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The Effects of Shiatsu Massage on Stressed College Students

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The Effects of Shiatsu Massage on Stressed College Students

Hannah Daniel

HON 420

Introduction

Stress is an epidemic that most Americans admit they have felt at one point or another throughout their lifetime. In most cases, this stress ranks between moderate to high and can often be classified as chronic. Chronic stress can be dangerous and disruptive because it can interfere with one's ability to function normally over an extended period of time. Even acute stress, which is less severe than chronic, can impede one's ability to maintain attention, learning, and memory (De Kloet, 2000).

While the general population can fall victim to stress at any given moment, there is one specific population that seems to be particularly burdened with stress; college students. College students are required to make enormous life adjustments especially within the first semester of college. Even high ranking high school students can undergo unanticipated difficulties when first entering a university or college setting. Students are expected to perform well, but in many cases, they underestimate the amount of effort and time that is needed to accomplish attaining an acceptable to high grade point average (GPA). Students struggle to balance being involved with their family, attaining new friends in an unfamiliar place, and budgeting their time and money, possibly for the first time in their life. At the same time, they must maintain a GPA that allows them to stay enrolled in the university (Kreig, 2013). All of these changes can factor into a student's level of stress, and while some of the initial feelings of separation anxiety from home may pass, course work continues to become more difficult as the year continues.

The first semester of my senior year I enrolled in an on-campus Shiatsu Massage class at Eastern Kentucky University. As a pre-physical therapy major, I was interested in different forms

of massage and how it can affect the human body. Throughout taking this Shiatsu massage class I learned that the Chinese, Japanese, and even Indian cultures all have a word to describe the energy that flows through and out of everything. This energy is known as Chi to the Chinese, Ki to the Japanese, and Prana to the Indians. As people undergo stress throughout their lives, they can develop what are known as energy “blockages” that can be located anywhere in the body. Shiatsu massage works towards getting rid of these blockages and helping people to live with less stress physically impacting their body. My purpose throughout this study was to research and determine what previous studies had found on the effectiveness of shiatsu massage, while concurrently conducting a survey of students enrolled at Eastern Kentucky University to discover the perceived effects of Shiatsu massage on stressed college students.

Understanding Shiatsu Massage

Shiatsu’s primary purpose, in most settings, is to promote well-being, aid in preventing illness, and overall supporting healthy living (Long, 2008). Shiatsu is known as a complementary and alternative form of medicine (CAM). Shiatsu massage uses oriental techniques that originated over 5,000 years ago and have proven to be effective in the reduction of both pain and stress. Shiatsu massage focusses on imbalances throughout oneself, whether they are mind, body, or spirit, and this is essentially the theory advocating the calming nature of Shiatsu massage. Shiatsu massage can be applied with the finger tips, the thumbs, the palms, the elbows, and the feet. The massage is given up or down what is known as a meridian.

Meridians are lines of energy that flow throughout the body. Meridians that flow up the body are known as ying, and the meridians that flow down the body are yang. There are a total

of fourteen main meridians located in the body. The ying meridians are: the central, lung, liver, spleen, heart, pericardium, and the kidney. The yang meridians are: large intestine, small intestine, triple burner, gall bladder, bladder, stomach, and the governing. (See Figure 1; meridians not included: central and pericardium)

The fourteen major meridians that flow throughout the body each take a different direction. The paths are as follows (Lundberg, 1992):

- Central- From the pubic bone up the center of the body, under the chin, to the lower lip.
- Governing- From the tailbone, up the spine, over the top of the head and down the middle of the face to the center of the upper lip.
- Spleen- From the big toe, up the inside of the leg, front of the abdomen to the side of the chest.
- Stomach- From the corner of the eye, looping around the side of the forehead, behind the ear, back to the forehead, behind the ear, back to the forehead, down the back of the head and shoulder, under the arm, down the side of the chest and the outside of the leg to the end of the fourth toe.
- Pericardium- From the nipple, down the middle of the inside of the arm to the end of the middle finger.
- Small Intestine- From the end of the little finger up the edge of the back of the arm to the chest.

- Large Intestine- From the end of the index finger, up the outside of the back of the hand and arm to the nose.
- Heart- From the armpit, down the inside of the arm to the end of the little finger.
- Triple Burner/Heater- From the end of the ring finger, up the back of the hand and arm, the side of the neck, around the ear to the eyebrow.
- Liver- From the big toe, up the front, inside of the leg, over the abdomen to the lower end of the chest near the side.
- Kidney- From the ball of the foot up the inside of the leg, abdomen and chest to the knob on the collar bone.
- Lungs- From the chest, down the outside of the front of the arm to the thumb.
- Bladder- From the corner of the eye, over the head and down the back along the inside to the buttocks. Skip back to the shoulder, down the outer line down the back of the leg to the end of the little toe.
- Gall Bladder- From below the eye, around the cheek to the forehead, over the eye, down the jaw and the front of the neck, across the collar bone, down the chest and abdomen, across the front of the hip down the outside of the front of the leg to the end of the second toe.

