

Music and Memory: 2 WI Projects

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2 projects

- **Project 1: Nursing Home Employee Impact**
- **Project 2: Community Caregiver Impact**



Music & Memory Nursing Home Employee Impact

Project 1



Survey

Baseline/Initial Survey

- 150 long-term care facilities in DHS Phase II, M&M
- 83 or 53% responded
- 2 to 10 employees, 686 total
- CNA, RN, LPN/LVN, Activity Director or Life Enrichment Director, Social Services

Follow-up Six Month Survey

- Follow-up with 83 respondent agencies
- 50 agencies responded
- 260 matched respondents
- 33 agency directors completed survey at follow-up



Baseline Demographics

- CNA--165 or 24.2%
- RN—137 or 20.1%
- LPN/LVN—112 or 16.4%
- Activity Dir./Life Enrichment Dir.—146 or 21.3%
- Social Services—106 or 15.5%
- Other—16 or 2.3%
- Male—25 or 3.7%
- Female—649 or 96.3%



Follow-up Survey

- 275 staff returns
- 260 matched with initial survey
- 33 agency directors
- 69.7% female directors, 30.3% male directors
(only 3.7% of staff were male)



Questionnaire Scale

1 = strongly disagree

2 = disagree

3 = neutral

4 = agree

5 = strongly agree



Job Satisfaction

Brief Index of Job Satisfaction (Thompson & Phua, 2012) showed a significant difference between baseline and follow-up for the 260 paired employees, but not in the expected direction—employees were significantly more satisfied at baseline than at follow-up.



Music & Memory

Impact Questions Mean Scores

Personalized music has the promise of bringing more pleasure to my residents = 4.54

Personalized music has brought more pleasure... = 4.39

Personalized music has the potential to help me care for our clients = 4.33

Personalized music has helped me care for our clients. = 3.90

Personalized music will have an impact on the overall agency work climate = 3.69

Personalized has made an impact on the overall agency work climate. = 3.18



Follow-up Questions

The personalized music program has lessened my desire to seek other employment = 3.11

I am much more satisfied with my work since the implementation of the music & memory program = 3.42

I feel much safer in interactions with residents with the music & memory program = 3.35

The personalized music & memory program has resulted in positive changes for residents who formerly represented challenging behaviors during care = 4.18



Recommendation

I would recommend the Music & Memory Program to other long-term care facilities.

4.42 or in-between agree and strongly agree



Agency Directors

Personalized music has brought more pleasure to my residents = 4.47

Providing personalized music has helped our agency staff in caring for residents = 4.25

Our staff report positive changes with residents who present challenging behaviors during care = 4.17



Agency Directors (N=33) More or Less Neutral on Impact of Music & Memory on...

- Overall Agency Work Climate
- Turnover Rate of Staff
- Employee Work Satisfaction
- Incident-Injury Rates
- Staff Retention
- Lost Time/Restricted Duty Case Rates of Employees



Next Steps: Secondary Analysis

- Which agencies stand out in terms of high job satisfaction?
- Which agencies stand out in terms of low job satisfaction
- Do case studies to see what sets the highest apart from the lowest agencies
- Contribute to the developing set of best practices

And, on the topic of best practices....



Recommendation: Consider Students





Music & Memory Community Caregiver Impact

Project 2



Participants

- Partnered with Eau Claire Aging and Disability Resource Center (ADRC) to recruit 25 participants
- Although 25 participants started the program, only 22 participants finished.
 - One was sent to a nursing home facility out of the area
 - One moved out of the area with a different caregiver, and did not return e-mails
 - They chose not to participate in the post-evaluations since the person with dementia did not ever use the iPod



Demographics

- 15 participants had moderate/middle-stage dementia
- 5 participants had mild/early-stage dementia
- 3 participants had moderate/middle stage-advanced/late-stage dementia
- 1 participant had mild/early stage-moderate/middle-stage dementia
- 1 participant had advanced/late-stage dementia



Demographics

- 17 of the participants were cared for by their wife
- 5 of the participants were cared for by their daughter
- 3 of the participants were cared for by their husband



Methods

- The second project took the Music and Memories program into the Eau Claire community by bringing the benefit of personalized music to twenty-five persons with dementia living in their homes with a caregiver.
- Caregivers completed the Caregiving Distress Scale (CDS) (which measures relationship distress, emotional burden, caregiver demands, social impact, & personal cost on a scale from 0-4) at intake and at the three-month follow-up.
- In addition, they also answered questions about the impact of the music on quality of life.



