

Educating Nursing Students on Live Music Programming

Capstone Project

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### Abstract

A decline in patient-centered empathy is documented in the life sciences disciplines such as nursing, medicine, and the allied health professions during time periods of intense academic rigor and when students have more exposure to the clinical space (Ward, Cody, Schaal, & Hojat, 2012). The delivery of live music by artists in residence has not received much attention in nursing schools, despite the history of human beings using music in healing rituals (Sonke, 2015b). Musical engagement has the potential to generate interpersonal bonds (Corke, 2014) and music has been shown to relax hospital staff (Bosanquet, Glasbey, & Chavez, 2014). Nursing students may be more relaxed and therefore perceive value for their future patients, if they are exposed to music in nursing education. Two informational lectures with live harp music were presented to nursing students and paper surveys were distributed. Prompts for qualitative data, such as spoken comments, notes on observations, and written open-ended statements, were coded for emerging themes. Quantitative data was manually input into the Qualtrics survey software program (Qualtrics, n.d.) to generate statistical tables and graphs. The findings are limited by the small sample size, but the respondents reported their increased awareness and expectations for live music to ameliorate the hospital environment.

*Keywords:* empathy, live music, nursing stress, nursing students, relaxation

## Educating Nursing Students on Live Music Programming Capstone Project

The academic demands of nursing school and stress from the clinical environment may challenge the wellbeing of nursing students. Empathy declines in nursing cohorts are documented (Williams, Boyle, & Fielder, 2015). This study explores educating nursing students about live harp music as a potential arts in health intervention to improve the hospital atmosphere. The goals of this project are to educate about music's potential to calm in a medical setting (Fattorini & Gallagher, 2015), to augment other arts modalities as medical and nursing school curricula, and to possibly establish the promotion of music by nursing professionals as they become future stakeholders (see Appendix A). The harp music demonstrations and lectures are evaluated to apprise nursing students on the potential benefits for healthcare professionals when hosted as a medical humanities program and to the hospital community as an arts in health initiative. These two complementary disciplines use the arts to enhance wellbeing.

Considered a bridge between science and the human experience (Cole, Carlin, & Carson, 2014), the medical humanities is an interdisciplinary field which uses various arts offerings to enhance personal development and discernment of practitioners. The medical humanities serve to encourage critical thinking and develop the character of healthcare providers (Cole et al., 2014). This programming is being introduced at the University of South Florida in Tampa, Florida.

Committed to transforming the healthcare experience through diverse expressive mediums, the arts in health field is often referred to as the arts in medicine or the arts in healthcare (University of Florida Center for the Arts in Medicine, n.d.). Artistic engagement can contribute to the wellbeing of patients, staff, and visitors (Clift, 2011). The delivery of live music in hospitals, played in public areas or at the bedside, is an arts in health intervention.

## Literature Review

### Nursing Student Challenges

Nursing students are subjected to significant academic pressures (Jameson, 2014) that can challenge the wellbeing of a cohort and contribute to empathy declines during the second and third years of nursing school (Williams et al., 2015). In a review of 13 studies on nursing student stress, hospital administrators recommend policies which can inspire and support nursing students who are overwhelmed by clinical responsibilities (Alzayyat & Al-Gamal, 2014). Detachment from the patient condition may form as a coping mechanism; empathy is a learned behavior that should be taught in nursing schools to strengthen resiliency (Ferri, Guerra, Marcheselli, Cunico, & Di Lorenzo, 2015). Workload demands can cause a decline in patient-centeredness (Taylor, Lehmann, & Chisolm, 2017). Although empathy will not be measured in these study surveys, the medical humanities literature alludes to it being a generated by the inclusion of live music.

Nursing students have clinical exposure in hospitals and are charged with performing patient care in a fast-paced, intense workspace. Hospitals can implement supportive policies because stress contributes to a decline in compassion and the elevation of errors (Sharma et al., 2014). The responsibility for patient care, poor rapport with physicians, understaffing, and limited acknowledgment from administrators can all affect wellbeing, job satisfaction, absenteeism, workforce turnover, and patient outcomes (Gulavani & Shinde, 2014) for future nursing professionals. Organized, onsite self-care programming can help manage overwhelming stress factors for pediatric intensive care nurses (Gauthier, Meyer, Greffe, & Gold, 2015). Educating nursing students about live music may encourage them to promote it once they are employed in hospitals.

## **Arts in Health**

The integration of expressive programming into the healthcare arena synthesizes two characteristics of humankind. Since the beginning of time, civilizations around the world have incorporated the arts into healing. The arts are ubiquitous and artmaking is a universal characteristic of all societies, creative engagement is integral in life activities, and immersion in arts modalities can evoke pleasure (Dissanayake, 1988). In place in many medical systems worldwide, arts in health programs strive to contribute to wellbeing as a desired need of all humanity (Maslow, 1943). The engagement with the arts and the vital necessity of medical care are synthesized to meet human needs.

Becoming more common and familiar (Clift & Camic, 2016), arts in health programs are gaining interest and are perceived as beneficial. Creative arts programming has the potential to improve the wellbeing of the hospital community (Corrigan et al., 2017). Despite the changing nature of medical services delivery, the human component remains essential. Care for the mind, body, and spirit of the whole person (Laderman & Roseman, 2016) may be augmented by adding artistic interventions. In a review of 27 articles written over a decade addressing healthcare professionals' views on arts interventions, Wilson, Bungay, Munn-Giddings, and Boyce (2016) determine that the modalities of music, visual art, dance, and creative writing are deemed as helpful with effects on patient mood, stress, communication, pain levels, and sleep. Nurses participating in arts activities claim to be more optimistic and cheerful, report a stronger sense of workplace community, and note lower stress levels than those who did not engage (Karpaviciute & Macijauskiene, 2016). Documented positive responses to arts in health programming will increase knowledge about this emerging field.

## **Medical Humanities**

Including the subjects of drama, art, music, writing, literature, and philosophy, the medical humanities enrich the wellbeing of life sciences students, encourage understanding through mindfulness, and promote empathy (Yale College of Medicine, 2018). This field emerged on the premise that the curriculum can play a role in the development of practitioners' professional behaviors (Boudreau & Fuks, 2015). Integrating the liberal arts into life sciences curriculum has the potential to mediate burnout, refine communication skills, and guide in ethical decision making; brief elective learning modules are cited as the most effective format for students experiencing rigorous academic stress (Ofri, 2015). Healthcare practitioners and life sciences students are the projected audience for the medical humanities.

The arts can provide relief from the pressures of patient care (Boudreau & Fuks, 2015), enhance empathy (MacDonald, Krautz, & Mitchell, 2012), and are cost effective (Clift, 2011). Self-reflection is recommended to ease practicum stress on nursing students (Sun et al., 2016). A rise in empathy is reported by participants who voluntarily enroll in medical humanities elective courses (Graham et al., 2016). Franco (2016) recommends that medical humanities offerings should be an available intervention for students and practitioners. Arts offerings demonstrate affordable programming for nursing students' wellbeing.

Gaining traction with educators in nursing and medical schools, medical humanities electives are credited with enhancing reasoning, diagnostic abilities, and critical thinking (Naghshineh et al., 2008). Integrating music with other arts curriculum can improve observational abilities of nursing students to better interpret and comprehend a patient's condition (Honan et al., 2016). The immersion of nursing and medical students into the arts and honing awareness of details may enhance patient care and rapport among the healthcare staff

(Klugman, Peel, & Beckmann-Mendez, 2011). Collaboration between artists and medical professionals may integrate the humanities and sciences together (Taylor et al., 2017) to improve overall healthcare delivery. The complex needs of a patient population demand competence in decision making and communication from nurses; Kooken and Kerr (2017) advocate to include the humanities in nursing school pedagogy for this purpose. Medical humanities participants perceive improvement in critical thinking and mindfulness (Fletcher et al., 2018). Medical humanities education may improve the technical skills of nursing students.

### **Live Music Benefits**

The literature shows the potential of live music to humanize the healthcare encounter. Music may positively impact communication and observation skills (Clarke, DeNora, & Vuoskoski, 2015). Live music lowers stress levels and enhances the social connection between the audience and the performer (Shoda, Adachi, & Umeda, 2016). Music is intrinsically appealing to human beings as a source of calm (Fattorini & Gallagher, 2015) and a relaxed space is the foundation for establishing conversations where concerns are shared and acknowledged (Newberg & Waldman, 2013). King and Waddington (2017) maintain that music has the potential to unite an audience by promoting cooperation and mutual understanding. Live music can foster collective engagement through tones and rhythms (Mogos et al., 2013). Interacting through music can develop social skills (Corke, 2014) and interpersonal bonds that can diminish communication obstacles. Accessibility to a diverse range of music may have the potential to decrease socioeconomic barriers (Clarke et al., 2015). These studies show the positive impact of live music; nursing students may experience these benefits from live music as part of a nursing school cohort or in future hospital employment.

Music can produce physical reactions as rich cognitive and sensorimotor experiences. The frontal lobe of the brain processes stimuli from music and also generates imitation and empathy (MacDonald et al., 2012). Research on saliva samples shows that patients who hear live music respond physiologically and have a decrease in the stress hormone cortisol (Schwilling et al., 2015). Based on the literature, the delivery of live music for nursing students may produce empathy and reduce stress levels.

### **Music in the Hospital**

Nursing students become acquainted with the hospital atmosphere during the required practicum experience as they learn about the hospital as a workplace. Music in hospitals can reach a broad cross section of the population and cause clinical settings to appear more comforting (Sonke, 2015a). Patients report higher satisfaction of medical care after hearing a musician play at the bedside (Mogos, Angard, Goldstein, & Beckstead, 2013). The presence of cultural activities in hospitals can lead to higher workplace satisfaction and employee retention (Sonke, 2015a). In a study of 31 interviews, nurses reveal that they perceive artists in healthcare as contributing collaborators to better patient outcomes (Sonke, Pesata, Lee, & Graham-Pole, 2017). Music is commonly heard from speakers in operating rooms and approximately 80% of the staff acknowledge its tendency to lower anxiety, encourage calmer conversations, increase levels of efficiency, focus listeners, and relieve muscle fatigue (Bosanquet et al., 2014). Surgery residents hearing music cite improved and faster completion of procedures while paying attention to music (Lies & Zhang, 2015); it is hypothesized that nurses may also respond with more efficiency in their work. Surveying nurses and doctors receiving music at hospitals, 78.9% affirm that they find this medium has a positive effect on the workplace (Ullmann et. al, 2008).



Live music may evoke higher morale and proficiency of patient care. Nursing students may consider an arts presence when making future employment decisions.

### **Nursing Students and Sound**

Employment in a hospital requires the toleration of various auditory stimuli necessary for patient care. While background noise can negatively affect the clinical setting, carefully selected music has the potential to positively impact nurses and patients in stressful situations (Iyendo, 2016). Nurses can make referrals to musicians in residence to provide creative diversions of sound during treatment (Lawson et al., 2016). Comforting music can distract from stress-inducing alarms, announcements, and beeping equipment. Learning about live music while still in nursing school may influence perceptions of sound.