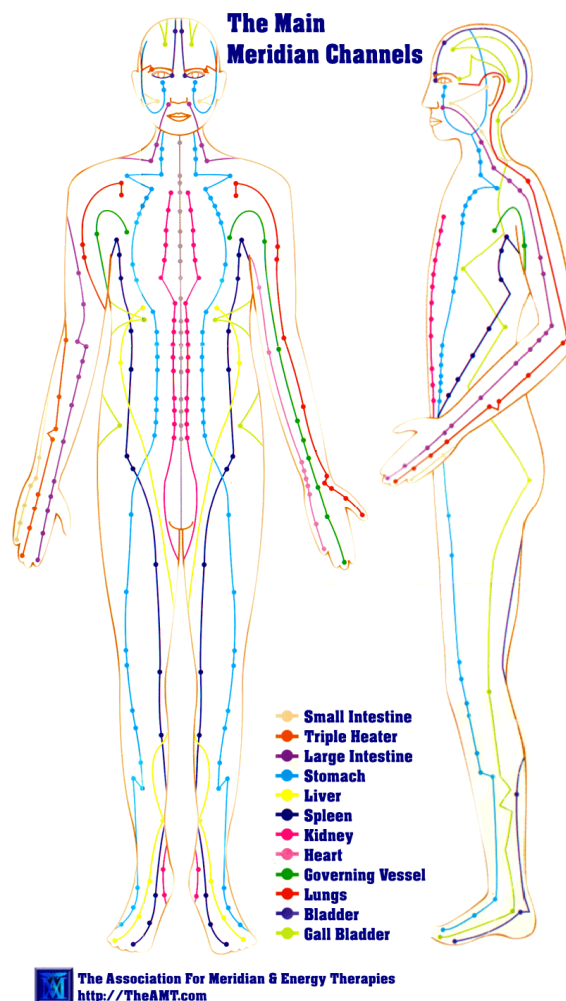


Figure 1

In administering shiatsu massage it is very important to note which meridian is ying and which is yang. While massaging up the ying meridians in the body may feel very relaxing, massaging up the yang meridians in the body will be very uncomfortable. Since there is more than one mode when giving Shiatsu massage, it is crucial to realize that the massage focuses around what are known as a tsubo, or pressure point, in the body at specific locations. Tension and blockages can be released by applying pressure to different locations in the body (Lundberg, 1992). In these tsubos around the body many people “carry” their stress. A common

place for individuals to have these “blockages” would be the shoulders at the base of the neck, and in the back.

It is incredible that although shiatsu massage is considered to be a form of “ancient medicine,” it is still used very often today for medical treatment. In some parts of Asia, there are no modern doctors that people can go see whenever they need medical attention, so these ancient forms of medicine are used as a primary form of treatment. This is not to say that Asia does not have well trained doctors, but that there is such a dense population and so few doctors, that there is no way that these doctors can be expected to treat everyone. Nei Ching is over two millennia old, and was the first medical text to be used in “ancient medicine.” The idea behind Nei Ching was that age, lifestyle, diet, and environment affect the health of people. These ideas of a holistic approach to health are still very prevalent in today’s culture. In the document, acupuncture (Shiatsu massage) is said to heal the body and aid in overall well-being. The Nei Ching Su Wen has still remained the most dominating medicinal theory and practice in present day indigenous Chinese medicine (Veith, 1949).

Shiatsu massage is very unique in that it enables the body to “heal” itself through the techniques used. Shiatsu can be received from someone else, or it can even be self-administered, depending on the area of the body that needs relief. Modern technology and medicine has come a long way and can significantly benefit those in need of serious medical attention, but even technology has not been able to defeat the menacing, chronic debilitating diseases that affect nearly everyone as they age. Shiatsu is a way to make one’s quality of life better overall (Endo, 2004).

Within the past twenty years the effects of shiatsu massage has been studied on a physiological level. There is research that shows Shiatsu massage is effective in dramatically reducing heart rate and slowing breathing. Shiatsu can reduce high blood pressure, diminish chronic pain, or even reduce nausea (Barrett, 1993). These positive health benefits have even been seen and tested in patients undergoing chemotherapy. Shiatsu massage can rejuvenate a person's body, mind, and spirit, and this can positively effect and reduce stress in individuals. In parts of Europe, Shiatsu is allowed to be practiced on patients, but it has yet to be integrated into the healthcare system; however, since 1952, in Japan, Shiatsu massage is recognized as a paramedical practice (Long, 2008).

Since the increase in the price of health care, medical treatment, and pharmaceuticals, complementary and alternative medicine (CAM) has become more popular. In 2003, almost six million adults began using CAM as a substitute for conventional health treatment. Colleges across the United States have been hiring masseuses as a way to assist students in de-stressing either before finals, or as an option throughout the entirety of the school year (Schlossberg, 2005).

Zen is a large part of the study and performance of Shiatsu. Zen can be translated into "meditative state," but many use the word as a substitution for the word "peace" or "peaceful." Shiatsu massage is meant to relax the body, mind, and spirit, and Zen requires a calm mind and relaxed body. Shiatsu massage is a physical manipulation that was developed in Japan and is one of the oldest forms of medicinal treatment in western civilization (Masunaga, 1977). While it is considered a medicinal substitute in America, it was not until recently that

Shiatsu massage became used solely for medical purposes. Some therapists even suggest that the pressing used in Shiatsu can cure all diseases. Most Shiatsu instructors today mainly teach Shiatsu as a home remedy rather than an actual treatment.

Stress

Shiatsu massage is important to research and apply to students because it is a method of massage that has multi-dimensional advantages: it can be used in a way that students can enjoy the benefits of a more calm body, mind, and spirit. The Center for Disease Control (CDC) reports that 4% of the United States population uses prescription sleeping pills. While 4% seems like a small percentage of the population, it is actually around nine million individuals. Experts believe that there are millions more that simply buy over-the-counter sleep aids or try other home remedies (<http://www.nydailynews.com/life-style/health/cdc-9-million-americans-sleeping-pills-article-1.1441778>). I believe that most of these could be prevented if people were able to be less stressed. If a person is constantly irritable, angry, or anxious, it could be impossible to get a restful night's sleep.

The American Psychological Association conducted a four year-long study on individuals experiencing chronic stress to determine what individuals personally felt originated their stress. On average, between 2007 and 2010, 73% of the participants felt stress due to money, and around 72% over the four year period claimed their stress was due to work. Forty-four percent of Americans claim that in the past five years, their stress levels have increased (American Psychological Association, 2011). One of the dangers of internal stress is that it begins to manifest itself physically over time if not treated. According to the same American

Psychological Study, between the years 2007 and 2010 the largest symptom of chronic stress is irritability or anger. Next on the list is fatigue, lack of energy or interest, and fourth is feeling nervous or anxious (See Figure 2; symptoms <20% were excluded).

