

**Grooving to the Beat:**  
 A dance-based program for fall prevention & active aging  
 Casey Javier, OTD; Shannon Martin, OTD, OTR/L, BCG;  
 Julia Graham, OTD, MFA, OTR/L

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**Introductions**

Casey Javier, OTD      Shannon Martin, OTD, OTR/L, BCG      Julia Graham, OTD, MFA, OTR/L

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**Personal Connection to Program**

Caregiver for grandpa → Research during undergrad → Part time job following undergrad → Combining my two passions into one → Grooving to the Beat!

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### Learning Objectives of today's session:

- Objective 1**
  - Understand holistic benefits of dance to an individual's wellbeing
- Objective 2**
  - Understand how to utilize dance- based techniques to promote fall prevention
- Objective 3**
  - Apply dance- based techniques & movement to OT practice

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### Goals for 'Grooving to the Beat' (GTTB)



1. Education on the importance of fall prevention as adults age and how it impacts everyday life activities.
2. Understanding what factors can prevent falls and how to implement them into our everyday tasks
3. Increasing self-efficacy in everyday tasks with the support of socialization through a sense of community and reflection

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### Current Problem- Falls & Older Adults

- Falls are the leading cause of injury and death in older adults
- 60% of falls happen within the home



© Centers for Disease Control and Prevention. (2018). Fall-Related Older Adult Risk. Retrieved January 11, 2021, from [https://www.cdc.gov/nchs/data/infographic/Fall-Related\\_Older\\_Adult\\_Risk.pdf](https://www.cdc.gov/nchs/data/infographic/Fall-Related_Older_Adult_Risk.pdf)

(Center for Disease Control [CDC], 2016; Hospital for Special Surgery, n.d.)

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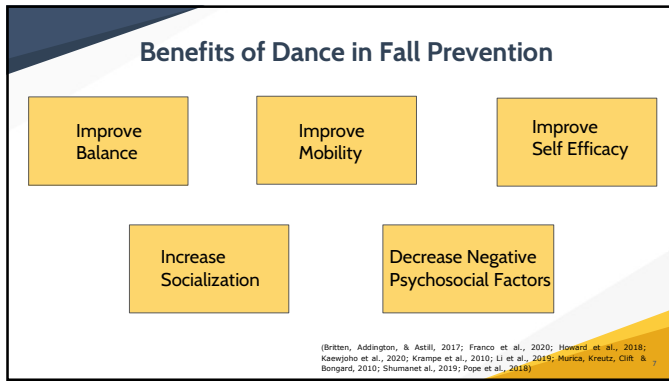
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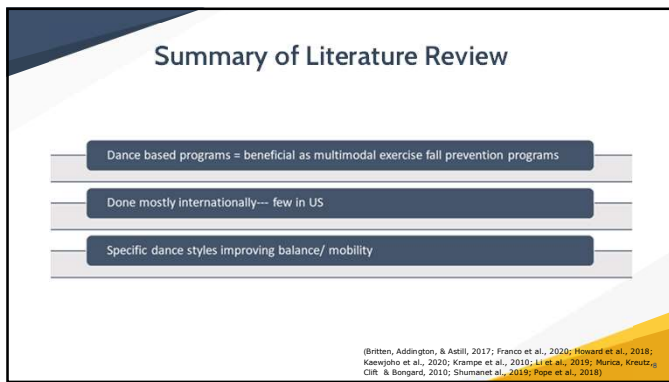
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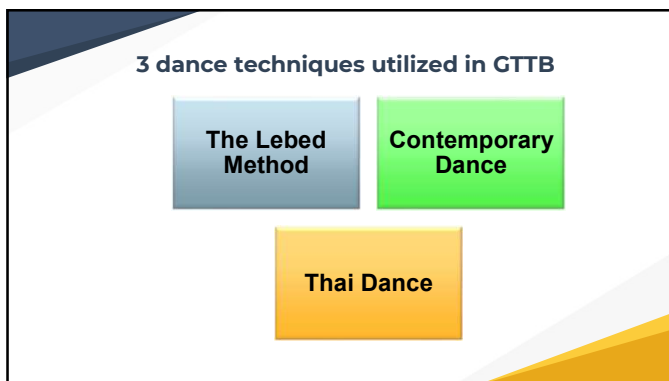
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Retrieved from: <https://www.giftedhygiene.com/sherry-lebed-dance.html>

