

"Music and its Effects on Mood"

Source:

Unpublished research completed in partial fulfillment of the requirements for BA Program

Location:

Florida State University
Under the supervision of the Center for Music Research
Tallahassee, Florida

Date: 1993

Contact Information:

Catherine L.W. Szuch, MM, MT-BC
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This study looked at the mood of twenty-nine college students before and after they experienced one of three current popular songs, 1) "Vibeology" by Paula Abdul, 2) "So Hard to Say Goodbye" by Boys 2 Men, and 3) "Songbird" by Kenny G, either vibrotactily via a Somatron or non-vibrotactily via a stereo system. All participants rated their mood using the Multiple Affect Adjective Check List (MAACL). The author found that the students who used the Somatron reported a greater general improvement in their positive mood state after experiencing the music than similar students who experienced the same music via a stereo system. This finding was statistically significant ($p < 0.001$) for the song "So Hard to Say Goodbye. Similarly, students that were presented with the Kenny G selection via the Somatron reported feeling a greater reduction in depression following the experience than those experiencing the same music via a stereo system. This finding was also statistically significant ($p < 0.05$). It appeared that the vibrotactile experience of the Somatron affected the mood state of college students in an overall more positive way than when the same songs were experienced via a stereo system. When asked, the vast majority of the students said that they enjoyed their experiences with the Somatron, would repeat it if they had the opportunity, and would recommend it to others. In addition, the students generally felt that it enhanced their experience of the particular song that they heard.

"The Effect of Vibrotactile Stimuli and Selected Music on Mood Descriptors Chosen by Music Majors"

Source:

Unpublished Research Paper

Location:

University of Kansas

Psychology of Music Laboratory

Contact Information:

Rebecca A. Lord

This study looked at the effects of vibrotactile stimulation via a Somatron on the mood of college-age music students. Sixteen to twenty students participated in this research, half of whom listened to a selection of music while sitting in a chair that faced 2 speakers, the other half experienced the same music while lying on a Somatron. All students rated their mood both before and after the music was played. The test used to measure mood (Multiple Affect Adjective Check List (MAACL)) measured levels of anxiety, depression, hostility and also provided a total mood score. The students that used the Somatron reported a decrease in the number of negative mood responses at the end of their vibrotactile experience. The differences between the two groups of students were found to be statistically significant for both depression and total overall mood scores ($p < 0.05$). The researcher concluded that “vibrotactile stimulation and selected music does have an effect on mood descriptors chosen by music majors”.

"The Effect of Vibrotactile Stimuli on Subject's Descriptive Responses for Familiar and Unfamiliar Music and Preferences for Music Listening Conditions"

Source:

Location: University of Kansas

Psychology of Music Laboratory

Contact Information:

Dianne Burton

This research was carried out to look at the effects of vibrotactile stimulation via a Somatron on the words chosen by students to describe both familiar and unfamiliar pieces of music. Thirty psychology students participated in two separate music listening

sessions. During one of these sessions, music was played via a stereo under “normal listening conditions”, during the other session, the same music was experienced via a Somatron mattress. The researchers found that the students preferred the experience of using the Somatron over hearing the same music under “normal listening conditions”. It was also found that the music that was unfamiliar to students was described differently when experienced via the Somatron when compared to “normal listening conditions”. The level of bass recognized by students in the various pieces of music appeared to have an effect on the particular words chosen by the students to describe it. This finding was statistically significant.

"The Effects of a Vibrotactile Device, Somatron, on Physiological and Psychological Responses: Musicians versus Non-Musicians"

Source: Published Journal Article

Location: Florida State University

Tallahassee, FL

Center for Music Research

Date: 1990

Contact Information: Dr. Clifford K. Madsen, Dr. Jayne M. Standley, and Dianne Gregory

Florida State University, Tallahassee, FL

This research consisted of two studies that compared the responses of musicians and non-musicians to music experienced via a Somatron. During the first study, all participants (college students) were presented with two pieces of music, one simulative in nature, the other sedative. For half of the subjects, the speed of the music was altered gradually becoming either faster or slower. None of these participants, regardless of their musical background, reported being aware of the change. All students had their heart rate monitored during their session however, no statistically significant differences in the heart rate of musicians or non musicians were found. Students did report that they liked the experience and that they would repeat it in the future if given the opportunity. Some of them reported that they did not want to get up once the music was over. The students also reported that they found the experience to be both stimulating and relaxing at the same time. The second study was almost exactly the same as the first however, this time those participants who were going to experience the music with altered speed, were warned that something would be changing. Despite this preparation, the students were still not able to correctly identify what was different about their experience

"The Psychological and Physiological Effects of Vibrotactile Stimulation, via a Somatron, on Patients Awaiting Scheduled Gynecological Surgery"

Source: Published Journal Article adapted from Masters Thesis
Journal of Music Therapy, XXXIII (4), 1996, p. 261-287
Location: Tallahassee Memorial Regional Medical Center
Under the supervision of Dr. Jayne Standley
Florida State University, Tallahassee, FL
Date: 1995
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Thirty-nine women admitted to a medical facility for day case gynecological surgery participated in this study. Some of the women had opportunities to use a portable Somatron mat, using music that reflected their musical taste, immediately prior to having their surgery. Other women had opportunities to listen to the same music via a tape player immediately prior to having their surgery. Both the women using the Somatron and the women listening to music via the tape player were found to spend less time in surgery than expected, less time in the post-anesthesia care unit, and received less post-operative medication than similar women who did not receive a musical intervention of any kind. These findings were all statistically significant ($p < 0.05$). The same women also had a tendency for lower blood pressure following their musical experiences although this finding was not statistically significant. The women who used the Somatron were found to experience lower reported apprehension (defined as combined ratings of their tension, anxiety, relaxation, stress, and mood) following its use than either the women who listened to music via a tape player, or the women who did not experience either. This finding was also statistically significant ($p < 0.05$). The women who used the Somatron were also found to have the least fluctuation in blood pressure throughout their surgery. Women rated their experiences with the Somatron positively stating that it "increased relaxation", "helped to ease anxiety", and provided a distraction resulting in "less time to focus on the surgical procedure".