**The Implementation and Evaluation of a Student Ambassador Program for a Music & Memory Intervention**

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CO-PIs

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OBJECTIVE

Develop and evaluate a student ambassador program to provide technical assistance to the Mason Music & Memory Initiative (M3I).

Assess a change in knowledge and attitudes among college students toward older adults

SUMMARY

Bringing faculty and students together from across the state to improve the lives of individuals with dementia is the primary purpose of this proposed 4-VA research grant. George Mason University’s Department of Social Work is currently in the first year of a 3-year project, funded by the Virginia Department of Medical Assistance Services (DMAS) that allows for the implementation of the Mason Music & Memory Initiative (M3I) in over 100 nursing homes across Virginia. In order to make this person-centered implementation achievable and sustainable, it is imperative to partner with other social work programs geographically closer to some of the facilities, engaging students to provide hands-on-technical assistance and data collection. The M3I has the following aims: 1. Provide an evidenced-based, non-pharmacological, person-centered intervention that positively affects the behaviors and emotions of residents with dementia and improves job satisfaction among frontline staff. 2. Support facilities in their implementation of the M3I. 3. Maintain and expand partnerships to sustain and increase the M3I. The current 4-VA proposed research project allows for the initial development and evaluation of a student ambassador program to provide technical assistance for the M3I. Experiential learning activities outside of the classroom provide opportunities for students to make a difference in the lives of older adults. We are proposing a collaboration with James Madison University’s Department of Social Work’s (Shenandoah Valley area) faculty and students to begin working across the state to provide technical assistance for the M3I and to assist with data collection. In addition, we will assess students’ knowledge and attitudes about older adults both before and after working as student ambassadors. A doctoral student from Virginia Commonwealth University (VCU) will also partner in this pilot program, identifying students to assist with implementing the M3I in the surrounding

Richmond area.

PARTICIPANTS:

PAID FACULTY

OR STAFF

7

VOLUNTEER FACULTY

OR STAFF

1

PAID UNDERGRADUATE STUDENTS

30

VOLUNTEER UNDERGRADUATE STUDENTS

10 (may receive class credit

PAID GRADUATE STUDENTS

1

VOLUNTEER GRADUATE STUDENTS

ANTICIPATED START DATE

July 1, 2019

ANTICIPATED END DATE

June 30, 2020

PARTICIPANTS

George Mason University: Cathy Tompkins, Emily Ihara, Megumi Inoue

Roles: Program managers; overall project management (Cathy Tompkins - grant point of contact [POC],); training development; hosting leadership trainings, IRB approval, recruiting Mason students, working with the M3I coordinator, securing nursing homes, overseeing data collection, analysis, and dissemination.

James Madison University: B.J. Bryson, Cindy Hunter, Nancy Poe

Roles: Recruiting students (social work, gerontology, music therapy); overseeing the implementation of the M3I in the Shenandoah area.

Virginia Commonwealth University: Tommy Buckley

Roles: Recruiting students (social work); overseeing the implementation of the M3I in the Richmond area.

**Introduction**. Bringing faculty and students together from across the state to improve the lives of individuals with dementia is the primary purpose of this proposed 4-VA research grant. George Mason University’s Department of Social Work is currently in the first year of a 3-year project, funded by the Virginia Department of Medical Assistance Services (DMAS) that will allow for the implementation of the Mason Music & Memory Initiative (*M3I*) in over 100 nursing homes across Virginia. One aspect of the *M3I* involves uploading the favorite music of individuals with dementia (going back to their young adult years) to a device where they can listen to the music with headphones in the attempt to stimulate emotions, behaviors and memories. In order to make this person-centered implementation achievable and sustainable, it is imperative to partner with other social work programs geographically closer to

Students from George Mason, James Madison and VCU will run a workshop at the annual Rally in the Valley in October, 2020 to present their work and provide an opportunity for other students to work as student ambassadors.