### The Lebed Method (TLM)



(a) (b)



Sherry Lebed Davis

**Figure 1.** The Lebed Method: (a) standing and (b) sitting dance routine at Program of All-inclusive Care for the Elderly.

(Krampe et al., 2010; Pope et al., 2018)

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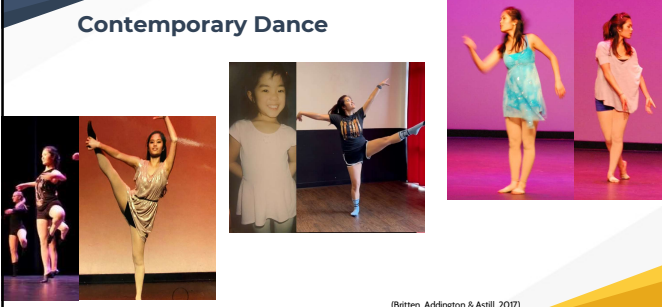
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### Contemporary Dance



(Britten, Addington & Astill, 2017)

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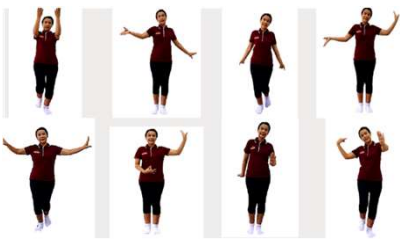
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### Thai Dance



(Kaewjoho et al., 2020)

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### Osher Lifelong Learning Institute (OLLI) at UNLV



"OLLI has been a life-saver for me especially during 2020, because, almost my entire family, including my two children, live 3000 miles away in the Philadelphia-area. OLLI has kept my mind active and structured my days during the height of COVID when everything shut down and I didn't leave my house for months....."

**-Member since '11**




OLLI means so much to me! The classes are such a crazy-quilt of topics, and always nurture my imagination and creativity. But, the finest gift is the PEOPLE that OLLI brings into your life - your fellow classmates sharing ideas, inspiring instructors introducing a whole world of experiences, and the wonderful, truly professional OLLI staff who make this whole organization function like a well-oiled machine! OLLI wakes up your mind and incites you to explore!

**-Member since '14**

*".....Sadly, my husband declined with various forms of dementia and my caregiver duties kept me from taking classes. After his death, I gradually resumed a more normal life and OLLI classes reopened the world to me. I enjoy taking classes online mainly because I have a better view of fellow participants than I did in classrooms....."*

**-Member since '18**



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### OLLI's Mission



"OLLI will provide for mature learners, an enriched environment for learning, teaching, and social interaction. This will primarily be accomplished through participatory classroom experiences in a wide range of intellectually stimulating, non-credited courses and educational activities presented by a broad range of instructors affiliated with UNLV and OLLI"

(OLLI at UNLV, 2022)

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### Areas of Focus



**Program Development**

**Education**

**Advocacy**

(OLLI at UNLV, 2022)