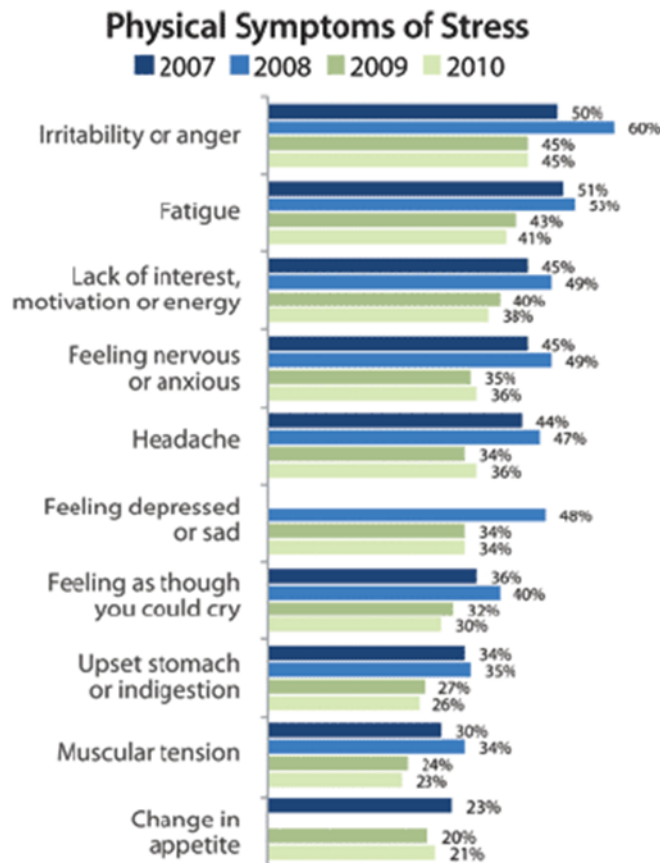


Figure 2

At a mid-sized University a study was conducted on perceived stress in students. The data from that research concluded that 69.6% of the students in the study perceived that they were chronically undergoing moderate to high stress (Ying & Lindsey, 2013). The results from this particular study showed that students who perceived that they had “lower stress” engaged in health promotion practices “routinely,” while the students who perceived they had “higher stress” were less likely to participate in health promotion practices. This sample was taken from

college students, and since the results yielded that almost 70% of these college students were stressed either moderately or highly, it is vastly relevant to Eastern Kentucky University students. Being constantly stressed is detrimental to one's health. This researcher felt that it was immensely important to Eastern Kentucky University students to have access to a healthy alternative to combat these high levels of stress. The researcher was interested to see if a significant amount of Eastern Kentucky University students also perceived these high levels of stress. Treating and relieving stress in college students should be a high priority due to its harmful effect on the body both physically and mentally, and Shiatsu massage has been used for thousands of years to relieve such tensions (DePalma, 2007).

It is important to be made aware of how the student body at Eastern Kentucky University perceives their personal stress levels comparatively with other universities. It is also important to note how to decrease these levels of stress as to have a healthier, aware, and overall happier student body. Although this is only a small convenience sample from the university, a considerable amount of data can be obtained through this small group of individuals. Also, this data could be expanded upon further if the university had an on-campus masseuse.

Methods

A survey was conducted on Eastern Kentucky University's Shiatsu 1 Massage Class, otherwise known as PHE 390. The surveyor explained that the survey was being used to study the effects of Shiatsu massage in college students and how it relates to their stress. The survey is entirely based upon their own perception and judgment. The surveyor then explained that

they planned to use the overall class opinion to aid in research and that the survey responses will be presented in a final presentation on the findings, but their personal answers and identities will remain completely anonymous. International Review Board (IRB) approval was obtained. Consent was obtained by the student filling out the survey and returning it.

The survey contained nine questions and included both quantitative and qualitative questions regarding the students' feeling about the Shiatsu massage class and how it personally affected their levels of stress. The group I chose to survey was a convenience sample since they were enrolled in an on campus class. I distributed 23 surveys and received 20 back with answers. The questions were solely based upon the students' perception of their own personal methods and experience (See Appendix A).

Results

The first question I asked was "Do you consider yourself stressed because of school?" The answer options were "Yes", "Sometimes", and "No." A total of 8 students answered "Yes", 10 answered "Sometimes" and 2 answered "No". This shows that 90% of the students in the classroom felt they are either sometimes or always stressed due to school and only 10% do not consider themselves stressed because of school (See Table 1).

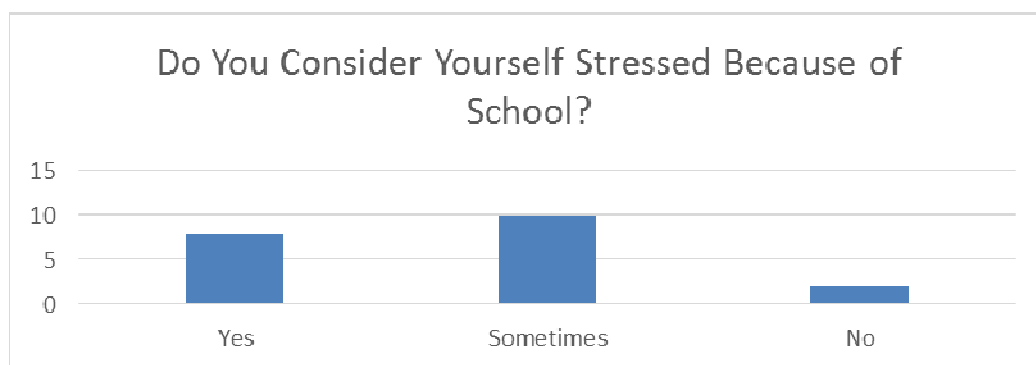


Table 1

Question 2 asked “If so, to what degree do you feel stressed?” This question contained a scale 1-5 to which the student could gauge their level of perceived stress. The number 1 indicated “very rarely” then number 3 indicated “occasionally” and the number 5 indicated “all the time.” Only 3 students reported to being stressed less than occasionally, and 10 students (50%) perceived that their stress ranked a 4 or 5 (See Table 2).

