyone she will give you a little tap on the back “that was good” that was right... so you can progress where you need to.”

A collective choreography was facilitated by the choreographer and dance facilitator, sharing and building on each participants’ own movement and “communication” within their dance. Participants appreciated this creative process; “It felt so creative with [choreographer] taking our [emphasis here] choreography to put it to the whole.” In her later diary entries, the choreographer reflected on individual and group progress:

“At the end of the class we share a choreography circle where each person shares movement. This week I noticed how much the movement they choose has changed. It’s much more considered, articulate and different to how they moved at the beginning. They’re really starting to behave like dancers. There’s a new PRIDE in their movement, so gorgeous to see.”

[X, Choreographer]

Participants discussed the benefits of working with a professional dance choreographer, co-choreographing a dance performance and forming a ‘company’ of dancers

“I never danced in my life before but I think those who stuck it out, us nine [who performed] we were very brave and we gained a lot from it.

Also Integral to participants’ development as dancers and sense of confidence, was their relationship with X Arts and as noted by the organization’s CEO:

“Something around the participants valuing the investment that I had put in and separate to that was building a close relationship with the producer [X Arts, Project Manager]. She was not an invisible factor; they recognised that without her, the performance wouldn’t have got there”.

(X Arts, CEO)

These more than dance outcomes, contributed to greater levels of self -competency for participants; ‘It’s building a relationship with you’. The group element also spilled outside of the dance activity. Participants shared information about other opportunities and activities with each other during their dance sessions, as well as forming friendships from within this ‘new’ group; “We’ve heard about a history group, a choir...a singing group. This widening of social opportunities and networks represents a social sustainability that has emerged as a result of the dance sessions.

Beyond dance: a new perspective on life

Participants shared some of their new perspectives on life,

particularly on expectations of later life, of getting older:

“I would say there is always more life to come, you’ve got to go out there and grasp it”

“I don’t know what I’ve achieved – but I know what’s happened. I’ve ceased to age. I was kind of sleepwalking into old age and I am no longer sleepwalking into old age. I realize there’s a big world out there- and how much is involved- there’s dance and everything what I’ve achieved is an opening of the mind to things that I didn’t know were there before – and it’s very pleasing and it stops me getting older.”

Following the ten minute choreographed performance, a member of the audience echoed this point:

I found this incredibly moving, touching, I just welled up. I’m not used to seeing older people dance in this way. I want to know can you join these classes even if you are younger - [general audience laughter], was it very emotional to make?

[Audience member taking part in the Q&A session, following the public dance performance]

Within their post intervention interview, the X Arts Creative Producer also reflected on age:

I think I underestimated the difference between someone 65 and someone 80 – and the boundaries and challenges that they are feeling themselves and the relationship with themselves. I think it was around the confidence to execute the work. They said themselves – “we still feel in ‘wor’ forties”. As soon as you’ve got a relationship with a person, it doesn’t matter about the age- so you’ve got similar areas of lack of confidence and challenges in your life and how you feel artistically.

The X Arts CEO suggested that the performance provided an opportunity for the participants to present themselves not just as an older member of a family or group of friends but as a dancer, with self mastery achieved through hard work, developing and tapping into a range of skills..

[They] build a personal relationship with the artist, with the group, they feel a responsibility, they can feel themselves getting stronger they watch each other and the aesthetic is very appealing as well- and they become a dance ensemble. [. . .]. The morality of the work, they are alive and kicking and they have work to share; that might have got missed. I think it’s that spirit, seeing the spirit of the performers and the performance as a whole. . .

The participants acknowledged individual and collective challenges and responsibility of becoming a dance ensemble. Within the post performance discussion with eight of the nine performers able to attend, they shared those anxious moments:

“...and I wanted to see what would be the resolution at the end of it, what would come off...and I yeah I was a bit frightened like everybody else and a bit nervous and thinking ‘oh gosh have I got to go through this’ and our dress rehearsal was dire wasn’t it.....”