### **Music in Nursing Education**

Music has the potential to enhance the overall nursing school matriculation experience. During their first blood draw procedure, 73 nursing students report that those who listened to music had lower levels of anxiety than the participants in the control group without music (Ince & Cevik, 2017). In a cohort of 40 undergraduate nursing students, the intervention of 30 minutes of scheduled music provides relief from the stressful triggers of heavy workloads and testing anxiety (Srikanth, Srinivasan, Ramanujam, & Therese, 2015). The two studies indicate music can help nursing students lower stress and anxiety.

### **Rationale for Research**

#### **Gap in the Literature**

Most of the studies located cite the delivery of music in general environments. There is a gap in research examining the benefits of live hospital music provided by musicians in residence, not music therapists. Engaging nursing cohorts through live music has not been explored in

depth. The introduction of music and its impact is not commonly included in humanities offerings to nursing students so its effects are not well known. Research is available about musical sessions for hospital patients, but there is limited information regarding the effect on nursing students.

### **Methods**

A mixed methods approach (Creswell, 2014) is utilized to collect data for qualitative and quantitative analysis. A convergent research design is employed by merging both datasets for validation of results (Creswell, 2015). Data integration (Creswell, 2014) and side-by-side pre and post comparisons reveal thematic codes which were be quantifiably reinforced. Instrumentation of self-created surveys is tailored to these lectures to evaluate responses to the activities. As data collection instruments, paper surveys provide for the quick turnaround of information (Creswell, 2014). Answers in Likert style scales represent respondents' individual levels of agreements to survey statements (Harpe, 2015). Quantitative data from continuous scales (Creswell, 2014) is uploaded into the Qualtrics (Qualtrics, n.d.) survey software for statistical analysis. Qualitative data analysis is performed using collected written comments, spoken responses from students, and noted observations during the lecture. Emerging themes are grouped by statements (Figure 5) for meaning (Saldana, 2015). The survey questions are prompts to solicit data from attendees.

### **Recruitment**

The recruitment of participants was permitted by the nursing college. Only enrolled, degree seeking, adult nursing students at the University of South Florida were eligible to participate, as stated in the approved inclusion criteria. It was requested that nursing professors announce this event to their classes. A student services advisor sent email correspondence directly to nursing cohorts and distributed paper fliers (see Appendices B and C) in the facility

where these students meet to study and dine. The facility manager assisted in securing a student volunteer who agreed to help with survey collection and notetaking during the lecture. Informed consent forms (see Appendix D) were supplied to the attendees to complete prior to the beginning of the presentation.

### **The Intervention**

Two separate lectures were presented on the campus of the University of South Florida in Tampa, Florida to two nursing and one pre-nursing students. A pilot study also took place as a session to eight undergraduate art majors; this activity served as a practice to improve the efficiency of the actual approved research study. Informed by the literature review, the learning content was developed and consisted of discussions and live harp music. Attendees completed pre and post surveys reflecting their knowledge about live music and their responses to hearing it. As a new modality within the ongoing medical humanities programming, music was demonstrated to educate about its value in healthcare environments.

### **Results**

Qualitative and quantitative information is synthesized to compare pre and post data from this nursing cohort. Inclusive of both lectures, the small sample size is comprised of one pre-nursing and two nursing students. Identical surveys (see Appendix E) were distributed before and after the lecture to measure opinions on live music in hospitals. Complete Qualtrics reports with bar graphs and statistics tables are included (see Appendices F and G).

The impact of the intervention is represented in the comparison of survey responses before and after the harp music lecture. The attendees were first asked if they think live music may improve the hospital environment. All answer that they strongly agree about this statement both before and after the lecture. Prior to the start of the lecture, they all agree or strongly agree

that music can humanize stressful situations; they all strongly agree with this statement after the lecture. Initially, one respondent reports an expectation for hospital music. Impacted by the lecture, they later all agree or strongly agree on expecting music. On the potential for music to have a positive change on the clinical environment, all agree or strongly agree before and after the program. All originally are undecided if music can create a more open space for communication, but agree or strongly agree on this propensity afterward. At first, the majority of participants (66.67%) are undecided if music can be a positive distraction (Table 1), but they later agree or strongly agree that music can have this potential (Table 2). Pre and post answers reveal they all agree or strongly agree about music's ability to increase mindfulness. On funding support, 66.67% are undecided at first on whether to support future funding of music in hospitals, but they all agree or strongly agree funding should be provided after they hear the live harp music. There is no agreement on making referrals for a musician in residence before the presentation (Table 3), but 100% assert they would refer music after attending the presentation (Table 4).

Table 1

Pre Lecture Opinions on Music as a Positive Distraction (Qualtrics, n.d.)

| Response Numbers | Answer            | %      | Count |
|------------------|-------------------|--------|-------|
| 1                | Strongly agree    | 0.00%  | 0     |
| 2                | Agree             | 33.33% | 1     |
| 3                | Undecided         | 66.67% | 2     |
| 4                | Disagree          | 0.00%  | 0     |
| 5                | Strongly disagree | 0.00%  | 0     |
|                  | Total             | 100%   | 3     |

Table 2

Post Lecture Opinions on Music as a Positive Distraction (Qualtrics, n.d.)

| Response Numbers | Answer            | %      | Count |
|------------------|-------------------|--------|-------|
| 1                | Strongly agree    | 33.33% | 1     |
| 2                | Agree             | 66.67% | 2     |
| 3                | Undecided         | 0.00%  | 0     |
| 4                | Disagree          | 0.00%  | 0     |
| 5                | Strongly Disagree | 0.00%  | 0     |
|                  | Total             | 100%   | 3     |

Table 3

## Pre Lecture Likelihood of Making Music Referrals (Qualtrics, n.d.)

| Response Numbers | Answer                     | %      | Count |
|------------------|----------------------------|--------|-------|
| 1                | Strongly agree             | 33.33% | 1     |
| 2                | Somewhat agree             | 33.33% | 1     |
| 3                | Neither agree nor disagree | 33.33% | 1     |
| 4                | Somewhat disagree          | 0.00%  | 0     |
| 5                | Strongly disagree          | 0.00%  | 0     |
|                  | Total                      | 100%   | 3     |

Table 4

## Post Lecture Likelihood of Making Music Referrals (Qualtrics, n.d.)

| Response Numbers | Answer            | %      | Count |
|------------------|-------------------|--------|-------|
| 1                | Strongly agree    | 66.67% | 2     |
| 2                | Agree             | 33.33% | 1     |
| 3                | Undecided         | 0.00%  | 0     |
| 4                | Disagree          | 0.00%  | 0     |
| 5                | Strongly disagree | 0.00%  | 0     |
|                  | Total             | 100%   | 3     |

Students describe the harp as a nursing intervention (Figure 1). According to the volunteer's notes, participants appear to be more relaxed physically; facial cues show interest on the topics of training, scope of practice, and the medical humanities. The participants verbally relay that nursing students could realize benefits to escape from stress. Citing its potential

promotion to wellness, the students label live music as complementary and holistic care. They find this arts in health offering empowering and expressive.



Figure 1: Word cloud of spoken and written themes (Wordart, n.d.)

## Discussion

Nursing students' responses indicate that they lacked information about the field of arts in health or live music in healthcare environments, but the lecture educated them about the benefits of music for staff, patients, and visitors. The participants reported that they had not previously considered the potential of live music to distract from diagnosis and treatment and to create a more open space for candid communication. The findings represent that attendees see the value of music in healthcare facilities and that these three nursing students are informed of the arts in health and are likely to make music referrals as they become hospital staff.

Reinforcing the literature on the benefits of live music (Fattorini & Gallagher, 2015) to improve the medical environment, the results may encourage nursing students to seek live music to relieve stress while in nursing school (Sharma et al., 2014) and advocate for music referrals in their future employment in hospitals. This study reveals a gap in knowledge about live music and how it can improve the wellbeing for nursing students.

### **Limitations and Recommendations for Future Study**

There are limitations within the literature and the results of this study. While the findings are inconclusive due to the small sample size of attendees, the integration of the music into the medical environment has the potential to improve the overall healthcare experience. Further research is recommended with a larger sample size of participants and that future study sites have mutually beneficial interests in research findings. Similar lectures at hospitals for nursing students fulfilling practicum requirements may attract more participants. A revision to the survey questions could yield more robust qualitative and quantitative findings.

### **Conclusion**

Incorporating music into medical humanities programming may serve to mediate stress with nursing cohorts, gain acceptance of music as an arts in medicine intervention, and improve the workplace for healthcare staff. The short term anticipated outcomes appear to have been met (see Appendix H) by this project. Musical programming may create a relaxed, calm space for the hospital staff to communicate and more fully relate to their patients. The modality of music appears to have appreciative value with healthcare professionals (Bosanquet et al., 2014), but the further study of this intervention could continue to explore its impact on nursing students. Nursing students report positive feedback to live music as an intervention for stress. This affordable (Clift, 2011) programming has the potential to enhance overall wellbeing for nursing



cohorts and cause them to seek employment at hospitals with existing arts programs (Sonke, 2015a). Nursing school administrators and hospital stakeholders should take note of the impact for positive change from live music delivery. This study represents that exposure to this modality educates listeners to appreciate this little known arts in health modality. Healthcare continues to evolve through research and technology. Incorporating live music into nursing school and hospital settings has the possibility of improving nurses' perceptions about nursing as a profession.