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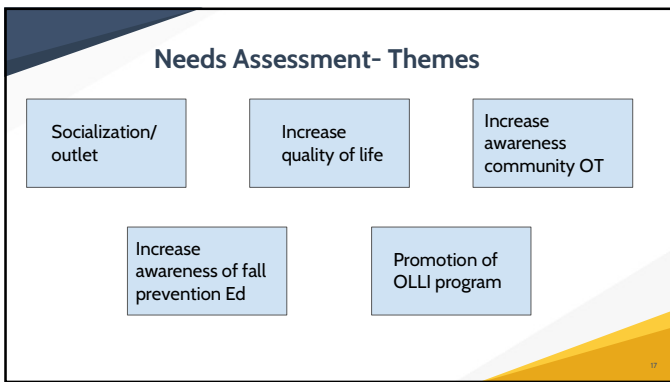
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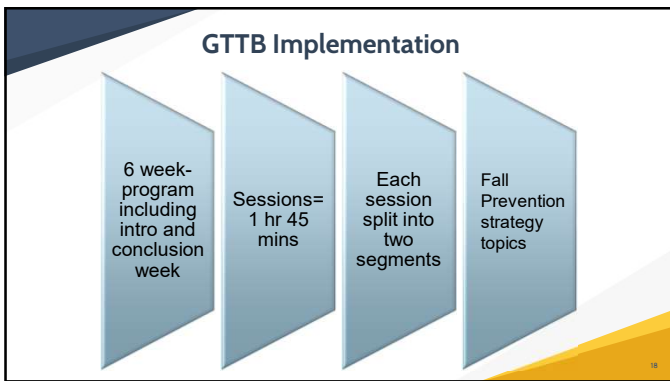
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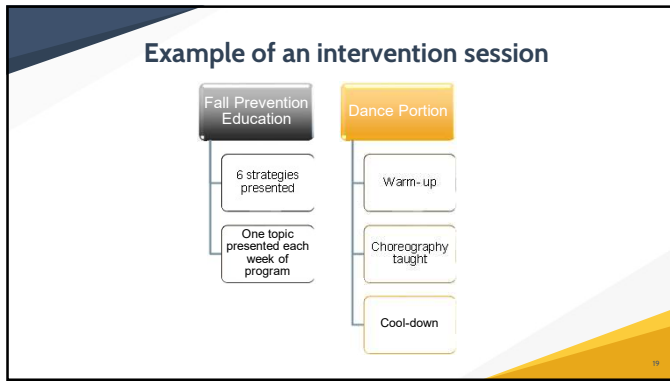
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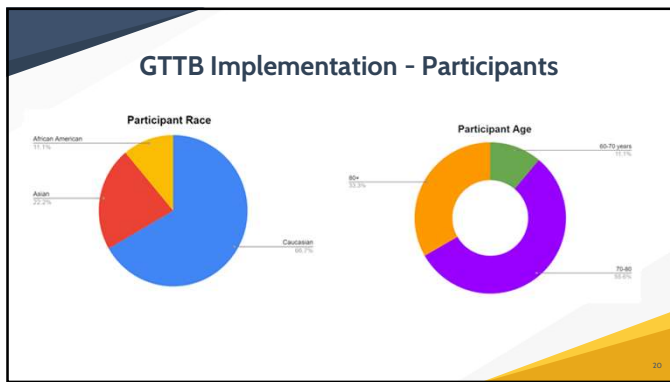
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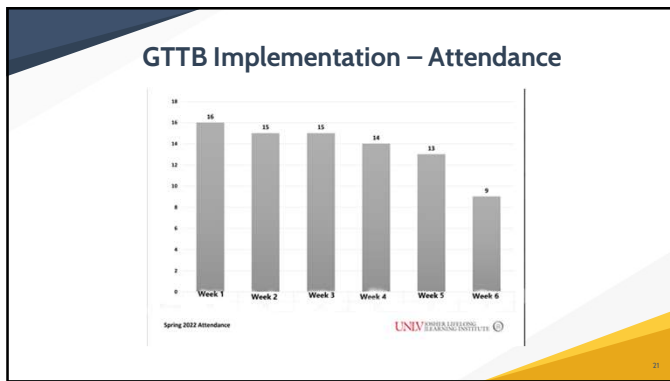
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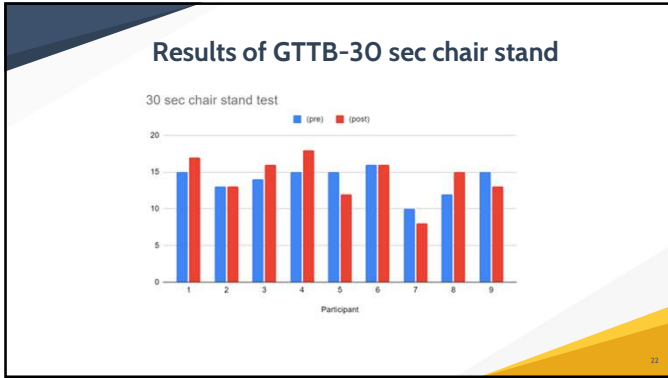
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### Results of GTTB- 4 stage balance

