



# Implementing a Community Choir in a Skilled Nursing Facility

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## Introduction

- High prevalence of depression, loneliness, and anxiety symptoms in skilled nursing facilities
- Research promotes individualized group music intervention as a motivating and effective intervention.
- Supporting theories:** The Intentional Relationship Model and The Model of Human Occupation (MOHO)
- The Intentional Relationship:
  - Therapeutic use of self
  - Individualized approach
  - Importance of building rapport and relationships
- Model of Human Occupation
  - Volition: motivation to engage in an activity is driven by interests and values
  - Habituation: meaningful roles and routines
  - Environment: physical environment, social environment, context
  - Performance: cognitive and physical abilities needed to perform meaningful activities
- Project Goal and Aim:**
  - to develop and implement a community choir in a skilled nursing facility
  - To measure depression, loneliness, and anxiety symptoms pre and post

## Methods

- Program**
  - 1 hour choir sessions 2-3 times per week
  - Planning and preparing for concert performance
  - Resident-led
  - Voted on genre, song selections, name of choir, and board of directors
- Inclusion criteria:** Residents of Cordova Health and Rehabilitation
- Exclusion criteria:** Brief Interview for Mental Status (BIMS) score of 10 or less
- Outcome measurements:** depression, loneliness, and anxiety symptoms pre and post
- Assessments:** Geriatric Depression Scale, UCLA Loneliness Scale, and Hamilton Anxiety Scale
- Demographics:** (see Table 1)
- 7 total research participants; 20-25 residents regularly attended.

## Results

- Comparison of pre and post scores for each participant (Table 2)
- Overall trend toward a decrease in depression, loneliness, and anxiety symptoms (Figure 1)
- Decrease in score=decrease in symptoms

**Table 1: Participant demographics**

Participant	Age	Gender	Ethnicity	Length of Residency
A	91	F	W	~5 years
B	71	M	W	~2 years
C	62	F	W	~2 years
D	66	F	W	~8 years
E	64	F	W	~5 years
F	90	M	W	~3 years
G	87	F	W	<1 year

Abbreviations: F, Female; M, Male; W, White

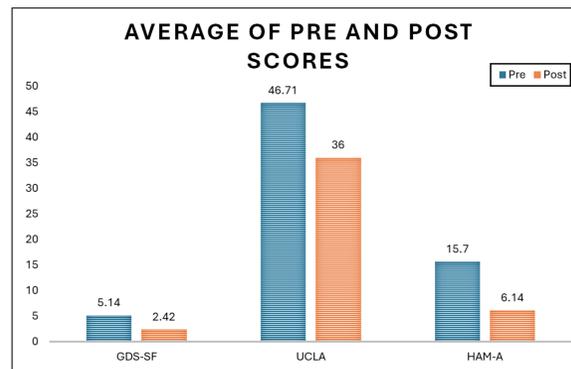
**Table 2: Pre and post scores**

Participant	GDS-SF (Pre)	GDS-SF (Post)	UCLA (Pre)	UCLA (Post)	HAM-A (Pre)	HAM-A (Post)
A	8	3	52	43	25	5
B	7	3	35	20	6	3
C	2	0	68	24	9	2
D	1	0	47	52	4	4
E	6	3	59	47	33	17
F	8	6	39	41	22	10
G	4	2	27	25	11	2

Abbreviations: GDS-SF, Geriatric Depression Scale; UCLA, UCLA Loneliness Scale; HAM-A, Hamilton Anxiety Scale

## Results Continued

**Figure 1: Average of assessment scores pre and post**



Abbreviations: GDS-SF, Geriatric Depression Scale; UCLA, UCLA Loneliness Scale; HAM-A, Hamilton Anxiety Scale

- Data analyzed using the Wilcoxon Signed Rank Test (Table 2)
  - Significant decrease in depression and anxiety ( $p < .05$ )
  - Trend toward decrease in loneliness but not significant ( $p > .05$ )

**Table 3: Wilcoxon test results**

Wilcoxon Signed Ranked Test Statistics	Geriatric Depression Scale (Post) - Geriatric Depression Scale (Pre)	UCLA Loneliness Scale (Post) - UCLA Loneliness Scale (Pre)	Hamilton Anxiety Scale (Post) - Hamilton Anxiety Scale (Pre)
Z score	-2.384	-1.609	-2.201
Asymp. Sig. (2-tailed)	.017	.108	.028

## Discussion

- Depression, loneliness, and anxiety symptom outcomes:**
  - Intervention effective for anxiety and depression symptoms
- Program Development and Implementation:**
  - Top attended activity
  - Collaboration with therapy, nursing, and activities was crucial
- Participant Experience and Performance:**
  - Participant feedback:
    - Happiness
    - Joy
    - Sense of accomplishment
    - Purpose
    - Self expression
  - "It was a great sense of accomplishment to be able to be apart of a group and prepare something of good quality to perform and entertain others with".
  - "I never attended activities before but began attending choir because it gave me a chance to express myself."

## Discussion Continued

- Implications for Practice:**
  - Importance of context and roles
  - Implementing similar facility level programs as part of a restorative approach
  - Incorporating music intervention in traditional billable OT treatment
- Limitations:**
  - Small sample size
  - Short duration of project
  - No control group
  - Many factors could have influenced results (medication changes, changes in medical status, etc)
- Future Research and Direction:**
  - Physiological measurements (cortisol, blood pressure, etc)
  - Incorporating control groups
  - Assessing how music intervention affects traditional OT outcomes
  - Incorporating movement/exercise

## Conclusion

- Music participation as an intervention:**
  - Cost-effective
  - Non-pharmaceutical approach
  - Motivating
- Occupational therapy practitioners should consider implementing music intervention into their own practice.

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- Full list of references is available upon request.**

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