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## Appendix A

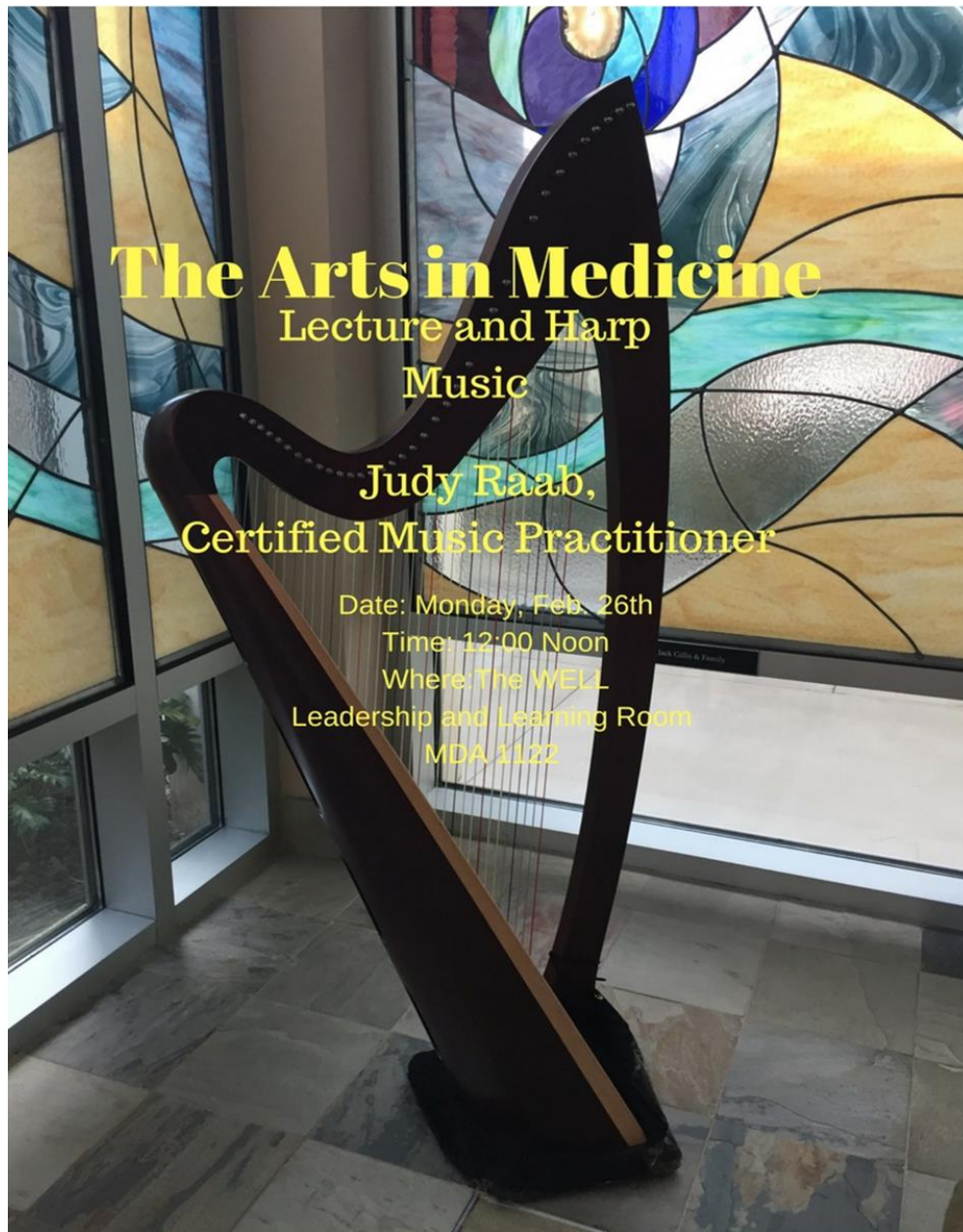
Table A1

## Goals and Objectives

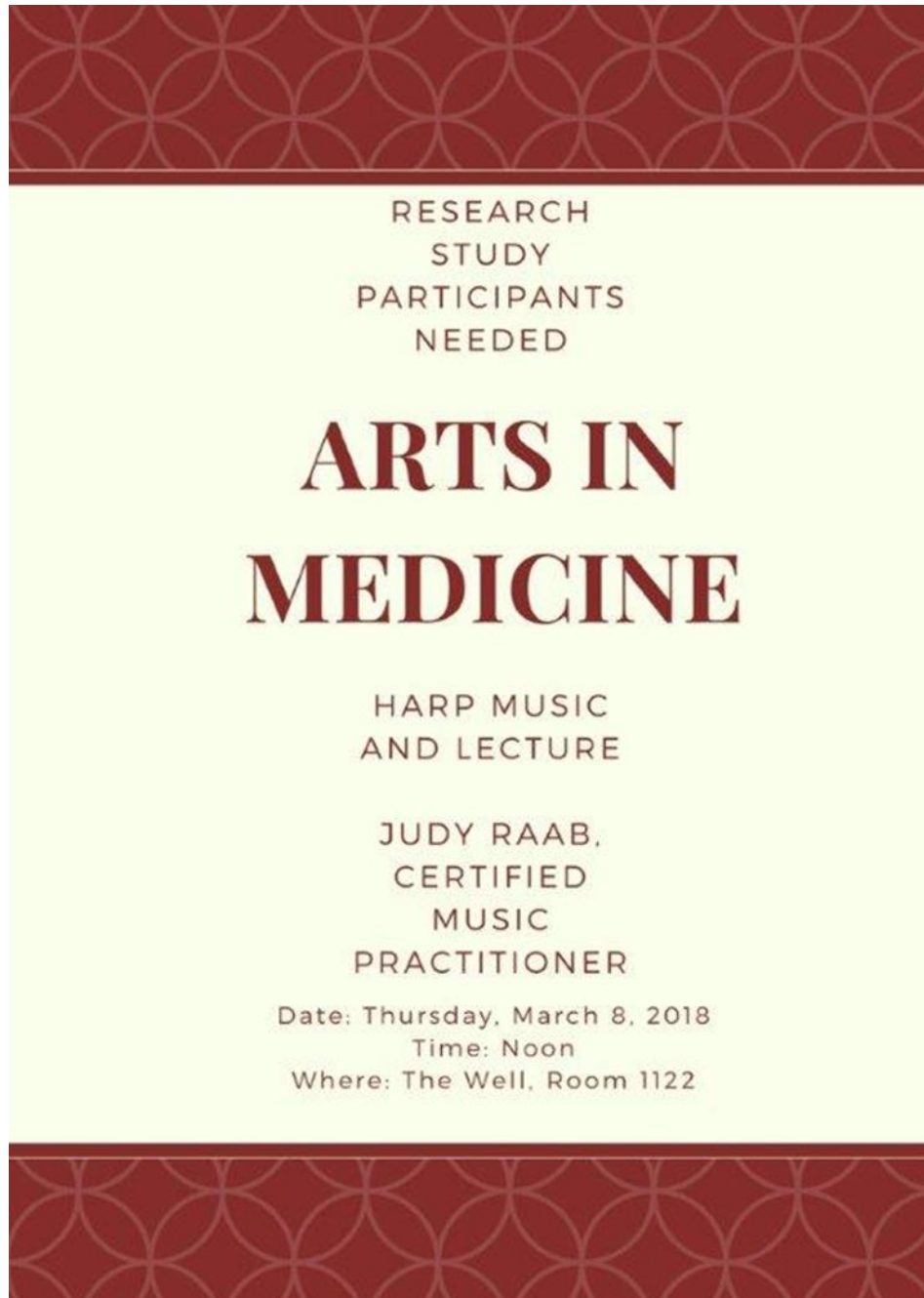
| Goals   | Objectives  |
|---|---|
| To raise awareness of music's value for wellbeing in the medical environment                    | By end of sessions in the spring semester of 2018, to show increase in acceptance by this audience through comparison of pre and post surveys.  |
| To have a positive impact on the medical environment with soothing, calming music               | Through post surveys in the spring semester of 2018, listeners claim to have been relaxed and more mindful to communicate with patients.  |
| To integrate music with other arts interventions as medical and nursing school curriculum       | By January 2019, USF will offer an introduction to music in healthcare as a voluntary learning module.  |
| To establish the benefit of music with medical professionals as future stakeholders for funding | By 2021, medical professionals will expect arts in medicine offerings in clinical environments and will support funding. After graduation, nurses exposed to the performance of live music in the hospital will recommend it as a component of healing. |



Appendix B  
Recruitment Flier for First Lecture (Canva, n.d.)



Appendix C  
Recruitment Flier for Second Lecture (Canva, n.d.)



## Appendix D Informed Consent

### Protocol Title

Studying perceptions of live music with nursing students

**Please read this consent document carefully before you decide to participate in this study.**

### Purpose of research study

The purpose of this study is to examine the impact of educating nursing students about the integration of live music in healthcare settings.

### What you will be asked to do in this study

A paper survey will be distributed for completion prior to the hour of lecture with live music. You will be asked to answer the survey prompts and this data will be collected in a drop box. At the end of the hour long presentation, the same survey will be given again to gauge any effect the module had on your perceptions of live music as a healthcare intervention.

### Time Required

Approximately 80 minutes

### Risks and Benefits

There are no known risks for participants in this project. Participation is voluntarily and can be discontinued if any discomfort is experienced. Participants will receive no direct benefits. Findings may be published and disseminated to inform about nurses' feedback on their exposure to this arts in medicine offering.

### Compensation

You will receive no monetary compensation for your participation with this research.

### Confidentiality

Your identity will be kept confidential to the extent provided by law. Surveys will be submitted without names or identifiable information. Your name will not be used in any report.

### Voluntary Participation

Your participation is completely voluntary and there is no penalty for not participating.

### Who to contact if you have questions about the study

Judith Raab, Graduate Student, University of Florida,

Email: [jraab@ufl.edu](mailto:jraab@ufl.edu), phone: (813) 629-6951

Jennifer Lee, MA, Center for the Arts in Medicine, University of Florida

Email: [jlee@arts.ufl.edu](mailto:jlee@arts.ufl.edu), phone: (352) 733-0880

Who to contact about your rights as a research participant in the study

IRB02 Office  
Box 112250  
University of Florida  
Gainesville, FL 32611-2250  
(352) 392-0433

Agreement

I have read the procedure described above. I voluntarily agree to participate in the procedure and have received a copy of this description.

Participant: \_\_\_\_\_ Date: \_\_\_\_\_

Principal Investigators:

Jennifer Lee \_\_\_\_\_ Date: \_\_\_\_\_

Judith Raab \_\_\_\_\_ Date: \_\_\_\_\_

**Appendix E**  
Survey of Live Music Lecture at USF

We value your feedback regarding this presentation. It is very important to the University of South Florida to evaluate the benefit of our programs. Please circle your answers on the following questions.

Do you feel live music in a medical setting may improve the hospital environment?

Strongly Agree      Agree      Undecided      Disagree      Strongly Disagree

Do you think music can humanize stressful situations for patients, staff, and visitors to a hospital?

Strongly Agree      Agree      Undecided      Disagree      Strongly Disagree

Do you expect to hear live music in a hospital?

Strongly Agree      Agree      Undecided      Disagree      Strongly Disagree

Do you find listening to live music may have the potential for positive change in the clinical environment?

Strongly Agree      Agree      Undecided      Disagree      Strongly Disagree

Could music create a more open space for candid communication?

Strongly Agree      Agree      Undecided      Disagree      Strongly Disagree

Is music a positive distraction from diagnosis and treatment?

Strongly Agree      Agree      Undecided      Disagree      Strongly Disagree

Does the intervention of live music make you more mindful of your surroundings?

Strongly Agree      Agree      Undecided      Disagree      Strongly Disagree

How likely would you be to support future funding of arts in medicine programs?

Strongly Agree      Agree      Undecided      Disagree      Strongly Disagree

How likely would you be to make referrals to a musician in residence?

