VARYING FORMS OF MUSIC LISTENING AND THEIR EFFECTS ON ELDERLY PERSONS

Bolton, Rory K., Crimmins, Andrea M.-Ph.D., MT-BC, & Hogue, John D.
Illinois State University

Abstract

- Music appears to elicit different responses for many people. Elderly individuals having listened to music indicate an elevation in positive emotional responses.
- This study proposed that a live, projected musical presentation would elicit the greatest positive mood change in the participants versus no musical presentation.
- 35 elderly participants from four different long-term care facilities listened to different musical treatments and rank their emotions using the Positive and Negative Affect Schedule (PANAS) pre and posttest.
- Two, 2 (pre and posttest PANAS) x 4 (Treatment Groups: projected performance, deadpan performance, CD recording, and control group) repeated measures ANOVA with a between subjects factor concluded that the group listening to the CD recording had higher negative affect scores than the deadpan performance.
- Positive affect scores did not show any significant difference between the treatment groups.
- The deadpan performance illustrated lower negative affect than the CD which illustrates that playing live music may be a better option for clients than listening to a CD.

Research Question

- This purpose of this study was to gain a further insight on the effects of music listening on mood in the elderly.
- It was proposed that a live, musical presentation would elicit the greatest mood change in the participants versus its counterpart, no music, having little to no stimulation of mood.

Experiment Variables & Treatments

- Groups were given either a live, music listening treatment, audio recording, or no music treatment (control). Dependent variables were positive and negative affect as a result.
- Four long-term care facilities participated in the study, each facility only receiving one treatment.
- Schubert's *Impromptu Op. 142, No. 2* for the piano was the selected music for the musical treatments.
  Music is not limited to the piano and may be altered in future studies.
- Each intervention measured change in mood in the each of the participants in the form of a pre and posttest.

Method & Measures

- The test utilized was the scientifically validated International Positive and Negative Affect Schedule (I-PANAS) in the form of a pre and posttest ranking various moods 1 through 5 (1 being *very little or not at all* and 5 being *extremely).*
- The study utilized 35 elderly participants from each facility who were asked to complete the pre-PANAS test, listen to the treatment for their specific group, and then complete the post-PANAS test to the best of their ability.
- The care facilities assisted in determining the cognitive level of the residents who volunteered to be a part of the study as well as assisting some of the residents in answering the questionnaires on the PANAS forms.
- The study took place in the care facilities' multi-purpose activity rooms.