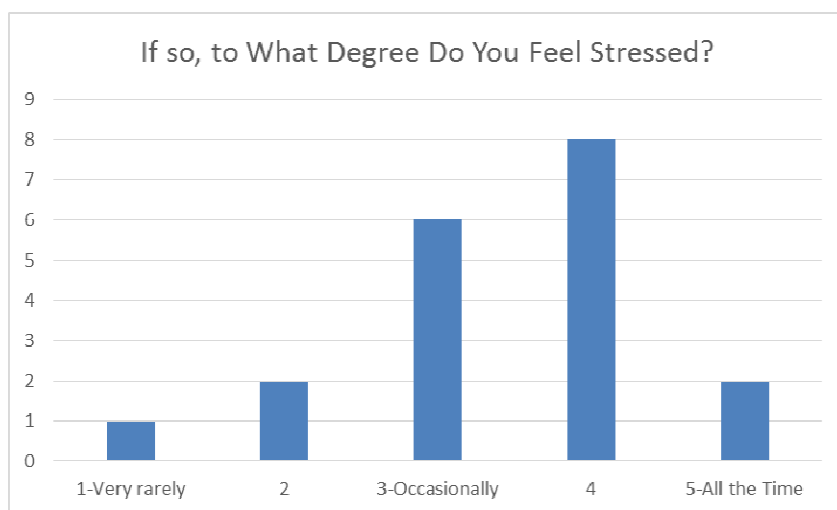


Table 2

Question 3 was qualitative and asked how the students cope with the stress they experience. Many of the students had more than one coping mechanism listed. The categories were then sorted into 7 overall groups (See Table 3 and Figure 1).

Sports/exercise	23.3%
Play video games/watch television/listen to music	20.0%
Talk to people	13.3%

Sleep	13.3%
"Hang out" with family/friends	13.3%
Writing/reading	10.0%
Do not stress	7.0%

Table 3

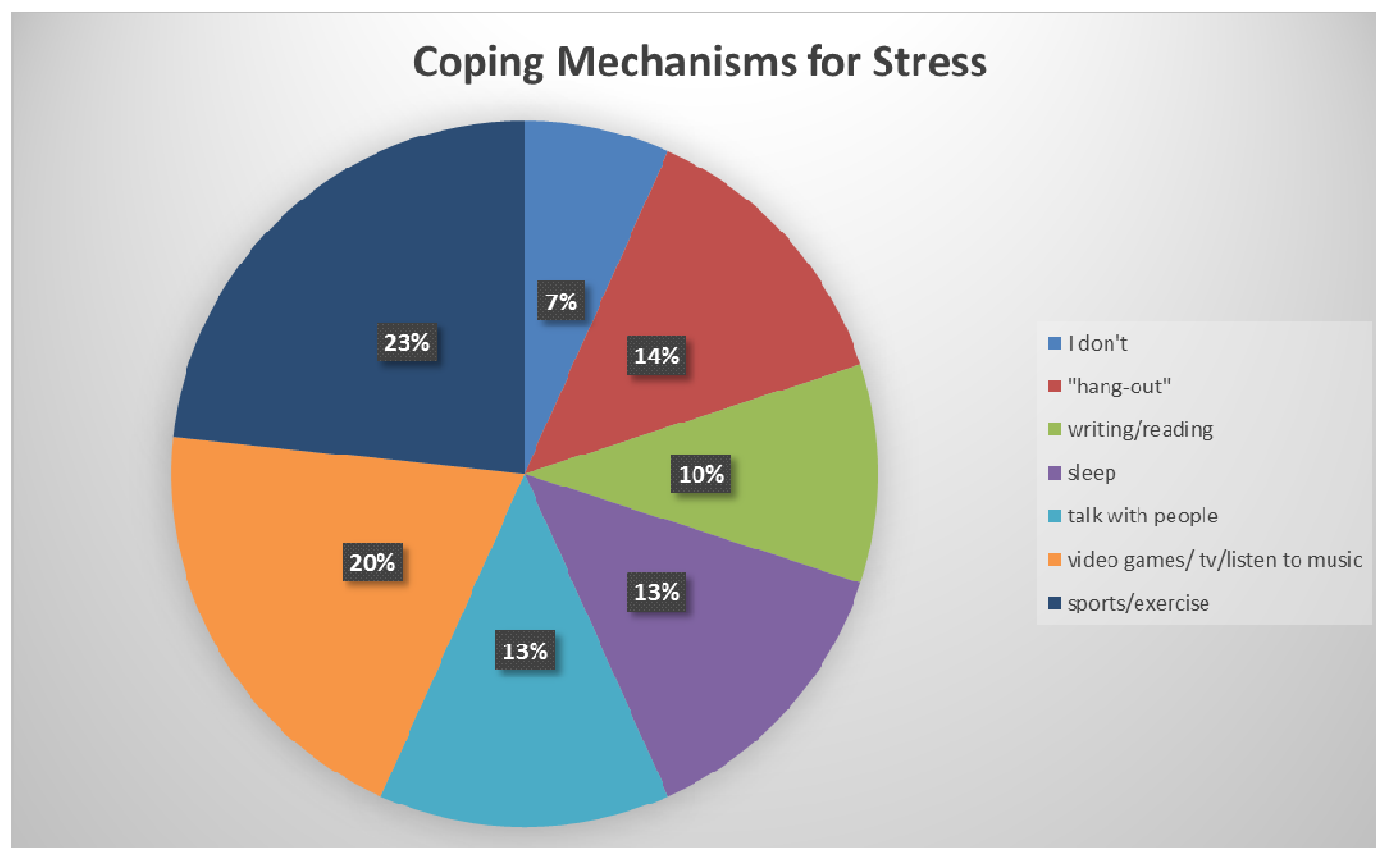


Figure 1

Question 4 asked whether or not the students felt that their coping methods were an effective way of coping with stress. One student wrote in "short term," 17 students said that

they felt it was an effective way to cope with stress, and 2 felt that they did not practice effective coping methods (See Table 4).