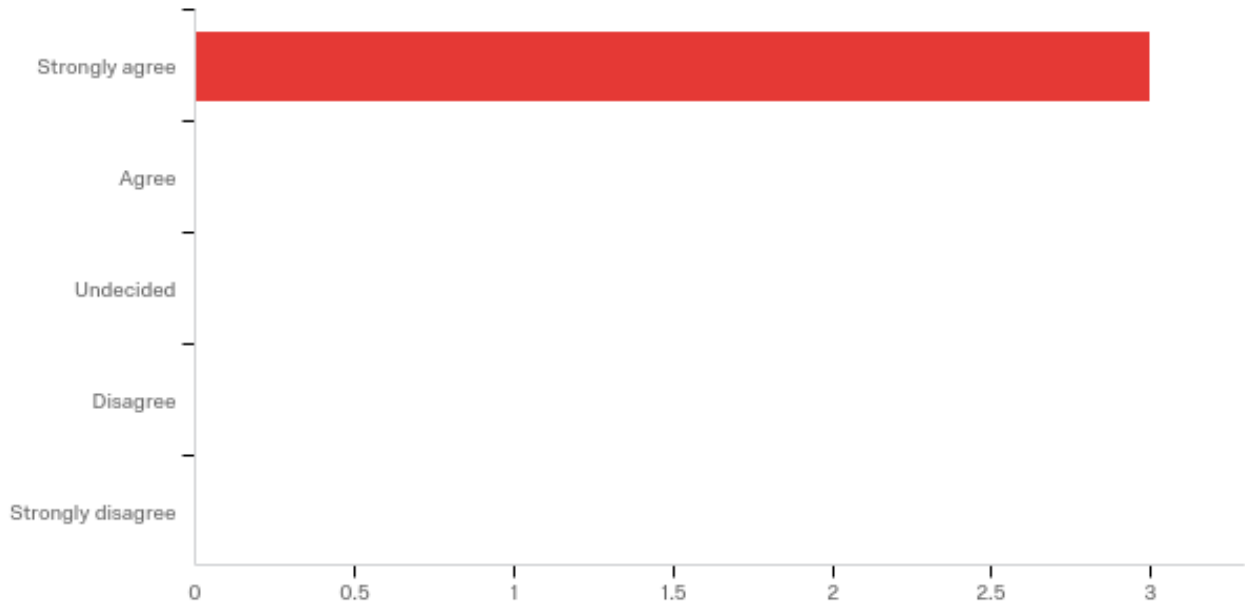
Strongly Agree      Agree      Undecided      Disagree      Strongly Disagree

Please indicate your course of study and date of anticipated graduation.

Please provide any additional comments about your experience of learning more about live music as an intervention. Thank you!

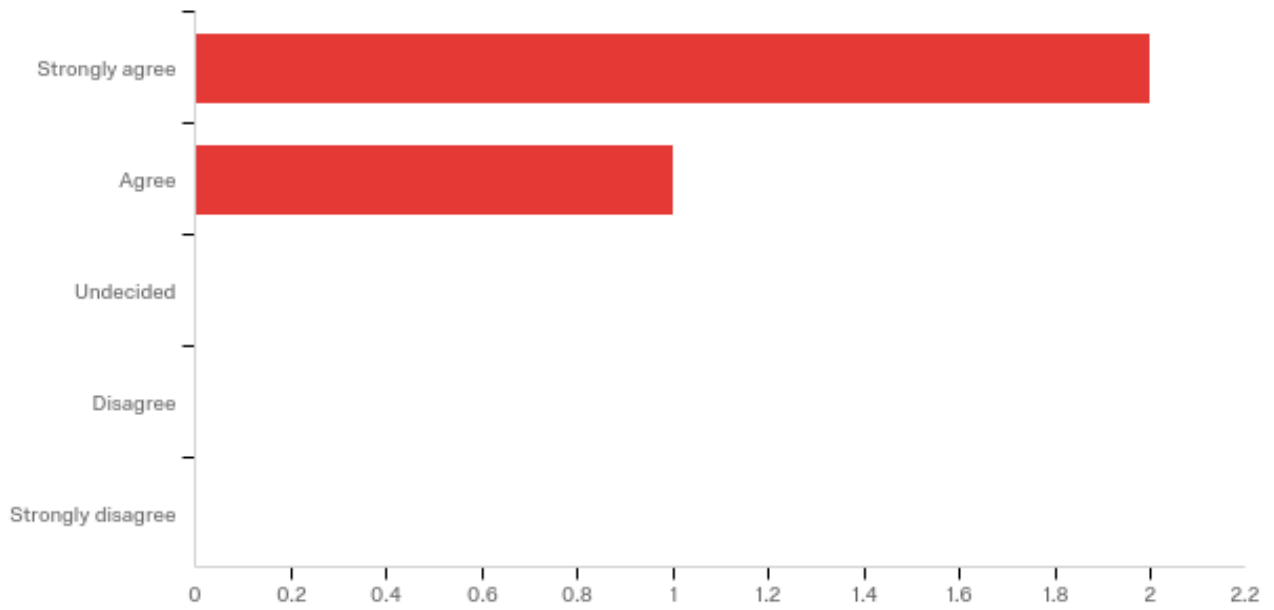
Appendix F  
 Qualtrics Pre Lecture Survey Answers Report (Qualtrics, n.d.)

**Q1 - Do you feel live music in a medical setting may improve the hospital environment?**



| # | Answer            | %       | Count |
|---|-------------------|---------|-------|
| 1 | Strongly agree    | 100.00% | 3     |
| 2 | Agree             | 0.00%   | 0     |
| 3 | Undecided         | 0.00%   | 0     |
| 4 | Disagree          | 0.00%   | 0     |
| 5 | Strongly disagree | 0.00%   | 0     |
|   | Total             | 100%    | 3     |

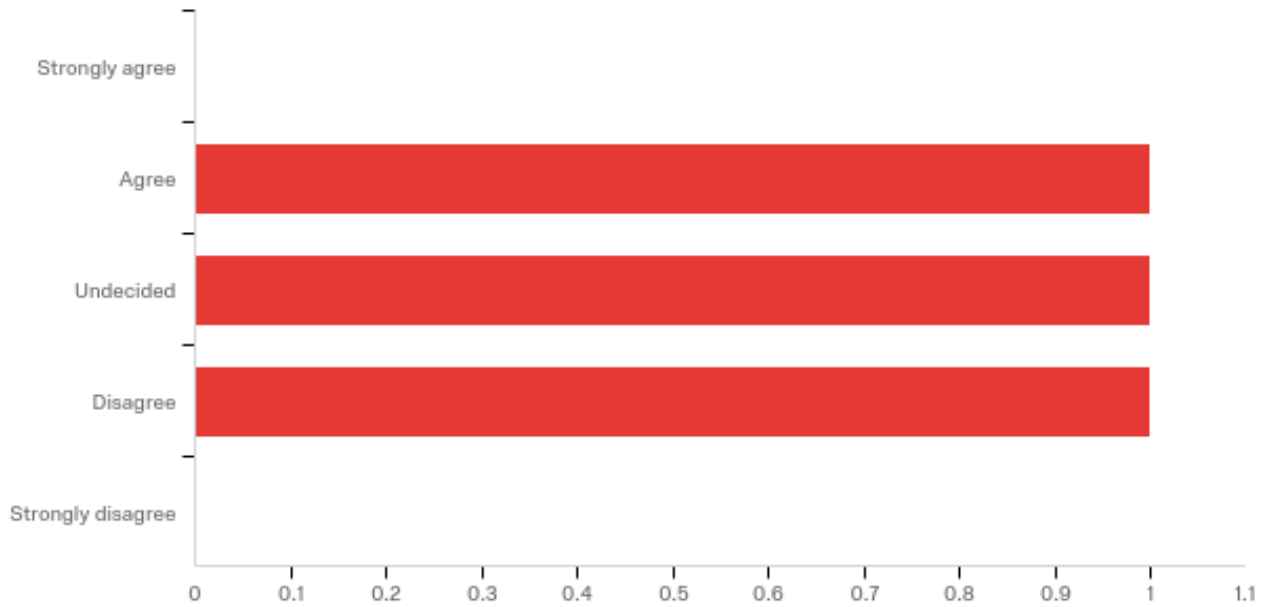
**Q2 - Do you think music can humanize stressful situations for patients, staff, and visitors to a hospital?**



| # | Answer            | %      | Count |
|---|-------------------|--------|-------|
| 1 | Strongly agree    | 66.67% | 2     |
| 2 | Agree             | 33.33% | 1     |
| 3 | Undecided         | 0.00%  | 0     |
| 4 | Disagree          | 0.00%  | 0     |
| 5 | Strongly disagree | 0.00%  | 0     |
|   | Total             | 100%   | 3     |

