

Yoga for Students with Anxiety: Does it Help?

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## ABSTRACT

Yoga is emerging as a clinical and non-clinical practice across the United States. Many researchers have found positive impacts of using yoga as an intervention to help with mental health issues, specifically to reduce anxiety and stress. This research strives to review the current literature on yoga interventions being used and how these interventions impact the individual. This investigation is designed to determine the benefits yoga has on individuals who participate in the practice. Furthermore, the research will review how anxiety impacts college students and what these symptoms may look like.

The purpose of this research is to explore the effects of a yoga classes on social work students who experience anxiety. This qualitative study will examine the current literature and research revolving around yoga and what effects yoga has when used as an intervention. The goal of the research is to determine if there is an effect on social work students' anxiety while participating in a basic yoga class. After conducting a ten week yoga program with social work students, the impact on their anxiety levels is shown to be positive.

*Key Words: Yoga, Anxiety, College Students, Stress, Coping Skills*

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## **CHAPTER 1: INTRODUCTION**

### **Introduction**

Thousands of people across the United States struggle with symptoms of anxiety on a daily basis. It is estimated that 13% of people are affected by anxiety in their lifetime (Narr & Teachman, 2017). In today's society there are many roles and obligations people are expected to fill. With these roles and obligations often comes stress and anxiety. Anxiety Centre (2016) further reports that the number of people in the North America who experience anxiety symptoms are actually much higher (about 30%) than are reported, as many people are misdiagnosed or do not seek treatment for their symptoms.

There are many different treatment options for individuals struggling with anxiety. Some of these treatments include Cognitive Behavior Therapy, Psychotherapy, and Dialectical Behavior Therapy. These models implement skills such as mindfulness and relaxation techniques into the practice. Taylor, Knapp, Bomyea, Ramsawh, and Stein (2017) report that Cognitive Behavior Therapy is a positive treatment for anxiety disorder, however it may not work for everyone. There are many differing opinions among clinicians as to which treatments best help reduce anxiety, among these controversial treatments is yoga.

### **Purpose**

This specific research will focus largely on reducing stress and anxiety by implementing yoga and yoga techniques into life. The purpose of this research is to explore the effects of a yoga class on college students who experience anxiety. This qualitative study will examine the current literature and research revolving around yoga and what effects yoga has when used as an intervention. The goal of the research is to determine if there is an effect on students' anxiety while participating in a basic yoga class. This literature review is designed to examine anxiety

issues among individuals, physical effects of yoga, and what effects yoga has on mental health in order to provide a background of how one might apply the yoga model to students and other individuals who experience anxiety.

## CHAPTER 2- LITERATURE REVIEW

### Literature Review

Anxiety is widespread throughout the United States. Anxiety disorders include symptoms of excessive fear or worry about social, personal or work situations, physical effects that can lead into panic attacks, and increased stress on both physical and mental health, which may affect a person's daily functioning (American Psychiatric Association, 2013). There are several types of anxiety, including separation anxiety disorder, selective mutism, specific phobia, and social anxiety disorder. Thousands of people across the United States struggle daily with coping with these different types of anxiety. "The 12-month prevalence of generalized anxiety disorder is 0.9%, among adolescents and 2.9% among adults in the general community of the United States. The 12-month prevalence for the disorder in other countries ranges from 0.4% to 3.6%" (p. 223). This demonstrates the high number of individuals who struggles with symptoms of anxiety on a daily basis and shows the high need for effective interventions.

Petersen (2016) discusses how this data affects the college student population in detail. She writes about the significant number of college students who are seeking assistance for mental health reasons, specifically stating that 17% of college students nationwide are diagnosed with or have been treated for mental illness during the past year (Peterson, 2016). With already high percentages of anxiety among college students, it also appears that anxiety among college students continues to be on the rise. Peterson (2016) writes that Ohio State University has seen a 43% increase in the past five years of students seeking help from the college counseling centers, and the University of Michigan has seen a 36% increase in the past seven years (Petersen, 2016). The specific reasons for the increase is unclear, but it is speculated that it has to do with the economy, social media, and current parenting styles.