**Significance.** In response to the high prevalence of antipsychotic drug use and its adverse effects, the Centers for Medicare & Medicaid Services (CMS) started the Partnership to Improve Dementia Care in Nursing Homes in 2012 to improve quality of care and promote therapeutic interventions for nursing home residents with dementia-related symptoms (CMS, 2018) Although this effort has contributed to the reduction of antipsychotic medications to a certain extent, a recent study from Human Rights Watch reports such medications are still overprescribed in nursing facilities (Human Rights Watch, 2018). CMS also announced a new national goal of a 15% reduction of antipsychotic medication use by the end of 2019 for residents in nursing facilities with currently small reduction rates (CMS, 2018). The importance of reducing unnecessary antipsychotic medications is also stated in Virginia’s Dementia State Plan (Virginia Alzheimer’s Disease and Related Disorders Commission, 2015). Within this current climate, nonpharmacological interventions to manage distressing behavioral and psychological symptoms associated with dementia are expected to play important roles in improving care in nursing facilities.

This *M3I* focuses on the MUSIC & MEMORY® program, one type of nonpharmacological intervention, which incorporates the concepts of person-centered care by developing and applying a music list with the individual’s preferred songs and types of music. This intervention is low-cost and easy to implement. Therefore, direct care workers in nursing facilities can utilize it as a tool to work with residents who present or suffer from psychological and behavioral challenges due to dementia. As part of the student ambassador program, social work students will provide technical assistance to the direct care workers as they are learning the intervention as well as help with data collection to determine if the intervention is effective. Uploading music, charging the devices, and establishing the Music & Memory intervention as a part of their everyday work with residents can be challenging for the direct care workers in long-term care facilities. The student ambassador program is being proposed to address this challenge.

Previous studies have found positive effects of music in general, including improvement of mood and social engagement, as well as reduction of challenging behaviors (Matto, Tompkins, Ihara, Inoue, & Byrd, 2015; Sherratt, Thornton, & Hatton, 2004; Sung, Chang, & Lee, 2010; Vasionyte, & Madison, 2013). Music interventions that are individualized have been found particularly effective for persons living with dementia in improving focus, attention, and ability to recall positive memories (Gerdner, 1997; Gerdner, 2010; Gerdner, 2012). The Mason team has implemented the Music & Memory intervention in adult day health centers in Fairfax, VA and found positive effects of improved mood, decreased agitation, connection to music, and increased social engagement during a 6-week intervention (Tompkins, Ihara, Inoue, Matto, & Sonneman, 2016). The Mason team also developed web-based, micro-learning modules for direct care staff in order for them to learn about the MUSIC & MEMORY® program and how to use it with residents. According to the Alzheimer’s Association, the number of Virginians aged 65 or older living with Alzheimer’s disease was 140,000 in 2017, which is expected to reach 190,000 in 2025 (Alzheimer’s Association, 2017). Similarly, the total Medicaid costs for Americans aged 65 or older living with Alzheimer’s disease or other types of dementia in Virginia are estimated to increase 48.7% between 2017 and 2025 (Alzheimer’s Association, 2017). Considering the increasing numbers of people affected by dementia and associated Medicaid costs, the *M3I* can make an important contribution to the state of Virginia by improving the quality of life of individuals with dementia and promoting person-centered care in nursing facilities.

The student ambassador program will consist of the following:

* Each school (George Mason, James Madison, and VCU) will have a project leader to recruit and train students.
* During the Fall, 2019 semester, students will be recruited from each school and asked to take a one-hour on-line training developed by the *M3I* staff. Nursing homes in each region where the schools are located will be recruited by the *M3I* coordinator.
* Prior to training, Project leaders from each school will spend a ½ day together during the summer, 2019, to be trained on the *M3I* project. The *M3I* coordinator will lead this event. The specific protocol for the students will be developed.
* students at each school will be given the Facts on Aging Quiz (2015) and asked to write a one-page perspective on their views about older adults, working with older adults and their personal and professional experiences with older adults (volunteer, practicums, employment, etc.).
* During the Spring, 2020 semester, the student ambassador program will be implemented in recruited nursing homes in each region of the state where the 4VA partners (JMU, George Mason and VCU) are located. It is expected that there will be approximately 20 nursing homes (10 residents in each nursing home) in each region.
* Student data and nursing home data will be analyzed during summer, 2020.
* Students will present their work at the Rally in the Valley conference October, 2020. Other dissemination plans will be developed.