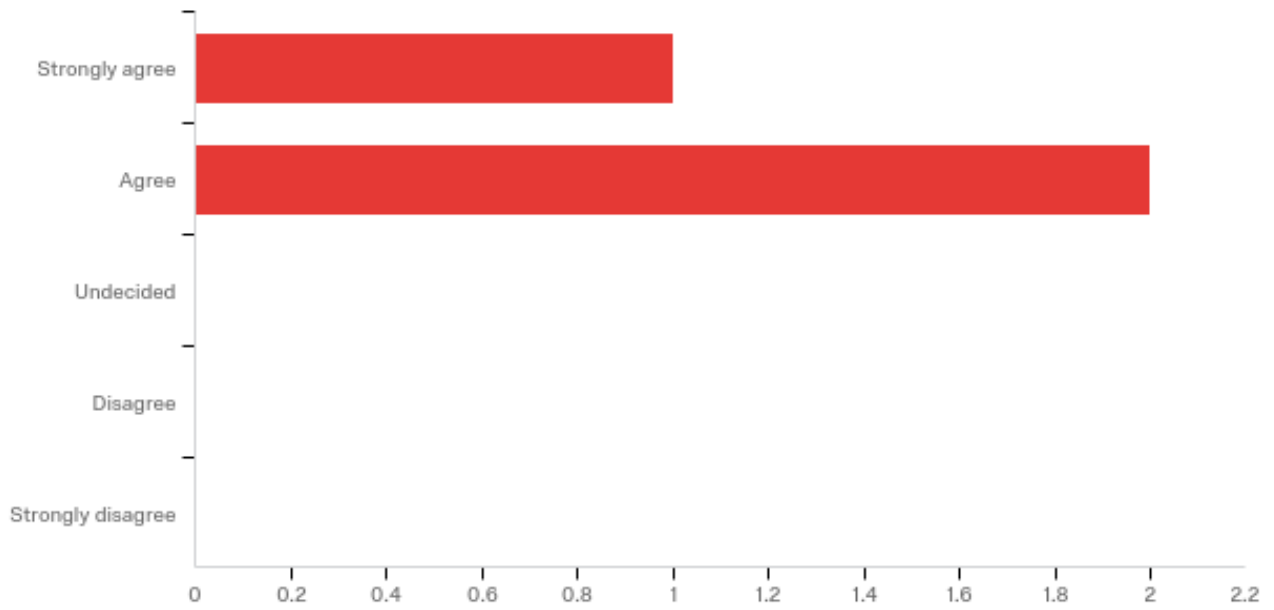


**Q3 - Do you expect to hear live music in a hospital?**



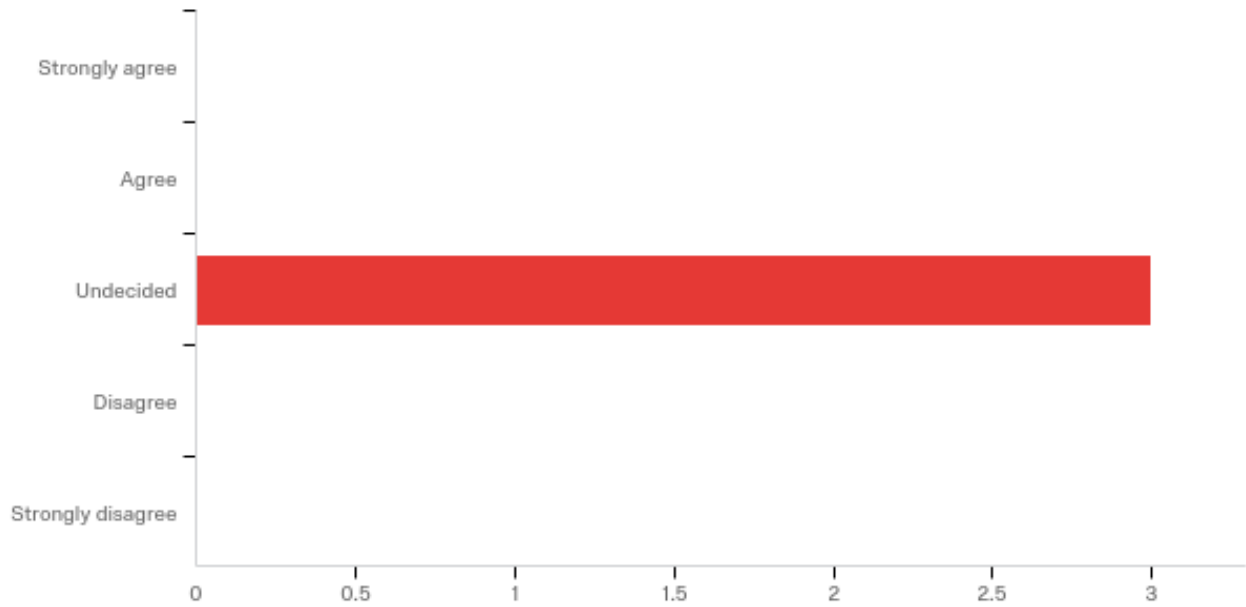
| # | Answer            | %           | Count    |
|---|-------------------|-------------|----------|
| 1 | Strongly agree    | 0.00%       | 0        |
| 2 | Agree             | 33.33%      | 1        |
| 3 | Undecided         | 33.33%      | 1        |
| 4 | Disagree          | 33.33%      | 1        |
| 5 | Strongly disagree | 0.00%       | 0        |
|   | <b>Total</b>      | <b>100%</b> | <b>3</b> |

**Q4 - Do you find listening to live music may have the potential for positive change in the clinical environment?**



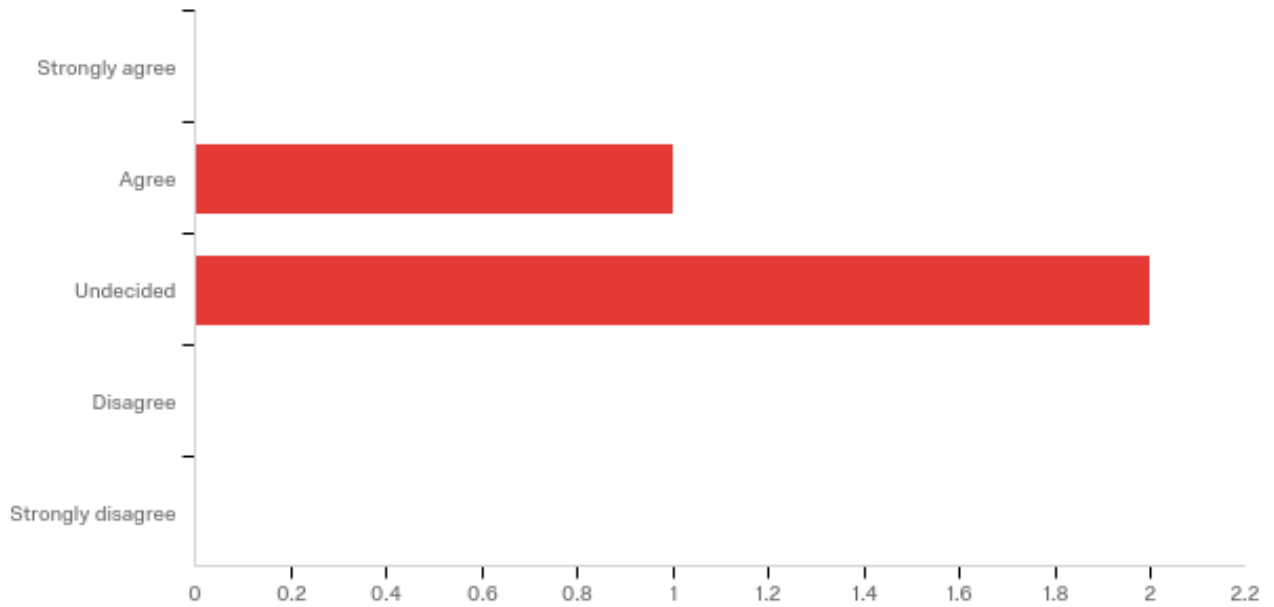
| # | Answer            | %      | Count |
|---|-------------------|--------|-------|
| 1 | Strongly agree    | 33.33% | 1     |
| 2 | Agree             | 66.67% | 2     |
| 3 | Undecided         | 0.00%  | 0     |
| 4 | Disagree          | 0.00%  | 0     |
| 5 | Strongly disagree | 0.00%  | 0     |
|   | Total             | 100%   | 3     |

**Q5 - Could music create a more open space for candid communication?**



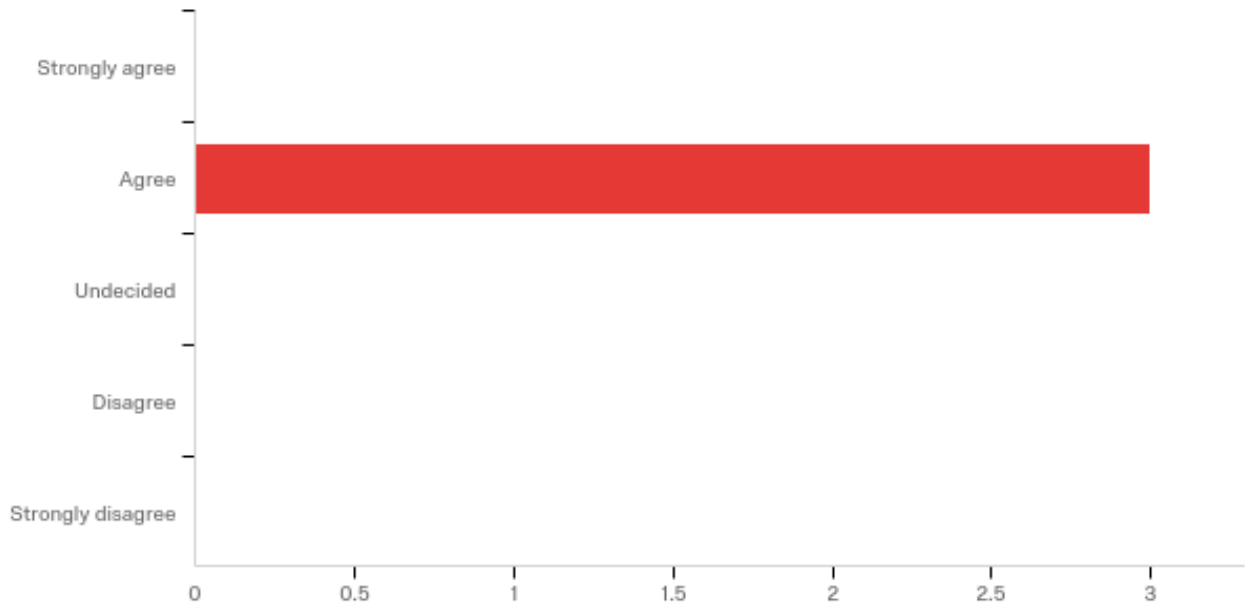
| # | Answer            | %       | Count |
|---|-------------------|---------|-------|
| 1 | Strongly agree    | 0.00%   | 0     |
| 2 | Agree             | 0.00%   | 0     |
| 3 | Undecided         | 100.00% | 3     |
| 4 | Disagree          | 0.00%   | 0     |
| 5 | Strongly disagree | 0.00%   | 0     |
|   | Total             | 100%    | 3     |

**Q6 - Is music a positive distraction from diagnosis and treatment?**



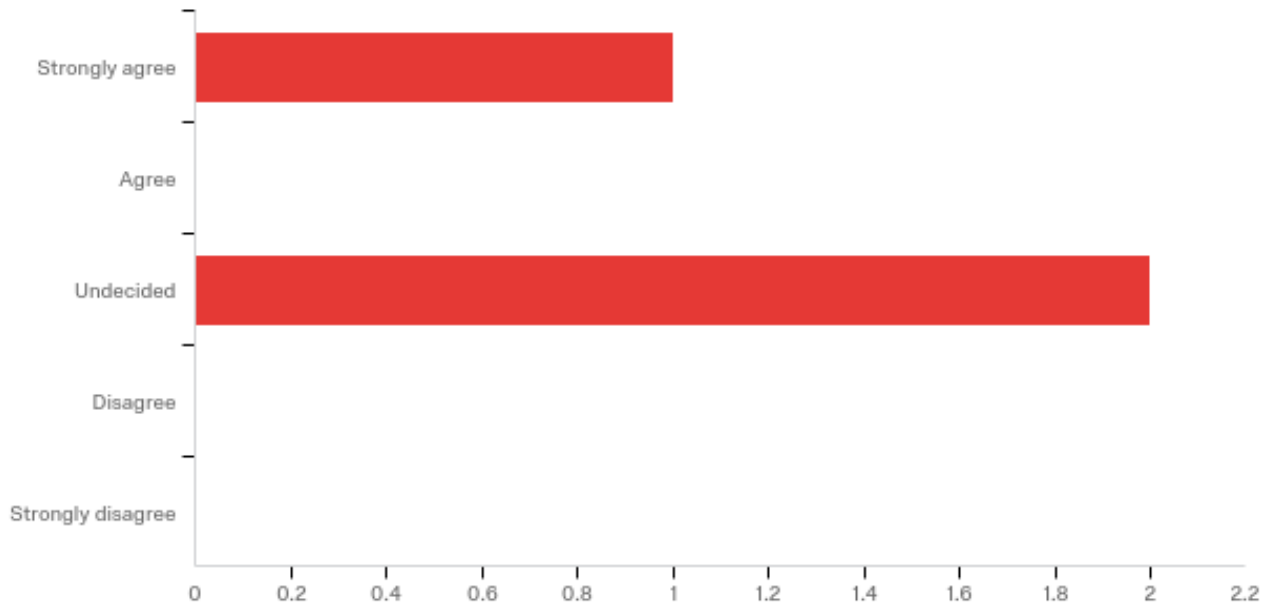
| # | Answer            | %      | Count |
|---|-------------------|--------|-------|
| 1 | Strongly agree    | 0.00%  | 0     |
| 2 | Agree             | 33.33% | 1     |
| 3 | Undecided         | 66.67% | 2     |
| 4 | Disagree          | 0.00%  | 0     |
| 5 | Strongly disagree | 0.00%  | 0     |
|   | Total             | 100%   | 3     |