While there are significant statistics showing the high percentages of college students who seek help for mental illnesses, there are many who do not seek help.

Despite the availability of effective mental-health treatment, the majority of people experiencing mental-health problems do not seek help. Globally, the number of people experiencing mental disorders who do not receive any healthcare treatment is estimated to reach up to 70 % (Hanisch, Twomey, Szeto, Birner, Nowak, & Sabariego, 2016, p. 2).

Thus, it is likely that many college students who experience anxiety are in need of better access to receiving assistance in coping with their symptoms. The American Psychiatric Association (2013) reports high suicide rates among individuals struggling with anxiety. Specifically, the American Psychiatric Association (2013) reports a person with specific phobia is 60% more likely to attempt suicide than the general population. SAMSHA.gov (2016) reports that 18- to 25- year olds had the highest rate of alcohol dependence or abuse among all populations in 2014. With there being a suggested link between stress, anxiety, suicide and alcohol use, clinicians and researchers seek to find the best interventions to help reduce the symptoms that accompany these mental illnesses.

Several different clinical strategies have been implemented to assist in coping with anxiety. Psychotherapy, Cognitive Behavior Therapy, Dialectical Behavior Therapy, and medications are among these treatments. These treatments are evidenced based practices used by clinicians across the United States. Yoga and mindfulness techniques have also emerged as beneficial treatments over the past 20 years in the United States. Yoga and other treatments implemented for mental health and physical health are often known as Complimentary and Alternative Medicine (CAM). Yoga can be implemented in many ways, being used as a general practice (student) as well as being implemented into therapy (client) and there are some distinct differences between the two .Krafstow (2014) writes that the yoga student is generally looking

for a form of exercise among others who enjoy similar things, compared to the yoga therapy client who is generally seeking relief from specific symptoms (either physical or psychological). She points out that the yoga teacher is aiming to teach the specific method of yoga in the correct way, as opposed to the yoga therapist, who is assessing the client to implement the appropriate intervention of yoga to best serve the client. Krafstow (2014) further goes into describing that the yoga class is generally aimed toward a specific population and/or specific method and taught in a way for students to best learn how to practice yoga in a safe way, versus the yoga therapy session in which the session is based around focusing on the client's specific symptoms (Krafstow, 2014). Although these are two different perspectives of yoga, Krastow (2014) does point out that the differences between the two often intertwine and people who are in yoga classes often experience therapeutic benefits and vice versa.

There are many different forms of yoga. Yoga techniques can be adjusted to fit most any individual, regardless of their limitations. Among techniques assisting to cope with anxiety, yoga has also been shown to provide great physical health benefits. According to the American Osteopathic Association (2016), some of the benefits yoga can contribute to include increased flexibility, increased muscle strength and tone, improved respiration, energy and vitality, maintaining a balanced metabolism, weight reduction, cardio and circulatory health, improved athletic performance, and protection from injury. Harvard Health Publications (2016) report "Yoga promotes physical health in multiple different ways. Some of them derive from better stress management. Others come more directly from the physical movements and postures in yoga, which help promote flexibility and reduce joint pain" (p.1). In addition to minor pain, yoga and mindfulness activities have also been implemented into Psychotherapy to help treat individuals struggling with chronic pain. Although psychotherapy is a model on its own, often



mindfulness and awareness of the body are implemented during the practice (de Figueiredo & Griffith, 2016). Chronic pain can be very debilitating for individuals who struggle with it. Yoga and mindfulness activities can be adapted to meet the needs and limitations for these individuals. The benefits of yoga on physical health have the ability to be astronomical for an individual's overall wellness.

Another physical health benefit found through a study conducted by Nelson, Reed, and Buck (2014) showed a reduction in resting systolic blood pressure (SBP). The study consisted of a 16 week yoga class for the focus group while the control group had no interventions. The findings of this study were that participants in the yoga program exhibited a greater reduction of SBP than participants in the control group, specifically six tenths of a reduction. Additionally, yoga has been used as an intervention for individuals struggling with obesity. Berman, Morton, and Hegel (2016) report that often when treating obesity the intervention includes weight loss; however, this more often than not leads to weight gain. "Because of the limited efficacy of existing treatments that focus on controlling depression and obesity, researchers have begun to develop innovative interventions that focus on self, body and emotional acceptance as an alternative means to improve physical and mental health" (Berman, Morton, & Hegel, 2016, p.266). Among these alternative treatments, Yoga has emerged as a positive intervention for focusing on the body in ways that people who are restricted to physical limitations can perform.