Methods

- **This process involved multiple home visits for each participant.**
 - **Introductions, informed consent, CDS pre-test, music preferences**
 - **Brought iPod with personalized music, instructions**
 - **Check in and change music if requested**
 - **Check in**
 - **CDS post-test and other questionnaire**
- **A paired-samples t-test in SPSS was used to analyze the data.**



Caregiver distress scale (CDS)

- This was used based on the Toronto iPod project
- The Caregiver Distress Scale has 17 questions, with a total score range from 0-68.
- The Caregiver Distress Scale (CDS) used this scale:
0-strongly disagree 1-disagree 2-neutral 3-agree 4-strongly agree
- There were subscales for emotional burden, relationship distress, care-receiver demands, social impact, and social cost.



CDS

Cousins, R., Davies, A.D.M., Turnbull, C.J., Playfer JR. (2002). Assessing caregiving distress: A conceptual analysis and a brief scale. *British Journal of Clinical Psychology*, 41(4), 387-403.

- _____ 1. I take part in organized activities less
- _____ 2. I visit my family/friends less
- _____ 3. I take part in other social activities less
- _____ 4. I feel frustrated with caring for _____
- _____ 5. My relationship with _____ depresses me
- _____ 6. I feel pressured between giving to _____ and others in the family
- _____ 7. I feel that my own health has suffered because of _____
- _____ 8. My relationship with _____ is strained
- _____ 9. Caring for _____ has made me nervous
- _____ 10. I feel _____ can only depend on me
- _____ 11. I feel resentful towards _____
- _____ 12. I feel helpless in caring for _____
- _____ 13. My relationship with _____ no longer gives me pleasure
- _____ 14. _____ tries to manipulate me
- _____ 15. I feel overwhelmed by caring for _____
- _____ 16. _____ makes more requests than necessary
- _____ 17. I feel that my personal life has suffered because of _____



CDS Instructions

- Specific aspects of family life are affected by the demands of caregiving. With respect to your current situation as caregiver for _____, please indicate whether **YOU** personally disagree or agree with the following statements using the five-point scale below.

0 1 2 3 4
Strongly Disagree Disagree Neutral Agree Strongly Agree



CDS Subscale Scoring

- **Relationship distress**
 - sum of items 5, 8, 11, 13 (0-16 points)
- **Emotional burden**
 - sum of items 4, 9, 12, 15 (0-16 points)
- **Care-receiver demands**
 - sum of items 6, 14, 16 (0-12 points)
- **Social impact**
 - sum of items 1, 2, 3 (0-12 points)
- **Personal cost**
 - sum of items 7, 10, 17 (0-12 points)



Results

- The personalized music intervention decreased overall caregiver distress, including emotional burden, relationship distress, and feelings of helplessness.
- The mean overall score on the CDS decreased by 6.45 ($p=.006$), from 29.19 to 22.74 (22.10%)
- The mean score for the emotional burden subscale decreased by 3.36 ($p=.000$), from 6.70 to 3.34 (50.12%)
- The mean score for the relationship distress subscale decreased by 2.20 ($p=.002$), from 5.07 to 2.86 (43.41%)
- There was no statistical significance for difference in mean scores of the subscales for care-receiver demands, social impact, and social cost.
- Overall, caregivers believed that personalized music helped them care for their loved ones and also brought more pleasure to their loved ones