**Collaboration**

This project will be produced through a collaboration across Mason, JMU, and VCU. The point of contact will be Cathy Tompkins, at Mason, who will be responsible for the overall ambassador program and its deliverables (working closely with the *M3I* staff). The social work departments at Mason, JMU and VCU have a recent history of working very well together. There has been previous collaboration through the Virginia Social Work Education Consortium (VSWEC) as well as other research and student-led projects. The team from JMU all have experience working with students to implement the national Music & Memory program (which is a part of the *M3I*). Tommy Buckley, a doctoral student in Social Work at VCU, received his BSW from Mason. While at Mason, he worked closely with the Mason team on various projects related to older adults. Tommy is pursuing his PhD to continue his work as a gerontological social worker and will be instrumental in connecting with other social work colleagues and students. He will oversee the implementation of the *M3I* in the Richmond area.

**Roles for Graduate and Undergraduate Students**

Graduate students will fill two primary roles in the student ambassador program, including:

* Oversight of the implementation of the *M3I* program in the Richmond area (Tommy Buckley).
* Graduate students from all three 4VA institutions will be eligible to participate in the student ambassador program (ambassadors to at least two nursing homes; research collaborators). If they are participants, we will employ a nested model of mentoring where faculty will work with graduate students and then the graduate students will mentor and oversee the undergraduate students.

Undergraduate students will fill two primary roles in the student ambassador program, including:

* Student ambassadors to at least two nursing homes.
* Research collaborators: Undergraduate students from partnering institutions will be invited by faculty members to serve as part of the research team during data collection, analysis and dissemination.

PROJECT LIFECYCLE

Phase 1: Development (July to August 2019)

● Determine overall plan for the student ambassador program: confirm 4-VA faculty/doctoral student team, collaboration agreement, etc.

● Confirm overall program budget

● Enhance current online, one-hour training program (currently the training program is directed to direct care workers; it will be reviewed and edited for students)

● Host a training and development program for 4-VA team leads

● Advertise to nursing homes

● Submit IRB

Phase 2: Recruitment and Training (September-December, 2019)

● Advertise, recruit and train students (undergraduate and graduate students)

● Recruit nursing homes

● Implement pre-tests

Phase 3: Implementation, Analysis and Dissemination (January-June, 2020)

● Implement the M3I program in 20 nursing homes in the Shenandoah Valley area, 20 nursing homes in the Richmond area and 20 nursing homes in the Northern Virginia area (please note that the implementation in the Northern Virginia area may start earlier).

● Project leads will monitor the process and outcomes of the implementation and report back to the M3I coordinator.

● Data collection will be entered and maintained by the M3I coordinator.

● Begin plans for sustainability (meetings with project leads, RFPs identified and proposals written).

● Data analyzed; data meetings held with 4-VA team either in person or remotely.

4-VA ALIGNMENT

The student ambassador program supports the following goals relevant to 4-VA’s mission:

1. To build a community of scholars in Virginia to collaborate on research and expand opportunities for funded research, making valuable and impactful contributions.

2. To develop research opportunities for both undergraduate and graduate students interested in career paths in social work, gerontology and other health professions, thereby encouraging students to pursue further educational and professional opportunities in Virginia.

3. To produce tangible resources for future collaborations, including sustaining the support for non-pharmacological interventions for people with dementia throughout Virginia.

A primary outcome of the student ambassador program is to encourage researchers and students to work together to improve the lives of people with dementia throughout Virginia. Upscaling projects from one region of the state to expand across the entire state and to be sustained over time, requires collaboration and dedication across universities.

At Mason, we often have success in having students enroll in individual gerontology courses, but enrollment in minor and certificate programs tend to be low. Student involvement in a project like the one being proposed may increase interest in working with older adults, leading to a pipeline for graduate programs in gerontology; potentially a joint hybrid program across 4-VA institutions.