Yoga has grown to be a stress relieving tool for many people. Harkess, Delfabbro, Mortimer, Hannaford, and Cohen-Woods (2016) conducted a study implementing a 16-session, 8-week yoga class to mostly middle-aged women who generally worked in professional settings. The class was of moderate intensity. In their study, the researchers hypothesized that the yoga class would decrease psychological stress and increase physical health. A total of 46 women

participated in the study, attending at least one (and up to two) sessions of yoga for eight weeks. The researchers' findings demonstrated that participants in the study had overall improvements in positive affect, decreased levels of psychological distress and perceived stress when participating in the class at a minimum of once a week for eight weeks (Harkess et al., 2016, p. 5).

Furthermore, Russinova, Wewiorski, and Cash (2002) executed a study on the perceptions of alternative treatments among individuals who were diagnosed with a Severe Mental Illness (SMI). The responses established that (among many other types of treatment) 43% of participants found implementing meditation into their treatment as beneficial and 20% of participants reported implementing yoga into their treatment as beneficial. Others reported using treatments such as guided imagery, nutritional supplements, aromatherapy and breath work to be beneficial. (Russinova, Wewiorski, & Cash, 2002). Shearer, Hunt, Chowdhury, and Nicol (2016) specifically look into what mindfulness-based stress reduction (MBSR) is and how it can impact college students in reducing stress and unhealthy coping strategies. According to Shearer et al. (2016), mindfulness techniques not only help reduce stress and anxiety, but also increase students' ability to cope with stressful situations in the college environment. In addition, Telles, Gaur, and Balkrishna (2009) found a 14.7% decrease in anxiety their study implementing yoga into a practice group. This indicates complimentary and alternative medicines have been beneficial to many recipients who struggle with SMI and have the potential to be effective treatments for others who struggle with the same issues.

In a study involving the specific population of college students and their experiences with yoga Godse, Shejwal, and Godse (2015) conducted research in Pune, India to study the effects yoga on college students. The students' age ranged from 17-22 and had reported experiencing

high levels of stress. The study included a control group and a focus group. The focus participants engaged daily in Yoga for 14 days. The control group was offered no intervention. Both groups participated in pre- and post-test Relaxation Dispositions (R-disposition). The study concluded the control group reported higher on the R-disposition in areas such as physical relaxation, mental quiet, feeling rested and joy. Whereas, the researchers concluded that the use of yoga in the focus group reduced students' stress, increased mental calmness and joy, as well as reduced sleepiness, worry and negative emotions (Godse, Shejwal, & Godse, 2015).

In another piece of literature specifically regarding college student's enhancement of quality of life, Vilate (2015) writes about a study implementing a yoga class into a college class. The class met two times a week for one hour and fifteen minutes, for one semester. This specific class took place over three semesters, with 20 students in each class. The data collection method was done through reflective journals, in which the participants completed responses to specific questions (Vilate, 2015). The themes that emerged from the data were increased 1) calming; 2) perspective; 3) focus and 4) empowerment (Vilate, 2015). Vilate (2015) concludes from this study that yoga can assist college students in slowing down and gaining greater ability to deal with busy lives.

This review has revolved around many of the different effects Yoga may have on an individual. The discussion reviewed mental health among college students, yoga and physical health, and yoga and mental health. The research points out the need for interventions among college students across the United States and globally. Research continues to strive for more effective studies and conclusions regarding yoga, but according to the current literature, yoga is an intervention that can benefit many populations and should continue to be implemented into clinical and non-clinical practice.

## CHAPTER 3- METHODS

### Methods

As indicated in the literature review, anxiety is prevalent among individuals across the United States. Yoga has been shown to be effective in the majority of the research as an intervention to help reduce anxiety and stress. There is, however, a gap in the research to specifically identify if yoga is beneficial among the specific population of college students, which is what this research seeks to find.