**Q7 - Does the intervention of live music make you more mindful of your surroundings?**



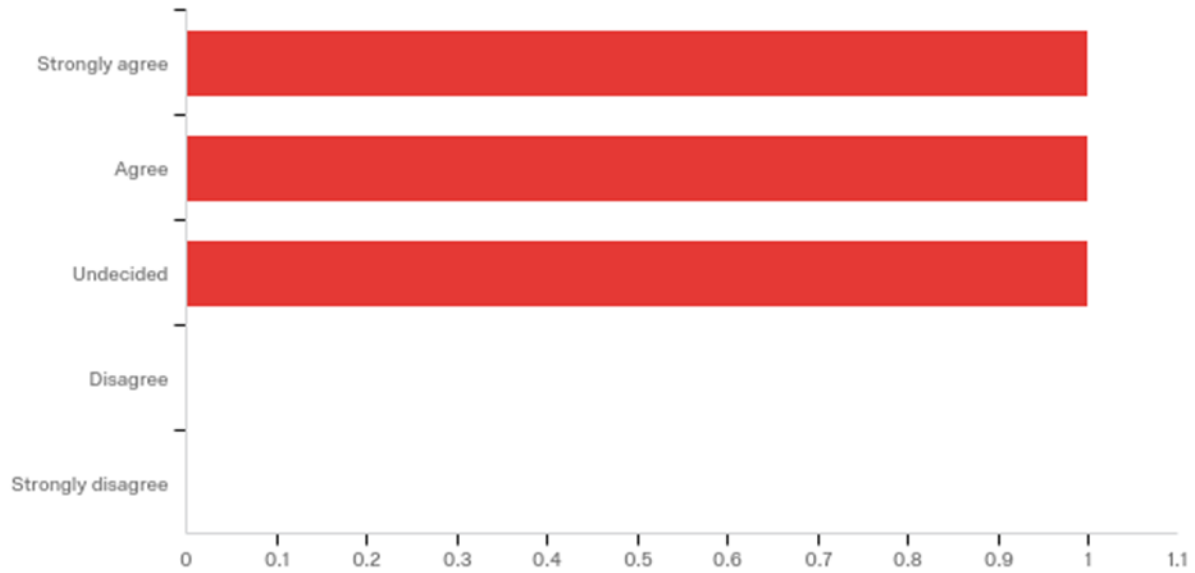
| # | Answer            | %       | Count |
|---|-------------------|---------|-------|
| 1 | Strongly agree    | 0.00%   | 0     |
| 2 | Agree             | 100.00% | 3     |
| 3 | Undecided         | 0.00%   | 0     |
| 4 | Disagree          | 0.00%   | 0     |
| 5 | Strongly disagree | 0.00%   | 0     |
|   | Total             | 100%    | 3     |

**Q8 - How likely would you be to support future funding of arts in medicine programs?**



| # | Answer            | %      | Count |
|---|-------------------|--------|-------|
| 1 | Strongly agree    | 33.33% | 1     |
| 2 | Agree             | 0.00%  | 0     |
| 3 | Undecided         | 66.67% | 2     |
| 4 | Disagree          | 0.00%  | 0     |
| 5 | Strongly disagree | 0.00%  | 0     |
|   | Total             | 100%   | 3     |

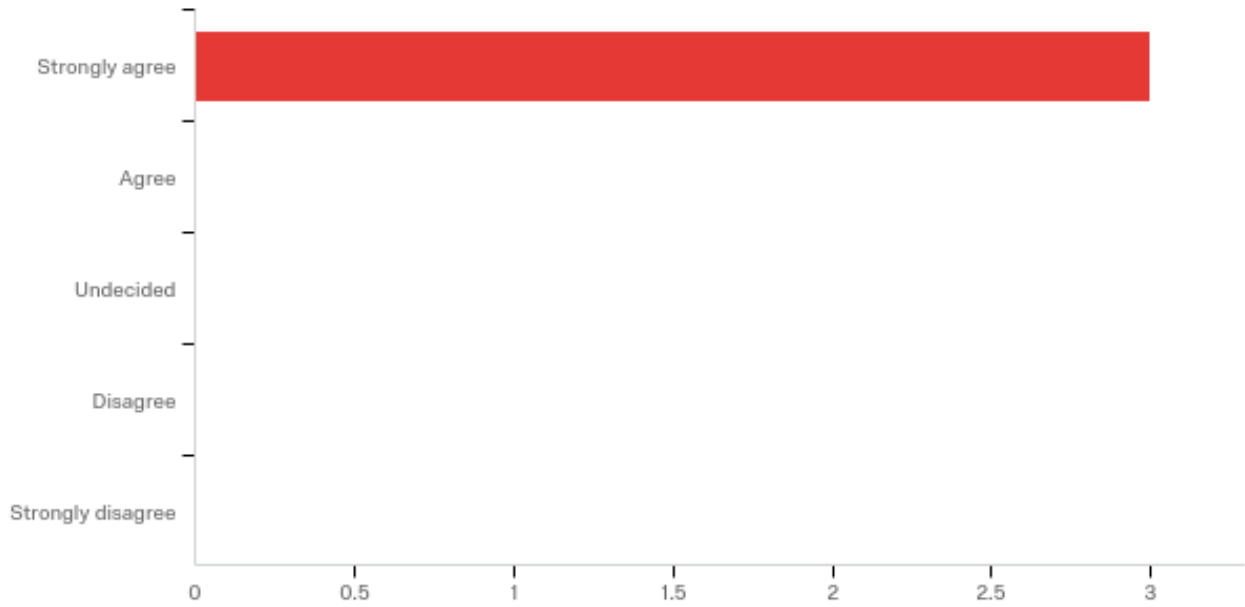
**Q9 - How likely would you be to make referrals to a musician in residence?**



| # | Answer                     | %      | Count |
|---|----------------------------|--------|-------|
| 1 | Strongly agree             | 33.33% | 1     |
| 2 | Somewhat agree             | 33.33% | 1     |
| 3 | Neither agree nor disagree | 33.33% | 1     |
| 4 | Somewhat disagree          | 0.00%  | 0     |
| 5 | Strongly disagree          | 0.00%  | 0     |
|   | Total                      | 100%   | 3     |

Appendix G  
 Qualtrics Post Lecture Survey Answers Report (Qualtrics, n.d.)

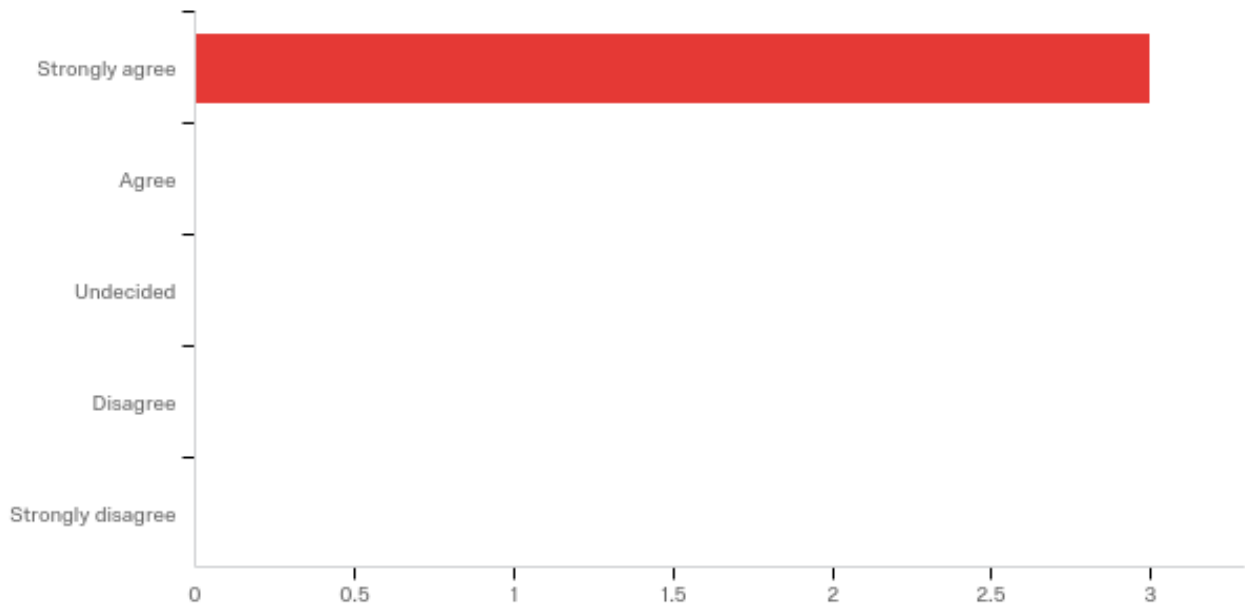
**Q1 - Do you feel live music in a medical setting may improve the hospital environment?**



| # | Answer            | %       | Count |
|---|-------------------|---------|-------|
| 1 | Strongly agree    | 100.00% | 3     |
| 2 | Agree             | 0.00%   | 0     |
| 3 | Undecided         | 0.00%   | 0     |
| 4 | Disagree          | 0.00%   | 0     |
| 5 | Strongly disagree | 0.00%   | 0     |
|   | Total             | 100%    | 3     |