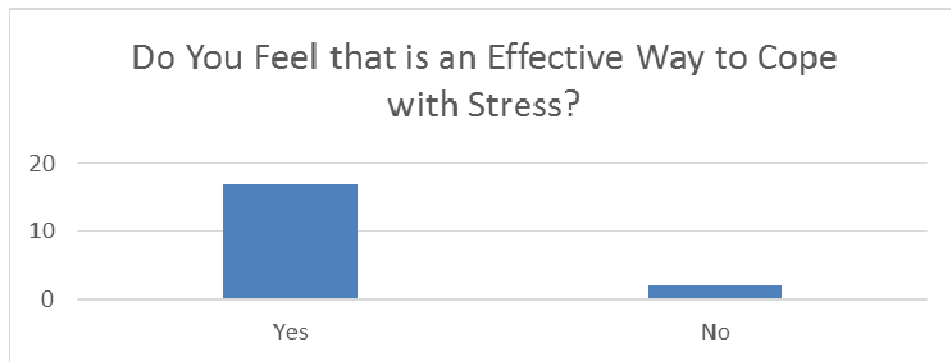


Table 4

Question 5 asked if they felt that their response was a healthy way for them to cope with stress. Again, 17 students said that they felt their coping mechanisms were healthy, and 3 students said they felt their methods were not healthy (See Table 5).

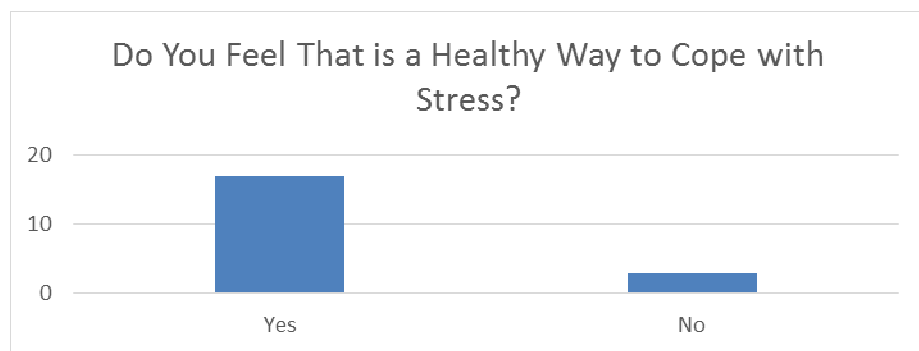


Table 5

Question 6 asked if the students enjoyed the shiatsu massage class. It was a quantitative question with a scale from 1 to 5. One indicated "No! I hate it." 3 indicated "It is ok." And five indicated "Yes! I Love it." No students marked a "1" or "2." Four students claimed that "It is ok." Nine students marked a "4" and seven students love the class (See Table 6).

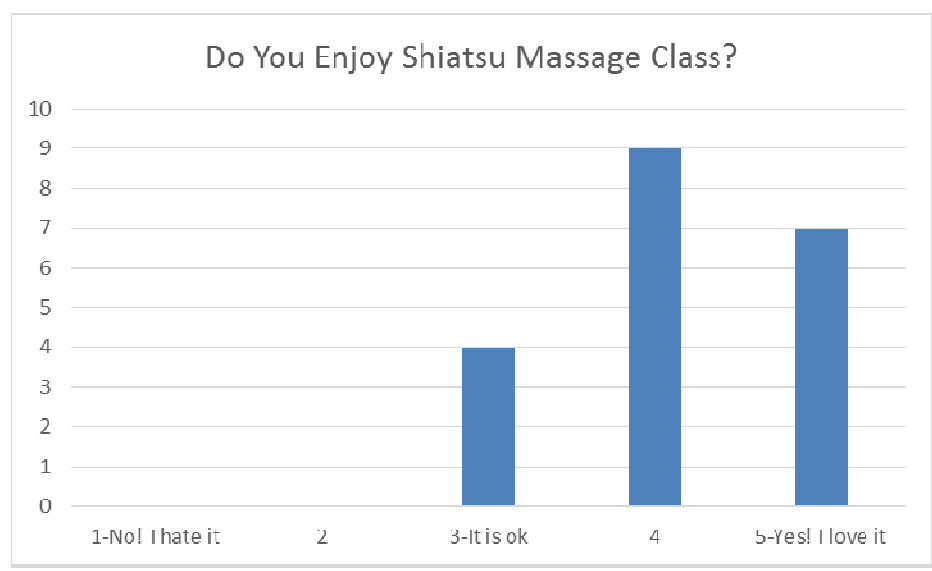


Table 6

Question 7 was another quantitative question that asked, "If you are stressed when coming to class, how does your stress level change?" A scale from 1-5 was used to determine their perceived stress level change. "1" indicated "Much more stress." "3" indicated "Remains the same." And "5" indicated "Much less stress." The results were that one student felt much more stress, one student selected that they were a "2." Six students reported that their stress levels remain the same. And twelve students felt that they experienced less stress (See Table 7).