Results

Results were determined using two, 2x4 repeated measures ANOVA tests with a between subjects factor. One test measured positive affect while the other measured negative affect.
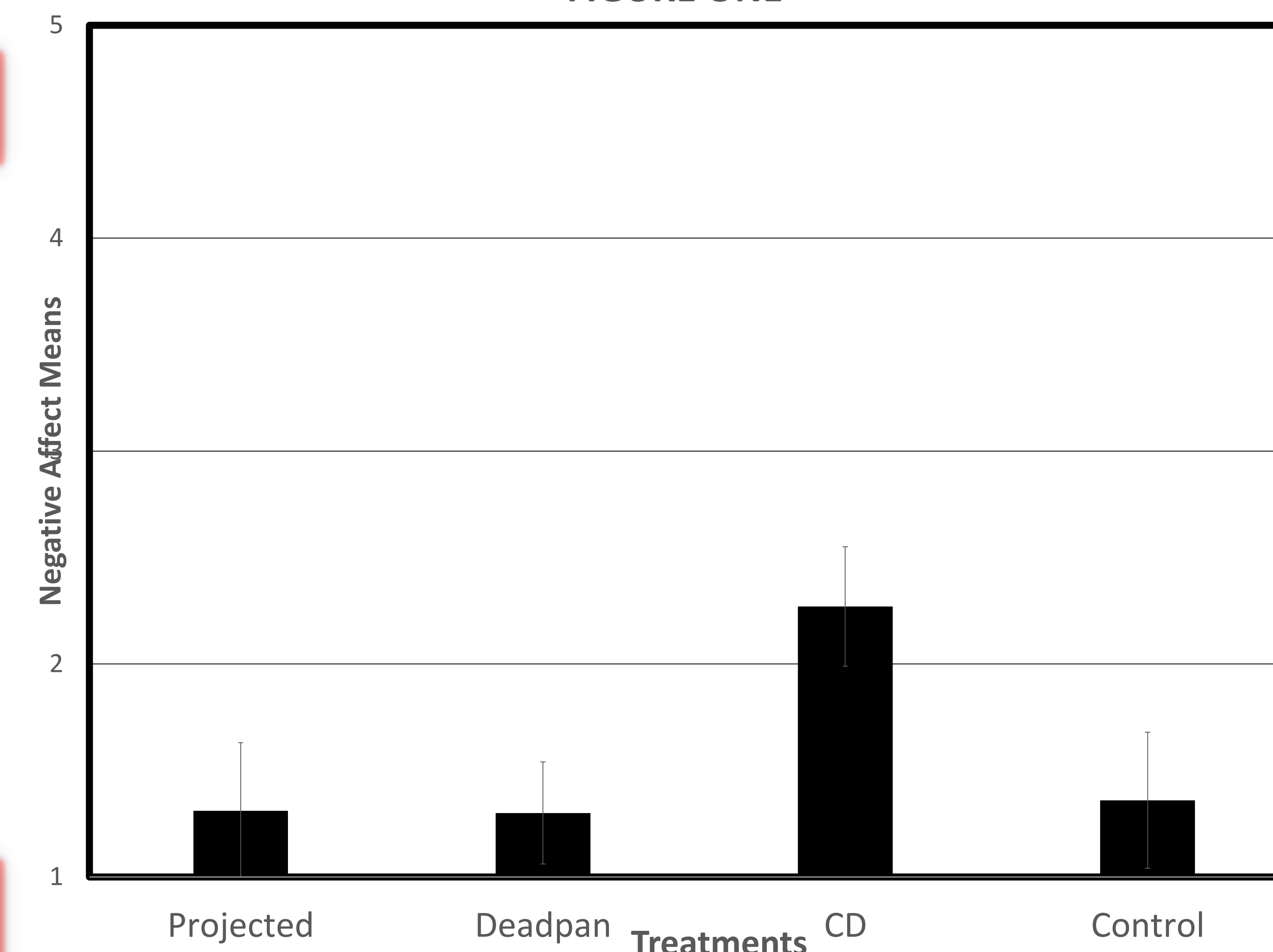
Positive Affect
- Results indicated no significance between the projected performance and any of the other treatments
  $F(3, 31) = 0.53$, $p = 0.67$.
- The pre-PANAS test failed to show any significance with the post-PANAS test
  Wilk's $\Lambda = 0.94$, $F(1.0, 31.0) = 1.83$, $p = 0.19$.
- The interaction between pre and posttest was not significant
  Wilk's $\Lambda = 0.95$, $F(3.0, 31.0) = 0.50$, $p = 0.68$.

Negative Affect
- Results indicated significance between treatment groups and negative affect
  $F(3, 31) = 2.91$, $p = 0.047$.
- The deadpan performance treatment showed significance with the CD recording ($p = 0.058$) but not with either the projected performance treatment ($p = 1.00$) or the control group ($p = 1.00$).
- The projected performance did not show any significance with the CD recording ($p = 0.13$) or the control group ($p = 1.00$).
- The CD recording failed to show any significance with the control group ($p = 0.16$).
- The pre-PANAS test failed to show any significance with the post-PANAS test
  Wilk's $\Lambda = 1.00$, $F(1.0, 31.0) = 0.09$, $p = 0.77$.
- Despite the significance between treatments, the interaction between pre and posttest did not show any significance
  Wilk's $\Lambda = 0.83$, $F(3.0, 31.0) = 2.07$, $p = 0.13$.

Due to small sample sizes among the individual groups, an alpha level of 0.10 was used instead of the traditional 0.05 to determine significance.

FIGURE ONE

Discussion & Future Direction

- The study's results do not support the proposed hypothesis.
- Several limiting factors played a role in the study:
  - Interpretation of PANAS
  - Staff assistance
  - Participants' cognizant ability
  - Sample size
  - Study's duration
- Improvement in participants' QOL was observed with majority of the participants having partook in a positive, non-threatening experience.
- This study illustrates a need for further investigation and research in the role music plays (ie. social, emotional, cognitive functioning and facilitators in successful aging) on elderly individuals.

References

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