

**Title:**

The Effect of Music Relaxation Video on College Students' Anxiety and Physical Vital Signs

**Grace Chu-Hui-Lin Chi, PhD**

*Department of Nursing, Andrews University, Berrien Springs, MI, USA*

Dennis Cheek, PhD

*Harris College of Nursing and Health Sciences, Texas Christian University, Fort Worth, TX, USA*

Jerry L. Chi, PhD

*School of Business Administration, Andrews University, Berrien Springs, MI, USA*

**Session Title:**

Health Promotion of the College Student

**Keywords:**

Anxiety, College Students and Music Relaxation Video

**References:**

American College Health Association. (2014). *American College Health Association-National College Health Assessment II: Reference Group Executive Summary Spring 2014*. Hanover, MD: American College Health Association.

Beiter, R., Nash, R., McCrady, M., Rhoades, D., Linscomb, M., Clarahan, M., & Sammut, S. (2015). The prevalence and correlates of depression, anxiety, and stress in a sample of college students. *Journal of Affective Disorders, 173*, 90-96. doi: 10.1016/j.jad.2014.10.054.

Kim, J. H., Yang, H. & Schroepel II, S. (2013). A pilot study examining the effects of Kouk Sun Do on university students with anxiety symptoms. *Stress and Health, 29*, 99-107. doi: 10.1002/smi.2431

**Abstract Summary:**

The music relaxation video is a safe and inexpensive technique that can be used for college students with anxiety. It also demonstrates beneficial effects on decreasing pulses and diastolic blood pressure. The findings can improve health among college students and can be easily utilized in educational institutions.

**Learning Activity:**

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner will be able to understand the effect of music relaxation video on anxiety of college students.	State Anxiety level in the experimental group was significantly decreased after watching a 30-minute music relaxation video as compared to the level of those who did not watch the music relaxation video in the control group.
The learner will be able to understand the effect of music relaxation video on physical vital signs of college students.	Pulse rate in the experimental group was significantly decreased after watching a 30-minute music relaxation video as compared to the pulse rate of those in the control group. Diastolic blood pressure showed significant decreased for the first 20 minutes. The results

	of the respiratory rate and systolic blood pressure were not significant.
--	---

### **Abstract Text:**

The effect of music relaxation video on college students' anxiety and physical vital signs

### **Background**

Anxiety is the most predominant class of mental illness and one of the main concerns for college students as they deal with assortment of stresses from academic, financial, individual, and social pressures. Stress is described as a response to a threat in a condition, and anxiety is a reaction to the stress. According to the American College Health Association, about 21.8% of students reported anxiety (26% response out of 79266 students surveyed), which affected their academic performance and grades. In addition, about 14.3% of students within last 12 months of the 2014 survey were diagnosed and treated by a professional. National Library of Medicine indicated that long-term mental stress puts the human body constantly on edge and in the fight-or-flight mode, and it is implicated as a risk factor for a variety of health complications, such as hypertension and other cardiovascular issues, diabetes mellitus, obesity, depression, anxiety and more. To aid in overcoming the tension and pressure, music is often recommended and used to help with that. Music plays an important part in human culture and behavior. It has direct and indirect effects on physiology and physiological situations. As a safe and non-invasive intervention, music has been widely known as not only a means for enjoyment, but also as an asset to the human body. Music can stimulate the autonomic nervous system to release hormones and endorphins, which are the body's natural opiates to encounter unpleasant experiences. Music may be combined with other relaxation techniques for increased effectiveness. To further enhance the effect of relaxation experience, the use of visual graphic effects along with music is a possible combination.

### **Purpose**

When the brain perceives a peaceful scene, it induces parasympathetic nervous system stimulation, which may ease physiological and emotional status from highly strained to deeply relaxed by slowing the heartbeat, lowering the blood pressure, decreasing the respiratory rate, reducing anxiety and perception of pain. Music and visual art presented together may have stronger effects on mood than visual art alone. Therefore, the study is to examine how anxiety levels and physiological reaction in terms of blood pressure, pulses, and respirations change in response to music relaxation video.

### **Methods**

140 participants were randomly assigned to two groups. Participants in the experimental group watched 30 minutes music relaxation video. Blood pressure, pulses and respiration were measured via monitor at baseline and every 10 minutes for 30 minutes during the intervention. Anxiety levels were measured by using State Anxiety Inventory before and after music relaxation video intervention.

### **Results**

One hundred twenty-nine sets of data were analyzed. Sixty-five participants were in the control group and sixty four participants were in the experimental group. State Anxiety level in the experimental group was significantly decreased after watching a 30-minute music relaxation video as compared to the level of those who did not watch the music relaxation video in the control group. Pulse rate in the experimental group was significantly decreased after watching a 30-minute music relaxation video as compared to the pulse rate of those in the control group. Diastolic blood pressure showed significant decreased for the first 20 minutes. The results of the respiratory rate and systolic blood pressure were not significant.

## Conclusion

The music relaxation video is a safe and inexpensive technique that can be used for college students with anxiety. It also demonstrates beneficial effects on decreasing pulses and diastolic blood pressure. The findings can improve health among college students and can be easily utilized in educational institutions.