“We kind of sacrificed our own desires and comfort zones to make sure it all went forward.”

In the final group discussion, there was ‘affirmation about valuing each other:

Participant One: “Yes we did have that sense of connection. As the weeks went on we connected with each person. I mean it took me a long time to connect up with you J but we were giving each other signals andit was such a lovely feeling

Participant Two: “I think we shared a lot of things....”

Discussion

Participants value and know about the importance of maintaining/improving strength and balance in later life. There is substantial literature evidencing older people becoming more fearful of falling [25-27]. The participants of *Falling on your Feet* reported feeling more confident with, and noticed improvements in, their posture, balance, standing and walking. In their recent randomized control trial, [9] suggest that whilst social dance does not reduce falls, specific training elements within social dance, may demonstrate improved balance [28,29], which is necessary for reducing falls.

Within future interventions, recruitment could focus on older adults who have a history of falls and/or fear of falling and are known to local falls services. Validated tools such as the Falls Efficacy Scale [30] could be administered at the beginning and end of a ‘Falling on your Feet’ programme to measure any self-reported change in confidence with carrying out daily activities, whilst a specific training element with a balance challenge appropriate to participant capability, could be included within the dance programme.

Some participants specifically registered with ‘Falling on your Feet’ because it targets older people. A dance and later life review carried out by Connolly and Redding [16] cites earlier research wherein older participants preferred dance session content that considered the ‘ageing body and mind’ [31]. An earlier dance facilitation resource by the UK, Green candle Dance Company [32], contends that if a dance professional understands the mix of abilities within a class of older people, they can appropriately introduce improvisation, so that each participant may gain confidence in their ability and ‘pace’ their learning accordingly.

There needs to be careful consideration of the skills and experience of the dance professional to both deliver safe practice but also to enable the participant, who may already be quite fearful, to ‘find themselves’, through expressive dance and co-choreography. Short term investment in professional artists is likely to lead to longer term cost effectiveness in reducing health care costs. Future research should include cost benefit analysis, and explore older people’s attitude to paying for classes from within their means. This was raised in final participant discussion, but only eight participants were available and all suggested that a ‘reasonable cost per class’ for those who could afford it was sensible, if it meant sustaining what had become, a ‘big part of their week’.

Participants also felt encouraged to be part of a group dance story, each playing to their strengths but the whole story needing everyone to participate. These creative aspects seemed transformative. Participants expressed how co-choreographing, individual and group dancing and publicly performing, can be very challenging but they also expressed the psycho-social benefits including forming

relationships, finding oneself, ‘stretching what’s achievable’ and not feeling defined, ‘just through age’, increasing confidence and overall quality of life. Such benefits represent key factors in the development of resilience and its importance in successful ageing [33] and further support existing literature on the value of group and performative dance [16,17]. We would also suggest that this echoes Cohen’s [13] assertion that participation in the arts enables not only creative expression but also a sense of control mechanism, such as a sense of mastery [15] and presents a clear challenge to perceptions of age.

While more women than men took part, the men expressed a need for more opportunities to engage with health improving activities that enable emotional expression and release. As noted in a whole group session, a ‘men in sheds’ focus on activities may appeal to some and provide meaningful activity but not all men want the same sort of activities. ‘Falling on your Feet’ offered ‘something different’. Within a mixed group, working creatively, alone, with a partner and with the group, or the ‘company of dancers’, perhaps gives permission for embodied and tactile expression of self, to one’s self and others. Getting involved in a dance activity may indeed help combat social isolation and loneliness. Whilst not explicitly expressed by our participants, a comment from the researcher who observed the dance sessions, is that perhaps too, encouraging creative and expressive dance, may enable those living alone to experience appropriate human touch, a need that may be overlooked. In turn this may help tackle emotional loneliness, an aspect of feeling alone, even with other people present, that may not be recognized and yet has potentially, very negative ill health impacts [34].