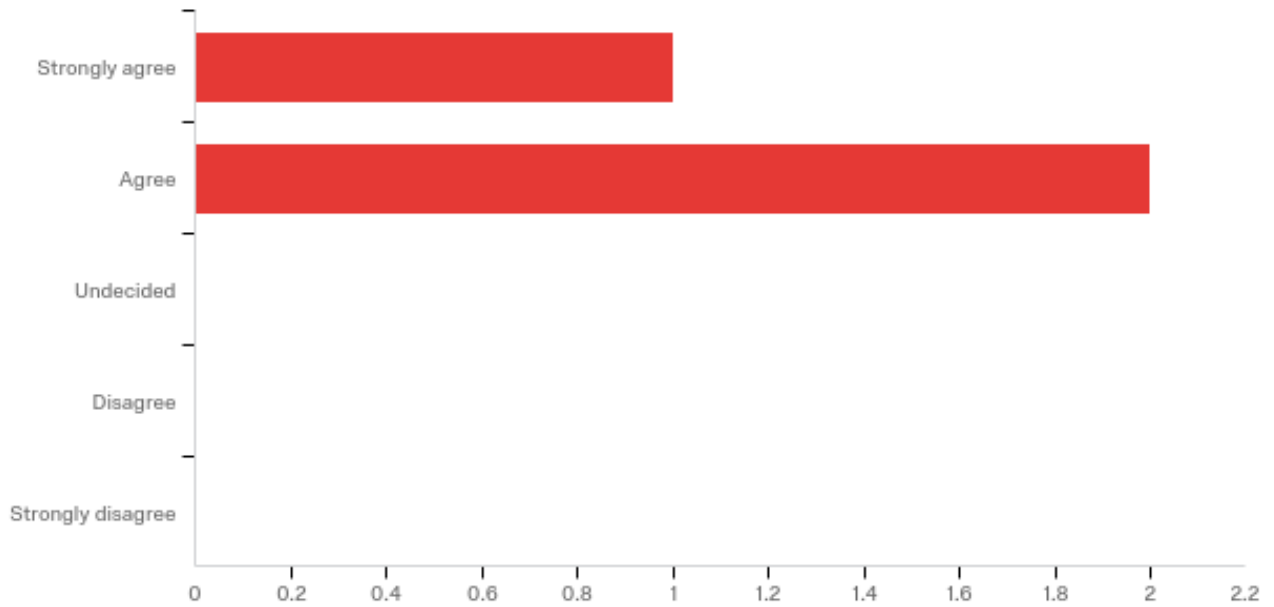


**Q2 - Do you think music can humanize stressful situations for patients, staff, and visitors to a hospital?**



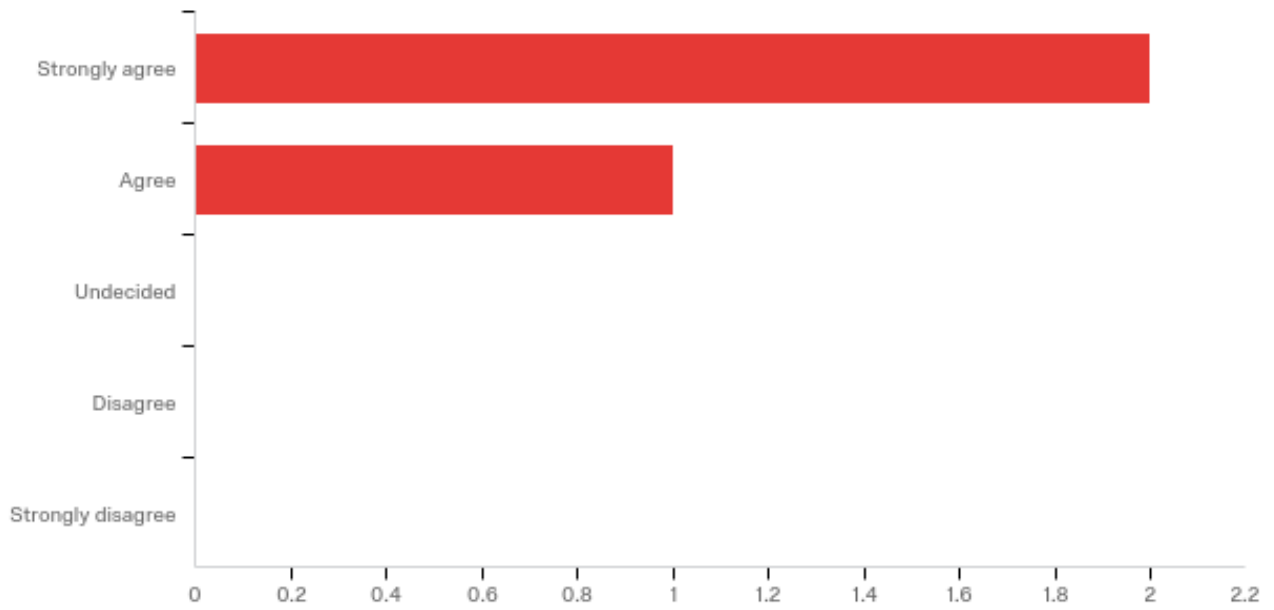
| # | Answer            | %       | Count |
|---|-------------------|---------|-------|
| 1 | Strongly agree    | 100.00% | 3     |
| 2 | Agree             | 0.00%   | 0     |
| 3 | Undecided         | 0.00%   | 0     |
| 4 | Disagree          | 0.00%   | 0     |
| 5 | Strongly disagree | 0.00%   | 0     |
|   | Total             | 100%    | 3     |

**Q3 - Do you expect to hear live music in a hospital?**



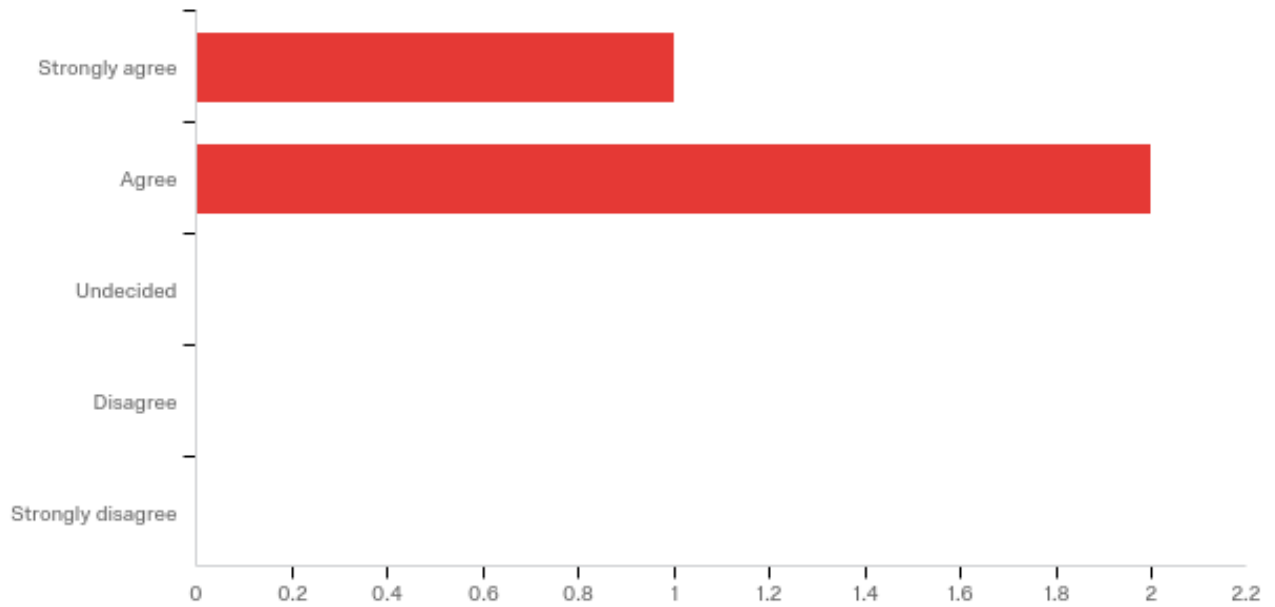
| # | Answer            | %      | Count |
|---|-------------------|--------|-------|
| 1 | Strongly agree    | 33.33% | 1     |
| 2 | Agree             | 66.67% | 2     |
| 3 | Undecided         | 0.00%  | 0     |
| 4 | Disagree          | 0.00%  | 0     |
| 5 | Strongly disagree | 0.00%  | 0     |
|   | Total             | 100%   | 3     |

**Q4 - Do you find listening to live music may have the potential for positive change in the clinical environment?**



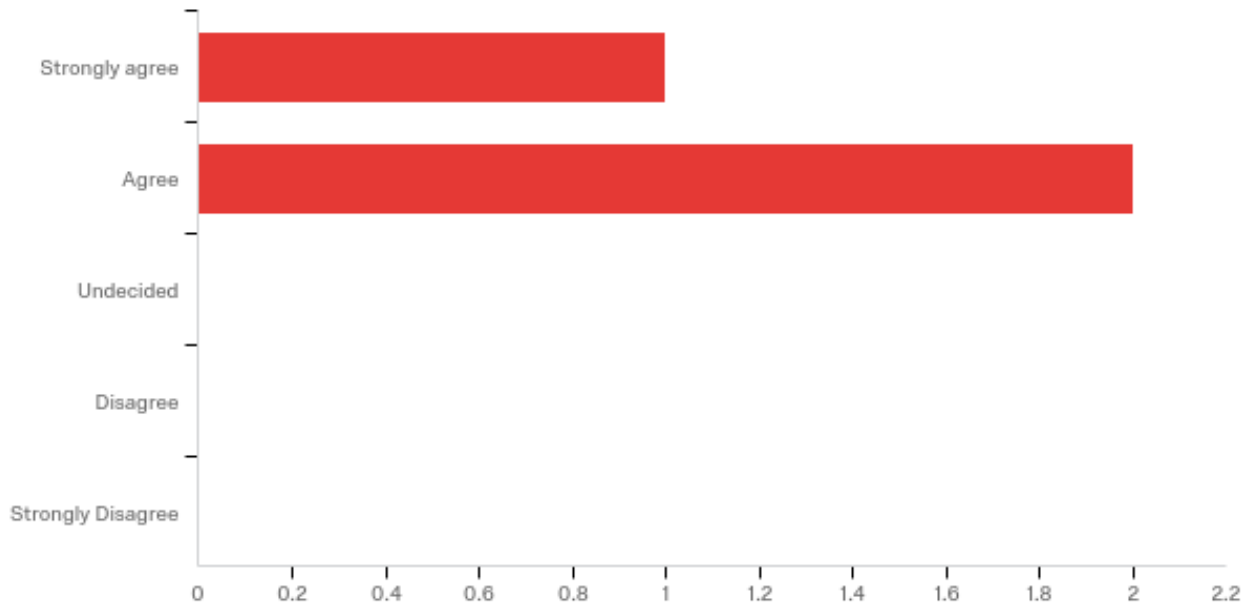
| # | Answer            | %      | Count |
|---|-------------------|--------|-------|
| 1 | Strongly agree    | 66.67% | 2     |
| 2 | Agree             | 33.33% | 1     |
| 3 | Undecided         | 0.00%  | 0     |
| 4 | Disagree          | 0.00%  | 0     |
| 5 | Strongly disagree | 0.00%  | 0     |
|   | Total             | 100%   | 3     |