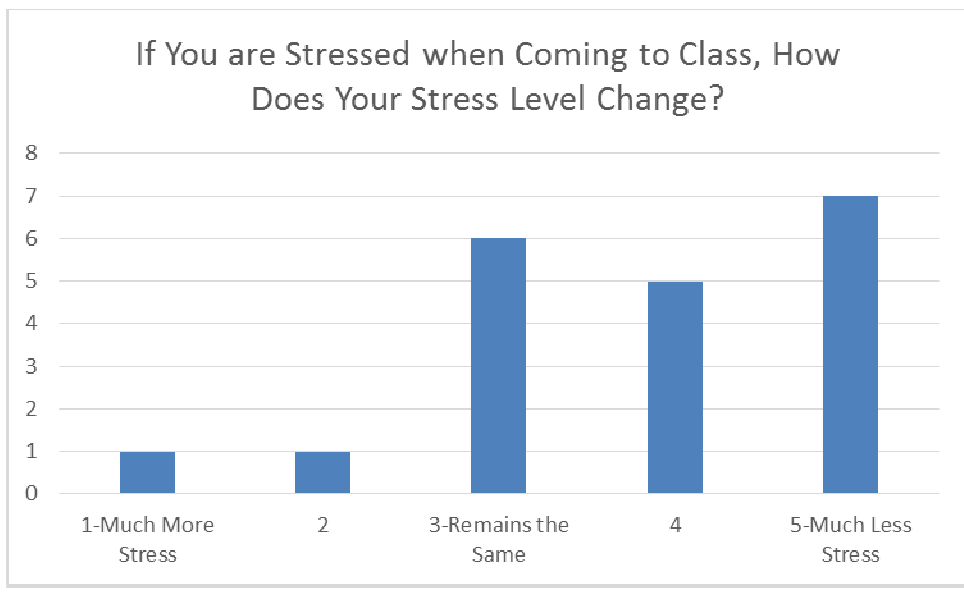


Table 7

Question 8 asked “Do you feel Shiatsu Massage is an effective form of stress relief for you?” Seventeen of the students said that “Yes” Shiatsu massage was an effective form of stress relief for them, and three students said that “No” Shiatsu massage was not an effective form of stress relief for them (See Table 8)

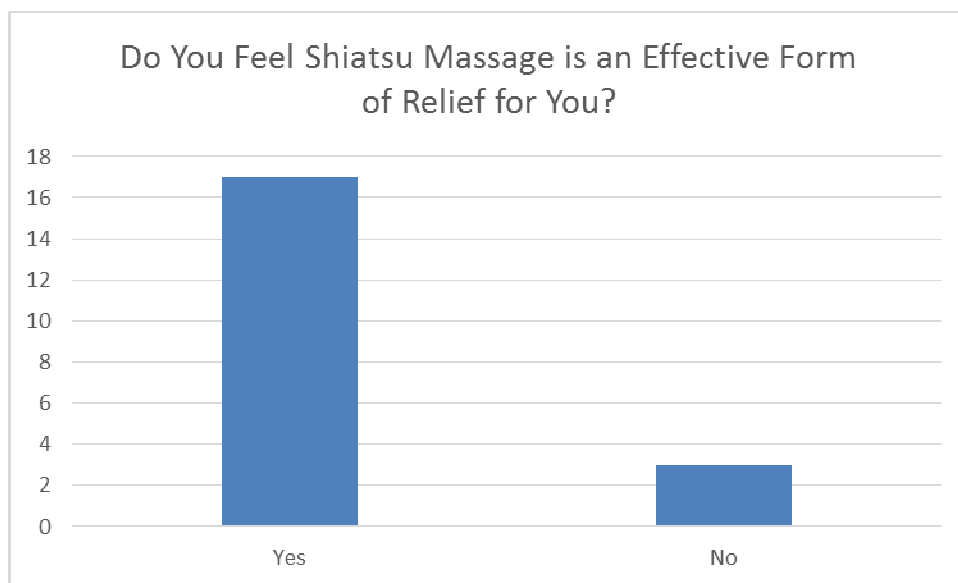


Table 8

Question 9 asked “If free massages were available on campus, would you be interested in getting one?” Eighteen of the students replied “Yes” they would be interested in getting a free massage on campus if they were offered, one student wrote in “maybe” and only one student responded “No” they would not be interested in getting a free massage on campus if they were offered (See Table 9).

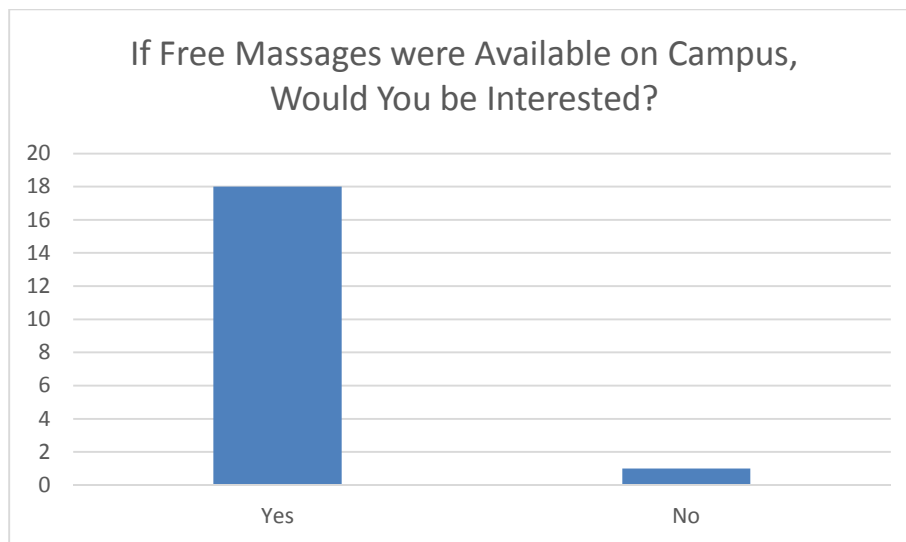


Table 9

Discussion

The survey focused on the perceived levels of stress in college students. Perception is a valid method for analyzing stress, because only the person feeling the stress can measure how much it does or does not affect them.

The results from question one in the study conducted at Eastern Kentucky University stated that eighteen of twenty students, or 90% of the students in the classroom, perceived that they were either sometimes or always stressed because of school. This number is 20.4% higher than that of another study conducted at a mid-sized university (Ying & Lindsey, 2013). The fact that the sample of students at ECU has a higher percentage of stressed individuals than another college is alarming to some degree. While the sample at ECU was much smaller (ECU at 20 students vs. 319 students at other college), the data stands that an ample number of students do indeed feel stressed due to college.