Participants experiencing the ‘Falling on your Feet’ dance intervention, suggested a life affirming new perspective on later life. This seems contrary to understandable concerns of policy makers, commissioners and providers of services that an ageing population may lead to unmet health and social care need, with escalating economic and human costs. Dance interventions like ‘Falling on your Feet’, may encourage a re-thinking of healthy ageing policy, from a ‘problem’ to a ‘potential’ focus’.

Limitations

The evaluation sample may be subject to biases, participant were likely to be those interested in dance with attrition pairing the group down to those most committed. However attrition reasons were varied, often underpinned by life’s vagaries such as ill health and being needed to support family members.

Conclusion

‘Falling on your Feet’ connected with the human scale of health promotion. Participants in this programme discussed ‘getting older’, holistic changes and their own adaptations to such changes, as well as their concerns about achieving and maintaining ‘a good healthy life’. Having meaning and purpose seemed critical and ‘Falling on your Feet’ provided safe, artistic and creative, individual, partner and group ‘dance space’ to further explore how to experience, live and enjoy healthy living. It also opened up future possibilities. In the longer term such preventative and enabling health promotion intervention, could prove cost effective in relation to maintaining independence and reducing longer term, health care costs. More research is needed to substantiate this potential human and economic gain.

References

1. World Atlas. 2016.
2. Salisbury C, Johnson L, Purdy S, Valderas J, Montgomery A. Epidemiology and impact of multimorbidity in primary care: a retrospective cohort study. *British Journal of General Practice*. 2011; 61: e12-e21.
3. Hrobonova E, Breeze E, Fletcher AE. Higher levels and intensity of physical activity are associated with reduced mortality among community dwelling older people. *Journal of Aging Research*. 2011; 65:1931.
4. Woodcock J, Franco OH, Orsini N, Roberts I. Non-vigorous physical activity and all-cause mortality: systematic review and meta-analysis of cohort studies. *International Journal of Epidemiology*. 2011; 40: 1, 121-138.
5. Castora-Binkley M, Noelker L, Prohaska T, Satariano W. Impact of Arts Participation on Health Outcomes for Older Adults. *Journal of Aging, Humanities and the Arts*. 2010; 4: 352-367.
6. Centre for Policy and Ageing. Keep Dancing: The health and well being benefits of dance for older people. Bupa. 2011.
7. Keogh JWL, Kilding A, Pidgeon P, Ashley L, Gillis, D. Can Dancing Improve Physical Activity Levels, Functional Ability and Reduce Falls in Older Adults? A Comparison of the Benefits of Once versus Twice Weekly Dancing for Healthy Older Adults, SPARC: Auckland. New Zealand. 2009a.
8. Keogh JWL, Kilding A, Pidgeon P, Ashley L, Gillis D. Physical Benefits of Dancing for Healthy Older Adults: A Review, *Journal of Aging and Physical Activity*. 2009b; 17: 1-23.
9. Merom D, Mathieu E, Cerin E, Morton RL, Simpson JM, Rissel C, et al. Social Dancing and Incidence of Falls in Older Adults: A Cluster Randomised Controlled Trial. *PLoS Med*. 2016; 13: 8.
10. Noice T, Noice H, Kramer AF. Participatory Arts for Older Adults: A Review of Benefits and Challenges. *Gerontologist*. 2014; 54: 741-753.
11. Kattenstroth JC, Kolankowska I, Kalisch T, Dinse R. Superior sensory, motor and cognitive performance in elderly individuals with multi-year dancing activities. *Frontiers in Aging Neuroscience*. 2010.
12. Kimura K, Hozumi N. Investigating the acute effect of an aerobic dance exercise program on neuro-cognitive function in the elderly. *Psychology of Sport and Exercise*. 2012; 13: 623-629.