### *Research/Design Approach*

This research uses a qualitative design, with survey methodology, to understand what effects yoga might have on college students who experience anxiety. The study was conducted at a mid-sized university in Central Michigan. This research does not identify a specific hypothesis, rather it is an exploration to identify if there is an effect on college students' anxiety, with yoga being implemented into their weekly routines. The researchers completed all required steps from the University before beginning the study, which included receiving the Institutional Review Board (IRB) approval.

The goal of this research is to determine if college students feel there has been an effect on their self-reported anxiety due to participating in a yoga class. This may include a reduction of anxiety, an increase of anxiety, or anxiety levels remaining the same. Using an inductive method, this research will begin with data and analysis, which may lead to a hypothesis and/or a theory regarding yoga's effect on anxiety.

### *Sampling*

A cross-sectional design was used in this research. The focus group in the study were full-time college students engaging in a weekly yoga class. They were offered the opportunity to

participate in the study through faculty email and flyers, accessing each student. The participants completed the Beck Anxiety Inventory (BAI) and the Generalized Anxiety Disorder 7-Item (GAD-7) scales at the beginning and end of the yoga class. They also completed a pre-survey questionnaire to identify the levels of previous engagement in yoga, physical limitations, and goals for taking the yoga class. In addition to the surveys, the focus group participated in a pre and post interview with the yoga instructor/researcher. The researchers also polled a control group of two classes to complete the pre and post surveys of the BAI and GAD-7, as well as the questionnaire.

### *Data Analysis*

Through the surveys in this research, researchers collected data at a micro unit of analysis. The researchers analyzed and described all of the data provided through each individual survey. A transcription was then created from the focus group interviews from both pre and post yoga class. The study took place over the course of one semester lasting ten weeks. Ten students started the yoga class as the focus group, with three students completing at the end of ten weeks. Students ranged between second year sophomores and graduate students. The control group of students was comprised of 25 students, ranging between first year freshmen and fourth year seniors. Both the study group and control group were administered the BAI and GAD-7 surveys during the same period throughout the semester.

## CHAPTER 4- RESULTS

### Results

The results of the BAI and GAD-7 were formed from the three students in the focus group who completed both pre and post-tests as well as the twenty control group students who completed both tests. The transcription data was collected from a post session held by the yoga instructor/researcher and the students completing the yoga class. Although the number in the focus group participating in the study was limited at the end of the study and the data collection was minimal researchers were able to obtain valuable information.

The results showed that none of the students in the control group had an increase in the GAD-7 at the end of the semester. 66% of the focus group actually had a reduction in the GAD-7 when completing the post test. Specifically, all students who completed the post GAD-7 had a reduction of “feeling afraid” and two of the three students reduced “excessive worry” and “too much worry”. With this being significant data to report, there was much more valuable data obtained from the BAI.

As with the GAD-7 both control group and focus group completed the BAI pre and post-tests. In the focus group two students completed both tests from the BAI and twenty students completed from the control group. The results in the focus group remained similar throughout the post tests. 50% of the focus group had a reduction of “being unable to relax”, “feeling terrified or afraid”, “fear of losing control” and “indigestion” while 50% of them remained the same.

None of the students in the focus group had an increase in anxiety symptoms on the BAI, as opposed to the control group. Of the twenty people in the control group who completed the BAI both pre and post-test 50% had an increase in overall score. Of the 50% who experienced an increase in anxiety symptoms five people had an increase in “wobbliness in legs”, seven increase

in “fear”, eight increased in “feeling terrified”, and six increased in “feeling scared”. As many college student’s stressors increase at the end of the semester (when the post test was distributed), this data indicates implementing interventions, such as yoga, may assist in student’s ability to cope with stress and anxiety.