Instructions to the patient:

1. Stand with your feet side by side.
2. Place the instep of one foot so it is touching the big toe of the other foot.
3. Place one foot in front of the other, heel touching toe.
4. Stand on one foot.

An older adult who cannot hold the tandem stance is at increased risk of falling. (CDC, 2007)

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### Results of GTTB- Observations/ Surveys

- Ability to reach further
- Increased knowledge of OT & fall prevention
- Increased confidence moving through daily activities
- Wish knew more about fall prevention earlier on
- Decreased severity of fear of falling

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### Results of GTTB-Surveys

Improvements in:

- Balance
- Strength
- Concentration
- Flexibility



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### Sustainability of GTTB

- GTTB Program Manual
- Training Videos
- Collaboration with Nevada Goes Falls Free Coalition



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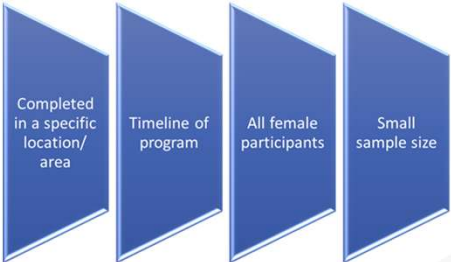
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### GTTB Limitations

- Completed in a specific location/area
- Timeline of program
- All female participants
- Small sample size



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### Implications for GTTB

Extend  
duration of  
course

Encourage  
more male  
participants

Include  
Functional  
Reach  
measure in  
outcome  
measures

More  
incentive to  
finish full  
course

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### Impact of GTTB

**Impact on general population**

- Benefits both frail and well older adults
- Education earlier on
- Decrease of caregiver burnout
- Decrease medical costs, hospital admissions and hospital readmissions

**Advancement of OT**

- Potential new avenue to fall prevention
- Aid for advocacy of OT in community based settings
- Unique way that challenges balance and promotes safety to engage in occupations, routines, and daily activities

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**Touro University Nevada**  
School of Occupational Therapy

### Acknowledgements

- Dr. Shannon Martin, OTD, OTR/L, BCG, Faculty Advisor
- Dr. Julia Graham, OTD, MFA, OTR/L
- Risa Federico, Capstone Mentor
- Dr. Rob Levrant, Ph.D., CPP, OLLI Director
- OLLI administration staff
- OLLI members who participated in Grooving to the Beat
- Touro University Nevada OT faculty




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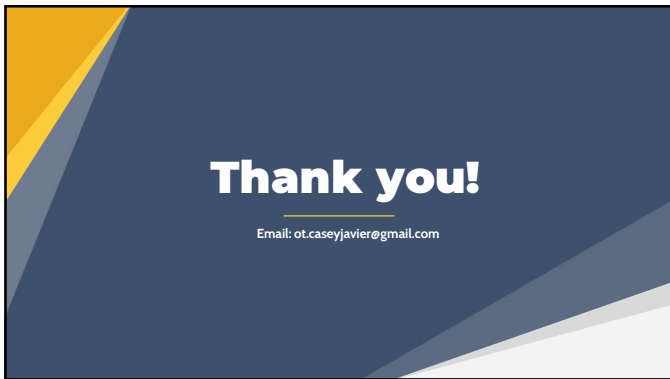
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