13. Cohen G. Research and Creativity and Aging: The positive impacts of the Arts on Health and Illness. *Generations*. 2006; 1: 7-15.
14. Kramer AF, Erickson KI. Capitalizing on cortical plasticity: Influence of physical activity on cognition and brain function. *Trends in Cognitive Sciences* 2007; 11: 342-348.
15. Rodin J, Timko C. "Sense of Control, Aging, and Health." *Aging, Health, and Behavior*, edited by M. G. Ory, R. P. Abeles, and P. D. Lipman. Newbury Park, CA: Sage. 1999.
16. Connolly M, Reading E. Dancing towards well being in the third age: a literature review on the impact of dance on the health and well-being among older people. Trinity Laban Conservatoire of Music and Dance: London Thames Gateway Dance Partnership. 2010.
17. Bertram G, Stickley T. An Evaluation of the Young@Heart Dance Project for Older People: University of Nottingham. 2009.
18. Cacioppo JT, Hawkley LC. Social isolation and health, with an emphasis on underlying mechanisms. *Perspectives in Biology and Medicine*. 2003; 46: 39-52.
19. Seeman TE, Lusignolo TM, Albert M, Berkman L. Social relationships, social support, and patterns of cognitive aging in healthy, high-functioning older adults: MacArthur studies of successful aging. *Health Psychology*. 2001: 20: 243-255.
20. Hulstsch DF, Hertzog C, Small BJ, Dixon RA. Use it or lose it: Engaged lifestyle as a buffer of cognitive decline in aging? *Psychology and Aging*. 1999; 14: 245-263.
21. Wilson RS, Bennett DA. Cognitive activity and risk of Alzheimer's disease. *Current Directions in Psychological Science*. 2003; 12: 87-91.
22. Taylor M, Purdue D, Wilson M, Wilde P. Evaluating community projects: A practical guide. Joseph Rowntree Foundation. 2005.
23. Fereday J, Muir-Cochrane E. Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods*. 2006.
24. Tobin GA, Begley CM. Methodological rigour within a qualitative framework *J Adv Nurs*. 2004; 48: 388-396.
25. Bailey C, Jones D, Goodall D. What is the evidence of the experience of having a fall across the life course? A qualitative synthesis. *Disabil Health Journal*. 2014; 7: 273-284.
26. Zijlstra GA, van Haastregt JC, van Rossum E, van Eijk JT, Yardley L, Kempen GI, et al. Interventions to reduce fear of falling in community-living older people: a systematic review. *J Am Geriatr Soc*. 2007; 55: 603-615.
27. Zijlstra GA, van Haastregt JC, van Eijk JT, van Rossum E, Stalenhoef PA, Kempen GI. Prevalence and correlates of fear of falling, and associated avoidance of activity in the general population of community-living older people. *Age Ageing*. 2007; 36: 304-309.
28. Sherrington C, Tiedemann A. Physiotherapy in the prevention of falls in older people. *J Physiother*. 2015; 61: 54-60.
29. Sherrington C, Whitney JC, Lord SR, Herbert RD, Cumming RC, Close JCT. Effective exercise for prevention of falls: a systematic review and meta-analysis. *J Am Geriatr Soc*. 2008; 56: 2234-2243.
30. Kempen GI, Yardley L, van Haastregt JC, Zijlstra GA, Beyer N, Hauer K, et al. The Short FES-I: a shortened version of the falls efficacy scale-international to assess fear of falling. *Age Ageing*. 2008; 37: 45-50.
31. Thomas H, Cooper L. *Dancing into the Third Age: Social Dance as Cultural Text: A Research Report*. Goldsmiths College: London. 2003.
32. Hansen S, Early F, Davies S. *Growing bolder: a start up guide to creating dance with older people*, Greencandle, supported by Arts Council: London. 1997.
33. Fry P, Keyes C. *New Frontiers in Resilient Aging: Life-Strengths and Well-Being in Late Life*. Cambridge University Press. 2013.
34. de Jong Gierveld J. A review of loneliness: Concept and definitions, determinants and consequences. *Reviews in Clinical Gerontology*. 1998; 8: 73-80.