The transcription of the open dialogue between instructor and students at the end of the semester also provided valuable information. At the beginning of the dialogue the instructor had asked the students what had motivated them to complete the yoga class for the entire semester. All students reported it being “helpful”. Specifically, one student reported, “I knew it was good for me because I felt it during the whole week, at least during the day of our yoga on Tuesday. I just felt like, relaxed the whole day and kinda grounded and ready for the day”. Students also indicated it was more helpful during the end of the semester stating the stress levels increase with the amount of work at the end of the semester. They stated Yoga was a way to relax from that stress, at least during the period of the class.

Furthermore, the instructor asked the students if they found that participating in the Yoga class had helped with anxiety and being able to relax. All students indicated they found it helpful. One student specified they were not only able to find it helpful during class, but had also started implemented it in other areas of their week such as in other classes and at their internship. One student stated, “I feel it did help. I mean I had recent events that it just increased my anxiety. Like all the time, but I mean I feel like it would have been worse if I wasn’t doing yoga. So I do feel like it helped even in just like a little bit so definitely for sure”. It was also reported there were additional benefits of participating in the yoga class, such as physical strength and learning to cope ahead for stressful situations. Specifically a student reported, “It also helped me build my upper body strength and I felt stronger not just my body, but my mind also felt stronger

and I was able to calm myself. If I felt the anxiety come I'd just start doing some deep breathing or child pose in class I've done that a couple times". The students specified being "more focused" and practicing "better self-care". One student described taking time to put themselves first, instead of putting other people needs in front of their own. Another student reported they felt more comfortable in public, crowded areas and found themselves interacting more with others than they had in the past.

The overall results of the study proved positive. Although not every student participating in the focus group had a reduction of anxiety symptoms, there were no shown increases. All students either reduced their symptoms on the GAD-7 and BAI, or remained the same. This was not true of the control group, in which 50% of participants scored higher in overall scores on the GAD-7 and the BAI. The open dialogue with the students showed positive results across the board. The students as a whole felt the yoga class was helpful and was useful in reducing anxiety and increasing focus and self-care.



## CHAPTER 5- DISCUSSION/LIMITATIONS

### Discussion

Anxiety has become widespread throughout the United States. Thousands of people struggle with symptoms of anxiety on a daily basis. There have been many coping methods implemented into clinical practice to assist individuals who are coping, or struggling to cope, with anxiety. Anxiety causes physical and mental health distress to these individuals. They deal with the mental illness in all aspects of life. Researchers and clinicians have sought to find more effective methods to assist these individuals. One of the methods that has been adopted to assist with anxiety is yoga.

As the research shows, yoga has benefited many people who struggle with stress and anxiety. College students are among this population of people. This research has indicated the vast benefits yoga can provide to these students, including increased physical health benefits, decreased stress, and increasing the ability to focus and care for one's self. Stress and anxiety tends to rise among college students toward the end of the semester. If students do not have the ability to cope with stress and anxiety in a healthy manner, their symptoms may increase and become worse. This was proven between the overall scores of the control group and focus group in this study. The focus group participated in a yoga class, which helped them cope with stress and anxiety in a healthy manner, leading to overall scores on GAD-7 and BAI that decreased or remained the same. The control group did not participate in the yoga class, leading to 50% of participants reporting an increase in anxiety symptoms.

Although the results were limited in this particular study, which may influence the reliability of the data, there was still valuable information obtained. Even considering the small group of focus participants who completed the semester, there were no increases in anxiety in

either the GAD-7 or the BAI. This differs quite radically from the control group in which 50% of the participants had an increase in anxiety by the end of the semester.

The control group had no interventions implemented in the study to assist in coping with their anxiety symptoms. This indicates that students who did utilize Yoga as an intervention benefited by either reducing anxiety, or remaining the same. More specifically, the control group with the highest increase in anxiety were sophomores and juniors, ranging from a four point increase to a nineteen point increase in overall scores. This may indicate this specific group of students may not deal with stress and anxiety as upper class students. This group may need more assistance or interventions to learn coping strategies to deal with stress and anxiety, which may be an area for future research.

Another contributing factor to the focus group results may come from the indication that they not only participated in the yoga class research, but also started implemented the techniques into everyday life. The students reported using yoga techniques in other areas of their lives, outside of the yoga class. This is common among individuals who learn to utilize yoga. They often find themselves utilizing the techniques in many other areas of their lives, which helps them reduce stress and cope with difficult situations.