**Q5 - Could music create a more open space for candid communication?**



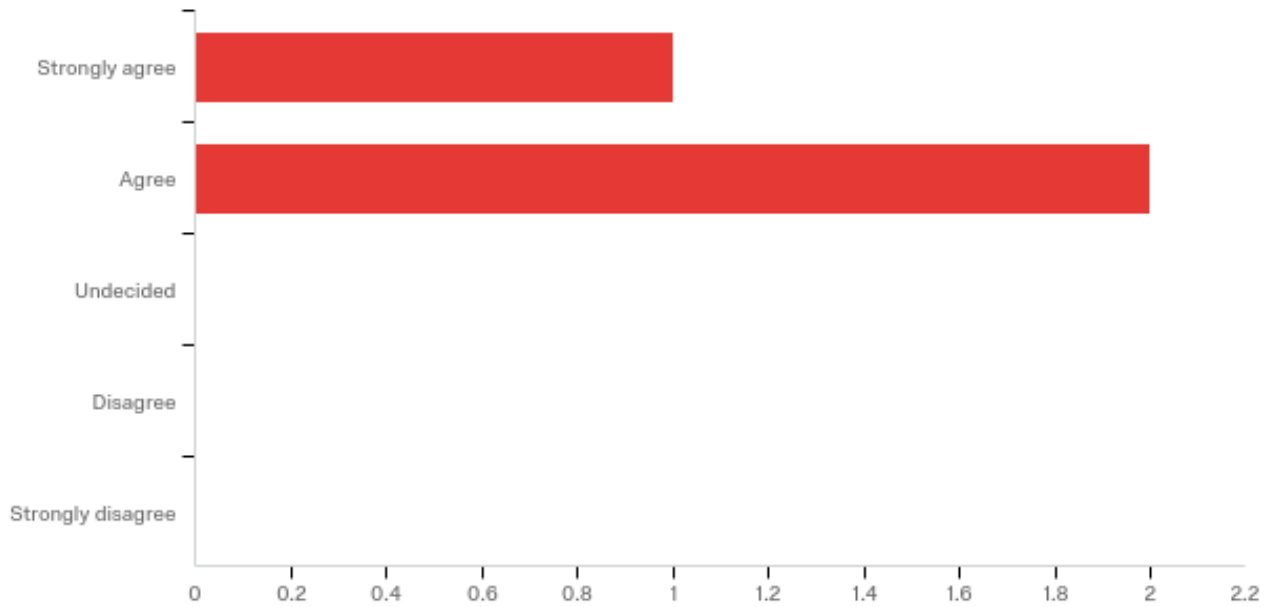
| # | Answer            | %      | Count |
|---|-------------------|--------|-------|
| 1 | Strongly agree    | 33.33% | 1     |
| 2 | Agree             | 66.67% | 2     |
| 3 | Undecided         | 0.00%  | 0     |
| 4 | Disagree          | 0.00%  | 0     |
| 5 | Strongly disagree | 0.00%  | 0     |
|   | Total             | 100%   | 3     |

**Q6 - Is music a positive distraction from diagnosis and treatment?**



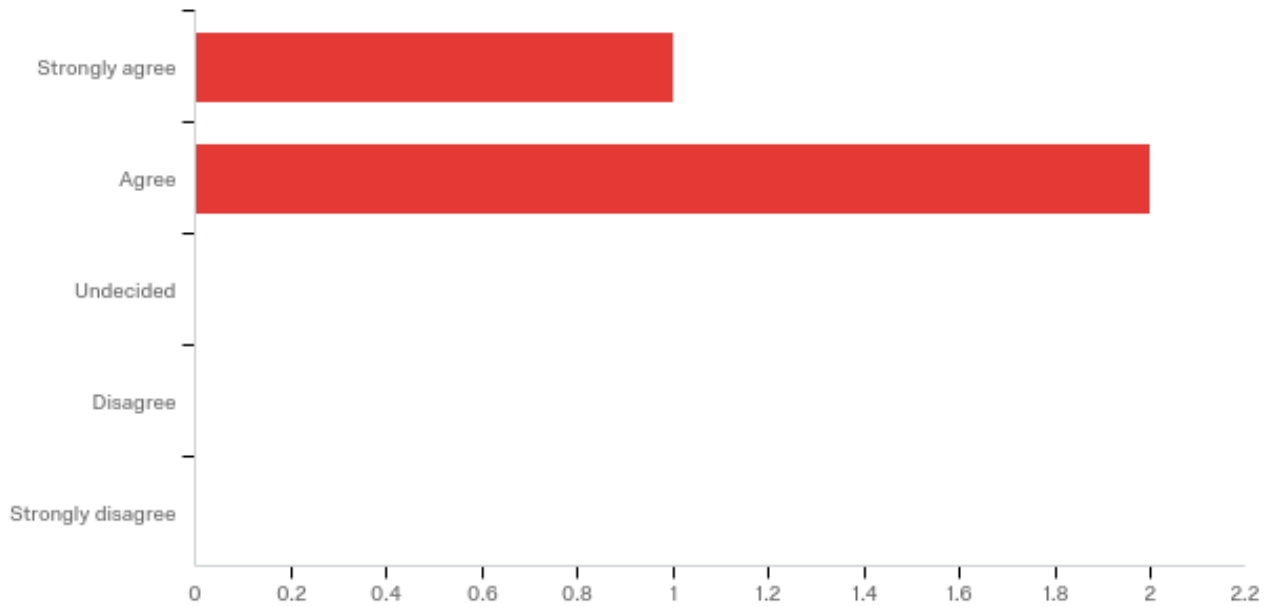
| # | Answer            | %      | Count |
|---|-------------------|--------|-------|
| 1 | Strongly agree    | 33.33% | 1     |
| 2 | Agree             | 66.67% | 2     |
| 3 | Undecided         | 0.00%  | 0     |
| 4 | Disagree          | 0.00%  | 0     |
| 5 | Strongly Disagree | 0.00%  | 0     |
|   | Total             | 100%   | 3     |

**Q7 - Does the intervention of live music make you more mindful of your surroundings?**



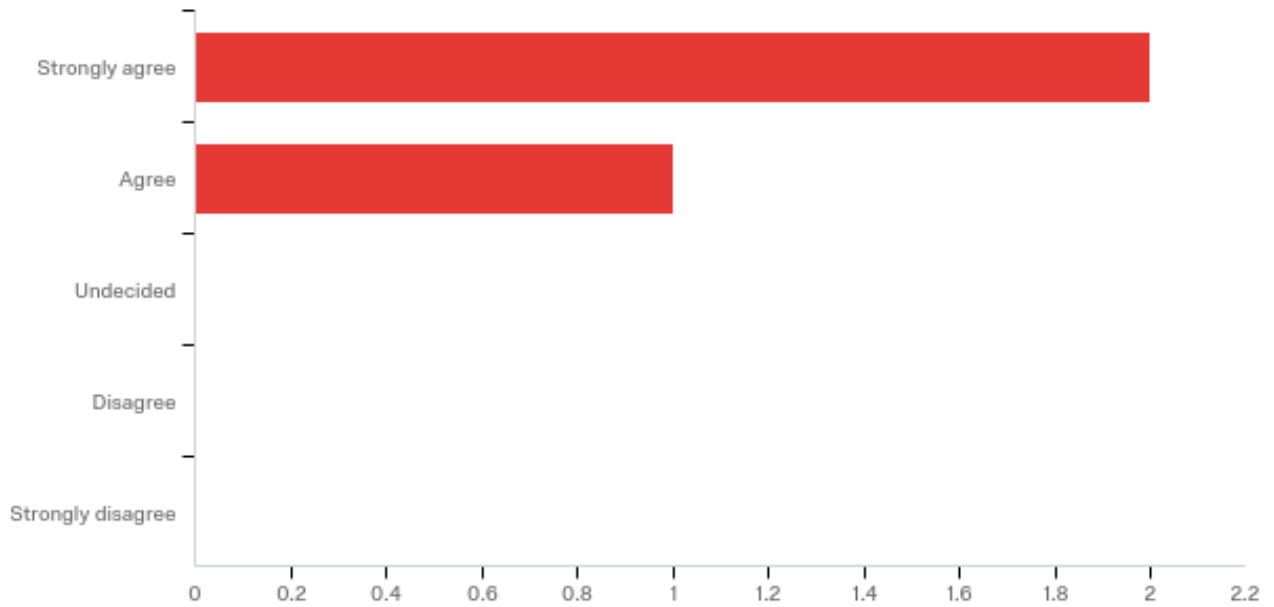
| # | Answer            | %      | Count |
|---|-------------------|--------|-------|
| 1 | Strongly agree    | 33.33% | 1     |
| 2 | Agree             | 66.67% | 2     |
| 3 | Undecided         | 0.00%  | 0     |
| 4 | Disagree          | 0.00%  | 0     |
| 5 | Strongly disagree | 0.00%  | 0     |
|   | Total             | 100%   | 3     |

**Q8 - How likely would you be to support future funding of arts in medicine programs?**



| # | Answer            | %      | Count |
|---|-------------------|--------|-------|
| 1 | Strongly agree    | 33.33% | 1     |
| 2 | Agree             | 66.67% | 2     |
| 3 | Undecided         | 0.00%  | 0     |
| 4 | Disagree          | 0.00%  | 0     |
| 5 | Strongly disagree | 0.00%  | 0     |
|   | Total             | 100%   | 3     |

**Q9 - How likely would you be to make referrals to a musician in residence?**



| # | Answer            | %      | Count |
|---|-------------------|--------|-------|
| 1 | Strongly agree    | 66.67% | 2     |
| 2 | Agree             | 33.33% | 1     |
| 3 | Undecided         | 0.00%  | 0     |
| 4 | Disagree          | 0.00%  | 0     |
| 5 | Strongly disagree | 0.00%  | 0     |
|   | Total             | 100%   | 3     |



Appendix H

Table H1

Assessment Proposal

| Anticipated Outcomes   | Methods of Assessment  |
|--|--|
| <p>Long Term: Acceptance by universities to add music for medical humanities as intervention to support understanding of practice</p> <p>Long Term: Stakeholders in clinical environments recommend live music for patients, families, and staff</p> |  |
| <p>Intermediate: Funding for music programming in medical and nursing schools</p> <p>Intermediate: Lectures becomes a component of the USF medical humanities modules</p>  | <p>Research at USF and other universities reflects that music is widely integrated into healthcare coursework</p> <p>Surveys of medical facilities indicate that live music is part of the funded programming to calm listeners and encourage better communication</p> |
| <p>Short Term:</p> <p>Enrolled students at lectures find live music calming and helpful to focus</p>   | <p>Written survey responses and spoken feedback observed by musician</p>   |