According to question 2, not only do a majority of these students feel stressed, but sixteen of the nineteen that responded claim they feel stress that ranges from occasionally to all the time, and ten of those students ranked their perceived stress at either a '4' or '5' indicating that more often than not, they are under stress. According to the American Psychological Association, chronic stress can be classified as stress that continues for an extended amount of time that interferes with one's ability to live a normal life. Chronic stress can make existing problems seem worse, or cause actual health issues to worsen. Also, individuals that are stressed are more likely to develop unhealthy habits as ways to relieve their symptoms of stress (i.e. smoking or overeating) (<https://www.apa.org/helpcenter/stress.aspx>).

Question 3 was a fill-in-the-blank question that inquired how students cope with stress. Their answers were then broken down into seven cohorts, or groups, that encompassed their answers. Many of the students reported more than one method for coping with stress, so the results were all quantified and averaged to find trends in which methods were most and least prevalent. The groups were broken into: Sports/exercise, Play video games/watch television/listen to music, Talk to people, Sleep, "Hang out" with family/friends, Writing/reading, and Do not stress. While all of these may be considered "appropriate" forms of relief, an error in the survey may have been that students would not feel comfortable revealing their true methods of stress reduction. The survey was anonymous, but if the students had been using illegal means for stress relief or even legal means that are seen as harmful to one's health, then they may not have felt comfortable reporting them for fear of being judged. Regardless of their methods, it seems that they fall short of relieving stress in the students.

Question 4 then asked “Do you feel this is an effective way to cope with stress?”

Seventeen students responded “Yes.” One student wrote in “short term” and only two claimed that their methods of coping with stress were not effective. A majority of the students, eighty-five percent total, responded that their methods of coping were an effective form of stress relief, yet 90% of the students responded that they are stressed because of school in question 1. The answers given by the students are inconsistent. If the students feel that their methods of coping with stress are effective, then the rate at which students are stressed due to school would be far below 90%. In question 5, the students were asked if they feel their methods of coping with stress are healthy. Seventeen of the students responded that their methods of coping are healthy, and three students feel their methods are not healthy. If these students’ methods of coping were in fact healthy, then their perceived amount of stress would not be as high as 90%. According to one study on perceived stress, individuals with a greater emotional intelligence are more capable of “handling” everyday acute and chronic perceived stress (Singh & Sharma, 2012). But what about those individuals that are not necessarily “more likely” to cope with stress well on their own; what are they to do in order to live a more stress free life that does not include medication or substance abuse of any sort?

The remaining questions on the survey were then aimed toward Shiatsu massage class as it relates to stress. Question 6 was quantitative and asked if the students enjoyed the Shiatsu massage class. Every student chose to answer a ‘3’ or higher which indicates between “It is ok” to “I love it!” Since, overall, the students feel it is an enjoyable class, and it is aiding an imperative service (i.e. stress relief), then why not make this class a requirement for freshmen? If this class is indeed a healthy alternative to being under chronic stress, then why not target it

toward one of the most stressed populations on campus early in their arrival to an entirely new and somewhat overwhelming environment.

Question 7 asked the students that if they are stressed when coming to Shiatsu massage class, then how their perceived stress level changes. Studies suggest that Shiatsu massages, when performed on individuals undergoing stress or other stressful environments, can significantly reduce the amount of stress that person is enduring. Shiatsu massage relaxes the mind and body, and over time has been proven effective on overall stress relief and mood enhancement. A recent observational study (Long, 2008) examined the effectiveness of Shiatsu massage on a Cross- European sample. The members that participated in the study were people that suffered from stress, tension, and issues with muscles. There were a total of 948 participants, and the study's results revealed that receiving Shiatsu massages for a 3-6 month time frame significantly reduced their symptoms of stress and provided relief. Although the sample from Eastern Kentucky University's Shiatsu massage class consisted of only twenty people, critical data can still be gathered from this study. When the survey was conducted, the class had been meeting once a week for about two months, and already the student reported experiencing less perceived stress after participating and receiving Shiatsu massages. Twelve of the students reported that they experienced less stress, seven of which claimed to feel "much less stress." Six of the students reported that their stress remained the same upon going to Shiatsu class, and only two students felt more stressed once participating in Shiatsu massage class.

The study could have been further expanded upon had the surveyor returned to the class with the same survey months later to see if results varied after the students received Shiatsu massages for a longer period of time. One of the limitations of this survey was the fact that there was such a short amount of time that data could be gathered and analyzed. Another limiting factor would include that EKU's Shiatsu massage class has only one section available per semester and is a moderately sized class since there is only one faculty member that instructs the class.

Question 8 in the survey asked if the students feel that receiving Shiatsu massage provides an effective form of stress relief for them personally. Not only has Shiatsu massage been used in treating stress in the physical aspect, but is it already being used as a mental stress relief aid. For example, after the attacks on the World Trade Center on September 11th, 2001, individuals involved that were psychologically affected were treated with Shiatsu massage as a way of reducing stress and facilitating coping with the incident. These individuals suffered from symptoms such as anxiety and insomnia, along with a number of other disruptive conditions that made it nearly impossible to perform even daily tasks. Thirty-three percent of those that underwent the acupressure of Shiatsu massage were more relaxed and able to sleep more, and seventeen percent of the individuals felt that their stress had been reduced (Sommers, Porter, & DeGurski, S., 2013). Stress manifests itself physically as previously seen in Figure 2. Regardless if it is acute or chronic stress, stress is indeed a problem that, as seen in this sample, nearly all college students fall victim to.

In the survey conducted on the Eastern Kentucky University Shiatsu massage class, seventeen of the twenty students felt that Shiatsu massage is an effective form of perceived stress relief. This equates to 85% of the students in the class. Although this is a small sample of the entire university, eighty-five percent is a significant amount of the sample. An interesting question to ask the students would have been how they personally feel they physically react to being under acute to chronic stress.

As seen in Figure 2, fatigue was the second largest physical symptom of stress. Students, who often undergo stress, as the results from the EKU sample showed, have been the focus in some studies involving Shiatsu massage and its effects on the physical symptoms of stress. In a single-blinded, randomized, cross-over trial Shiatsu massage was used to aid in mental alertness and the alleviation of fatigue in students in the classroom setting (Harris, Jeter, Chan, Higgins, Kong, Fazel, Bramson, & Gillespie, 2005). Students involved in the study expressed that they experienced a reduction in negative symptoms (i.e. less fatigue, less stress, more relaxed) after receiving Shiatsu massage. Two treatments over three different periods of time were given. The two types of treatments given were a relaxation session and a stimulation session. They were provided for a total of 39 students.