Results - CDS

- p values are displayed to 3 decimal points; all other scores were rounded to 2 decimal points
- Results are the difference of scores from time 1 (before iPod use) to time 2 (after ~ 3 months of iPod use)
- The mean overall score on the CDS decreased by 6.45 ($p=.006$), from 29.19 to 22.74, which is a 22.10% decrease
- The mean score for the subscale emotional burden decreased by 3.36 ($p=.000$), from 6.70 to 3.34, which is a 50.12% decrease
- The mean score for the subscale relationship distress decreased by 2.20 ($p=.002$), from 5.07 to 2.86, which is a 43.41% decrease
- There was no statistical significance for difference in scores in the subscales for care-receiver demands, social impact, and social cost



Results - CDS

- CDS Question #4: “I feel frustrated with caring for _____” decreased by 1.05 ($p=.001$), from 1.93 to .89, which is a 54.40 % decrease
- CDS Question #5: “My relationship with _____ depresses me” decreased .77 ($p=.004$), from 1.43 to .66, which is a 53.85% decrease
- CDS Question #8: “My relationship with _____ is strained” decreased by .67 ($p=.023$), from 1.26 to .62, which is a 53.17% decrease



Results - CDS

- CDS Question #9: “Caring for ___ has made me nervous” decreased by .75 ($p=.003$), from 1.57 to .82, which is a 38.85% decrease
- CDS Question #12: “I feel helpless in caring for _____” decreased by 1.00 ($p=.001$), from 1.30 to .30, which is a 76.92% decrease
- CDS Question #13: “My relationship with _____ no longer gives me pleasure” decreased by .61 ($p=.005$), from 1.25 to .64, which is a 60.00% decrease
- For the other 11 questions on the CDS, there was no statistical significance in different scores.



Results

- 19 stated that the music positively impacted the quality of life of the person with dementia and also the quality of life of the caregiver.
- 12 noted that the iPod helped the patient be more relaxed and more calm
- 9 stated that it helped decrease anxiety in the person with dementia.
- 7 noticed a positive effect on verbal and/or physical behaviors
- 6 stated that it was effective to help the person with dementia sleep at night
- 6 noticed a decrease in depression in their loved ones; 1 noticed a decrease in depression for herself (caregiver)



Results

- 5 noted that the iPod decreased stress for the caregiver
- 5 noted that the patients were livelier, happier, more engaged, sing
- 3 participants noted that the iPod was too small and the buttons were too small
- No noticeable effect on pain
- There was a wide variety of how often and when they used the music.



Quotes

- **“Good idea for anyone.”**
- **“We are really enjoying it.”**
- **“For such a small thing it does give a respite for both of us.”**
- **“Music and Memory is definitely a positive program. I appreciate we are a part of it.”**
- **“Motivation, dancing to music, less depression.”**
- **“Music is big part of life.”**
- **“It’s nice to see him doing something he enjoys.”**
- **“Gives something to do, keeps mind occupied.”**
- **“Likes dancing around and singing.”**
- **“Helps both caregiver and receiver to interact with a better attitude.”**



Quotes

- **“It helps me. I’m able to do things while he listens to the iPod.”**
- **“One time we danced to it. The day care facility found it helpful as well.”**
- **“I actually noticed he was directing the band one day!”**
- **“I love to watch him with the iPod on. It was pleasant to know he was listening to music he liked and enjoyed and that he still had those memories.”**
- **“We enjoy music with the iPod concept that provides pleasure for many hours.”**
- **“It gave him joy and made his life better when he used it.”**
- **“Improved his mood at times.”**
- **“It has allowed her to reconnect with songs and that area of her life.”**
- **“It makes him happy to listen to music.”**



Results

- **The community project results show that the personalized music intervention decreased overall caregiver distress, including emotional burden, relationship distress, and feelings of helplessness. Overall, caregivers believed that personalized music supported them in caring for their loved one and also brought more pleasure to their loved ones**
- **Overall, caregivers believed that personalized music brought more pleasure to their loved ones and also helped them care for their loved ones. The music intervention not only helped people with dementia, but also helped support their caregivers and reduced caregiver stress.**



Lessons Learned

- Give external speakers for all participants
- Use bigger iPods for all participants
- Have the participants keep a journal



Video



Recognition

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