DISSEMINATION:

One manuscript submitted to a social work journal, 6/20

At least 3 conference presentations out of the following:

1. Rally in the Valley, 10/19 & 10/20 - Student Conference (Shenandoah)

2. Council on Social Work Education - 10/20

3. Association of Baccalaureate Social Work Conference - 3/20 (full data collection does not need to be complete)

4. The Gerontological Society of America - 11/20

One manuscript submitted to a gerontology journal, 6/20

We plan to submit a training grant to the Virginia Center on Aging and to NIA

Website updated.

MEASURES/INDICATORS OF SUCCESS

Our measures for success for the initial launching of our student ambassador program include:

* Students: Pre/post measures for students participating in the ambassador program:
  + Facts on Aging Quiz
  + Statement of interest/experience in working with older adults.
* Faculty/Doctoral Student (Project Leads): Quarterly check-ins (via phone/Webx) to discuss strengths and challenges; debriefing October, 2020.
* Direct care workers: Knowledge and Skills pre/post evaluation; satisfaction with student interaction instrument
* Residents in nursing home: Minimum Data Set (data already collected by the nursing homes that we will have access to)
* Nursing home staff: Testimonials about effectiveness of student ambassador program

Each of the above measures is related to our Evaluation Plan and Dissemination Plan as follows.

*Evaluation Plan.* As described above we have plans to test the effectiveness of the student ambassador program by asking all of our stakeholders for feedback. We will have quarterly check-ins with the leads from each university, recording their feedback at each point-in-time. We will be using both qualitative and quantitative measures as part of our evaluation plan.

*Dissemination Plan: Website Publications, http.musicmem.gmu.edu.* In addition to the *M3I* website, we will also recruit and disseminate our findings through the Virginia Social Work Education Consortium’s listserv. The following documents will be posted:

* Testimonials from all stakeholders reflecting the process and outcomes of the student ambassador program. In addition to the written testimonials about the effectiveness of the student ambassador program, we will include photos, videos, tweets and other media on the website.
* Faculty profiles will be included to emphasize the 4VA collaborations.

*Dissemination Plan: Research Presentations and Grant Applications.*

* Students will submit an abstract to present at the October, 2020 Rally in the Valley conference (the abstract should be accepted prior to the end of the grant cycle). George Mason students will submit an abstract to present at the annual College of Health and Human Services Celebration of Scholarship. Other abstracts will also be submitted.
* Our team, faculty and students, will submit for abstracts for presentation at the following national conferences (as well as others):
  + Council on Social Work Education
  + Association for Baccalaureate Program Directors (BPD)
  + The Gerontological Society of America
* Our 4VA team will submit grant proposals for the expansion and sustainability of the student-ambassador program

BUDGET

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Category** | **Summer, 2019** | **Fall, 2019** | **Spring, 2020** |  |
| 4-VA Project Leads Stipends | $2800  ($400 x7) | $2800 | $2800 |  |
| Student Stipends |  |  | $7500  ($250 x 30) |  |
| JMU and VCU project leads travel to George Mason | $250  ($125 x 2) |  |  |  |
| Student travel to nursing homes |  |  | $3,000  ($100 x 30) |  |
| Food for Summer, 2019 meeting | $350 |  |  |  |
| **Totals:** | **$3,400** | **$2,800** | **$13,300** | **$19,500** |

*Budget Justification*

* **Project Leads’ Stipends.** Project leads will require stipends for each semester. ($400 per semester for 7 project leads).
* **Student Stipends.** We are proposing to have 10 student ambassadors at each 4-VA site. We are proposing to pay each student a $250 stipend ($7500).
* **Travel for Project Leads**. Each project lead site coming to George Mason for training during summer, 2019 (JMU/VCU) will receive $125 per site for travel (carpooling expected).
* **Student Travel.** Each student ambassador will be reimbursed up to $100 for travel to and from nursing facilities.
* **Food for Summer Training**. Lunch will be provided at the training to be held at George Mason University during summer, 2019.

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