The sample in this study was almost double that of the Eastern Kentucky University sample, but has only nineteen more students involved. However, the students at EKU only receive one type of treatment, on a weekly basis, in Shiatsu massage. The objective of the students receiving two separate types of treatment was to determine the effects of the treatments on mental alertness and fatigue in a classroom setting. There were minimal side

effects; however, they did not negatively affect the overall results of the study. Blinding in the study may have been imperfect throughout this study in that some students were able to guess which form of treatment they were receiving, this too, did not seem to show any statistical significance throughout the trial though. This article is valid when testing the effects of Shiatsu massage (acupressure) in stressed college students in that the study incorporates extraneous variables that college students encounter that may adversely affect the outcome of the trial, so further research is needed to fully prove that acupressure (Shiatsu massage) stimulation and relaxation are uniformly efficient in alertness in a classroom setting.

Since over three-fourths of the Eastern Kentucky University sample claimed that Shiatsu massage was an effective form of stress relief, and none of the students in the sample reported to disliking Shiatsu massage class, then why is it not being used more on Eastern Kentucky University's campus? According to an article in the *Lexington Herald-Leader* newspaper from Lexington, Kentucky, complementary and alternative medicines have become more popular throughout the last fifteen years to ease stress in patients. Weaver reports that 60%-80% of doctor visits each year are related to conditions due to stress (Weaver, *Lexington Herald-Leader*, 10/24/2013).

Other hospitals have been using stress relief techniques throughout. Shiatsu massage was also used in a military hospital and the patients receiving the massage were asked to give their perceived feedback on how the massages affected them (Duncan, Liechty, Miller, Chinoy, & Ricciardi, 2011). The article focuses on the feasibility of complementary and alternative medicine (CAM) on a number of health care workers and then discusses their perception of the

effectiveness on their levels of stress and relaxation. This study was conducted at a States Department of Defense hospital, and the patients were health care workers that self-evaluated the impact they felt the Shiatsu (acupressure) treatment had on their stress-related symptoms.

This study was similar to that of the one conducted at ECU in that it required those receiving the treatment to rate their own perceived stress. The last question on the Eastern Kentucky University survey was that if free massages were available on campus would the students be interested in receiving one. Only one of the twenty students responded “no.” One of the most enticing aspects of complementary and alternative medicine is that it focuses on the holistic approach of healing, and relies less on medications. Shiatsu massage is meant to promote healing simply through touch and massage up the ying meridians and down the yang meridians on the tsubos. For college students, this is especially beneficial due to the low required cost.

In the study at the military hospital, the more sessions that the patients attended the better they felt and more prevalently they noticed the positive effects. The study concluded that acupressure sessions, specifically targeted toward stress reduction, is very feasible and can improve stress reduction, mood, and even lifestyle. The difficulty of replicating the results of this research would be meeting with patients as often as they would want. Also, asking/requiring the patients to exercise more and eat a more balanced diet could be quite impractical due to meal plan requirements or busy school and work schedules. This trial is relevant to the research conducted at ECU in that it measures the stress of the clients, and it is done so in a self-evaluating manner alongside measuring the exterior variables that may affect

the results of the study. Regardless, Shiatsu massage is a cost-effective alternative to students feeling chronically stressed.

What is Next

A number of universities across the United States employ a massage therapist specifically for the use of the students that need stress relief. The University of Pennsylvania in Philadelphia is one such school (Schlossberg, 2005). The wellness coordinator for the college states that “We’re in charge of keeping the students healthy, so they can perform academically.” The wellness coordinator claims that the massages have worked wonderfully for the university, but in that specific scenario, the university hired an outside masseuse to visit the school, and the students were charged for the treatment sessions. Eastern Kentucky University no longer employs a masseuse for student purposes, according to a faculty member I spoke to through the Campus Recreation program.

After receiving results stating that 90% of the sample of students taken from Eastern Kentucky University is stressed, it seems more than necessary that there needs for a positive outlet in which these students can relieve or reduce their stress. Due to the adverse health effects that are onset because of stress, this large volume of students feeling stressed is a public health issue that is occurring throughout the university.

Even if Eastern Kentucky University was to begin with short seminars on self-administering shiatsu massage, this would be a step in the right direction. The EKU study

yielded that students are using a variety of modes for stress relief, but these seem to be ineffective since the majority of the students are still undergoing stress. Even if Eastern Kentucky University employed a masseuse during finals week, this could have a significant impact on the student body's overall mental and physical health. Overall, the students enrolled in Shiatsu massage class enjoy it, so it is quite possible that if more students were made aware of the class then there would be many more interested in enrolling. I have spoken with the instructor of the Shiatsu 1 massage class, and he said that in the fall semester, Shiatsu 2 massage class will be available for students to take for the first time. This will be a positive move for Eastern Kentucky University.

Appendix A

Beginning Survey - Effects of Shiatsu Massage on Stress in College Students

1) Do you consider yourself stressed because of school?

Yes Sometimes No

2) If so, to what degree do you feel stressed?

1 2 3 4 5
 Very Rarely Occasionally All The Time

3) How do you cope with this stress?

4) Do you feel that is an effective way to cope with stress?

Yes No

5) Do you feel that is a healthy way to cope with stress?

Yes No

6) Do you enjoy Shiatsu massage class?

1 2 3 4 5
 No! I hate it It is ok Yes! I love it

7) If you are stressed when coming to class, how does your stress level change?

1 2 3 4 5
 Much more stress Remains the same Much less stress

8) Do you feel receiving Shiatsu massage is an effective form of relief for you?

Yes No

9) If free massages were available on campus, would you be interested in getting one?

Yes No

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