

Advocating for Music Therapy in Medical Education as Effective Treatment for Neurological Deficits

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Introduction

Music therapy

- Definition: the clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional
- Results in measured functional improvement in patients with neurological deficits, including patients with stroke, dementia, and Parkinson’s disease
- Positive outcomes have been observed in music therapy for treating depression
- Produces desirable peer interaction outcomes in children with developmental delays

Current state of music therapy in practice and education

- Despite being an evidence-based practice, music therapy has been slow at receiving mainstream acceptance
- 41 PLME students surveyed in Fall 2015 indicated they had an interest in taking an elective course on music therapy
- The increasing amount of evidence surrounding music therapy, the current state of music therapy, and the growing interest in the field from future physicians suggests a need for an educational effort to advocate for music therapy

Objective

- To create an educational resource for current and future healthcare providers to advocate music therapy as an effective treatment for patients presenting with neurological deficits
- To increase recognition of music therapy as a legitimate form of treatment in general

Methods

- Created and coordinated the lecture series for a preclinical elective course focusing on music therapy (BIOL6682 - Musical Prescription: Music as a Tool for Healing)
- Conducted surveys to collect student demographic data including class year, musical background, neuroscience or psychology background, lecture attendance habits, and attention span during lectures
- Conducted pre-course surveys to assess student understanding of music therapy

Results

Class Year		Musical Background	
MD17	1	Non-Musician	0
MD18	1	Musician	7
		Do you attend lecture?	
MD19	2	Yes	7
MD20	2	No	0
Undergrad	1	Learning style	
Neuroscience or Psychology Background		Visual	3
None	0	Auditory	1
Taken courses	3	Reading	0
Major or minor	3	Kinesthetic	3
		How long can you focus for during class?	
Took brain sciences during M1	4	<60 min	5
Performed research	3	60-90 min	2
		>90 min	0

Figure 1. Summary of student demographics collected during the first class session. Every student surveyed regularly attends lectures, has some background in music, and has background in neuroscience or psychology. Total number of students: 7.

Results (cont.)

BIOL6682 – Musical Prescription: Music as a Tool for Healing
Pre-Course Survey

Identifier (first 3 letters from the city that you’re from followed by last 3 digits of phone number): _____

1. There are data in peer-reviewed articles suggesting that music therapy has beneficial patient outcomes.

2. Medicaid provides benefits to cover music therapy.

3. Private medical insurance provides benefits to cover music therapy.

4. I feel confident that I can refer a patient to the appropriate type of music therapy given their specific disease or condition.

5. I would be willing to refer patients to music therapy if applicable to their specific clinical presentations.

6. Without looking anything up, please name all the different types of music therapy that you know of.

Figure 2. Survey filled out by each student before his or her first class session. Each question except for question 6 was answered on a scale of 1-5 (1=strongly disagree, 5=strongly agree). Question 6 was a free-response question.

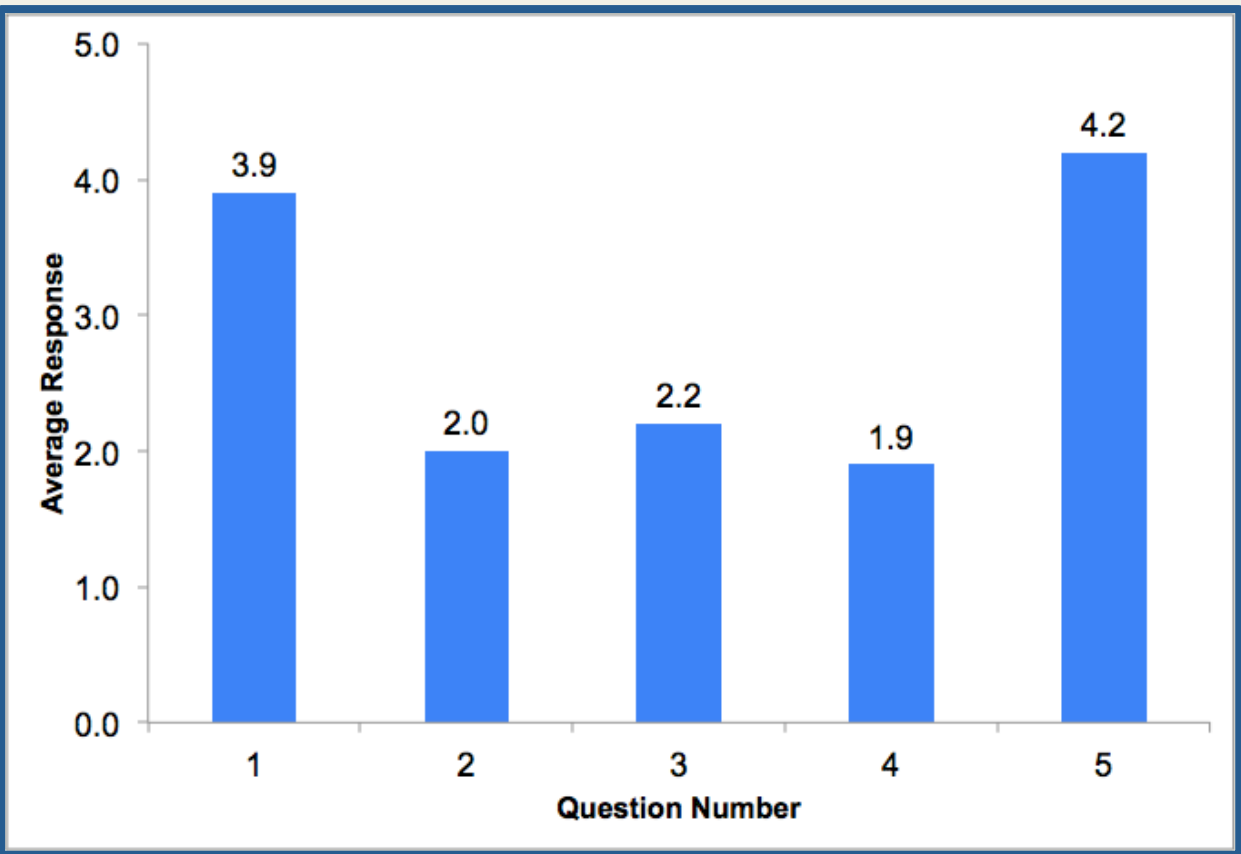


Figure 3. Average responses of students to the survey questions. Most students agreed that there scientific evidence supporting the efficacy of music therapy, and most students would be willing to refer patients to music therapy. Students mostly believed that Medicaid and private insurance do not cover music therapy and were generally not confident about their ability to refer patients to appropriate types of music therapy for treatment. 3 out of 10 students correctly identified neurologic music therapy as a type of music therapy.

Conclusions

- A significant number of future physicians (41 PLME students) are interested in taking an elective on music therapy
- Few students are able to name types of established evidence-based music therapies
- Students generally would be willing to refer patients to music therapy, but feel a lack of confidence about their ability to refer to the appropriate type of music therapy given the specific patient presentations
- Students disagree that Medicaid and private insurance cover music therapy, although insurance coverage for music therapy is increasing and is possible even today under certain circumstances.

Future Directions

- Have students take post-course surveys to see if their understanding of music therapy has changed
- Create a literature review summarizing the different types of music therapy, their scientific bases, and their relevance to clinical medicine
- Design a self-directed online course for future students interested in learning about music therapy

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