The literature and research in this study both show positive results for college students who utilize yoga as a coping tool to help deal with the symptoms of anxiety. Although the focus results were limited by number, there does appear to be some evidence to show that the yoga class did have positive outcomes on the participants. This was proven through the data collected from the GAD-7 and the BAI, as well as the open dialogue between instructor and students. As clinicians strive to find the most effective treatments for anxiety, Yoga is certainly emerging as an ideal option.

## **Limitations**

There are limitations to this research. As the research is targeting a population of students with many other obligations, the sample size was minimal. As college students have busy schedules and busy lives, there are many different factors that may have interfered with their attendance and completion of the yoga class. Noting there was a small sample of participants, the researchers analyzed the data to reflect the most useful information, with a focus on the qualitative discussion. The study also took place over the course of two semesters, which is short term. This factor may have contributed to issues with reliability of the data. To rectify these issues, the researchers may choose to extend the study to other semesters, which will increase the number of participants included in the study.

Ethical issues to consider include the researchers' roles in the yoga class. As the researchers are part of the student body and faculty of the university where the study was held, there was the possibility that participants might have felt obligated to complete the course and the surveys. To avoid these issues, the participants were given a consent to sign, which informed that their participation in the yoga class or research will not affect their grade or status as a student. The data was also collected anonymously and held in a secure area in order to prevent any breaches of confidentiality.

## CHAPTER 6- IMPLICATIONS AND RECOMMENDATIONS

### Implications and Recommendations

There are many areas where college students experience stress and anxiety throughout their college careers. Often students are leaving home for the first time, experiencing life from a completely different perspective, have limited supports, and are making important decisions on their own for the first time. As the research shows there is vast amount of college students who experience anxiety, specifically 17%. This indicates a high need to access to interventions that will help deal with the stress and increase coping skills. Although many universities and colleges offer mental health services, research also shows students are less likely to seek out treatment, possibly due to stigma.. Hanisch, Twomey, Szeto, Birner, Nowak, and Sabariego (2016) report it is soon estimated that the number of individuals who do not seek treatment for mental health issues is soon to reach 70%. So the question emerges, what can be done to help these individuals?

Yoga is becoming a very viable option as a treatment method and intervention to help deal with stress. Yoga will specifically benefit those who do not seek out treatment, as people do not stigmatize yoga to the extent that mental health treatment is stigmatized. College students may be more likely to engage in a yoga class to learn to deal with stress than seek out treatment at the local university or college clinics. If yoga classes were to be implemented on campuses across the United States, the rising number of students experiencing anxiety may start to decrease.

Throughout this study the researchers found many gaps in the literature. As this specific study indicated the highest number of students who reported increases in anxiety symptoms were sophomores and juniors, ranging from a four point increase to a nineteen point increase in overall

scores. This may be an area recommended for future research. It is unknown why this specific group of students had such high increases in scores. It could be due to a heavier class load, or more personal stressors. Whatever the reason may be, this may be a specific area in which more interventions may need to be implemented to help these students deal with the stressors in their lives and cope with symptoms of anxiety. As this research was limited in participants it is also recommended future research strive for larger participant numbers in order to retrieve reliable and valid data.

## CHAPTER 7- CONCLUSION

### Conclusion

This research has revolved around the many different aspects of anxiety symptoms and the difficulty people face on a daily basis while dealing with anxiety. The literature reviewed how Yoga can help with these symptoms. The specific population of college students and how anxiety and stress may impact their daily lives was also reviewed. The research shows yoga has been an effective intervention to assist in coping with stress and anxiety. This specific study sought to learn how yoga may impact college students who experience anxiety. The findings showed overall positive results for the focus group compared to the control group in the study. Taking into account the current literature that exists, as well as this specific study, it is evident that yoga is finding it's place in mental health treatment. Researchers and clinicians continue to strive for the most effective treatments to help treat anxiety and it appears yoga becoming a fast contender.

## REFERENCES

- American Psychiatric Association. (2013). *Diagnostic and statistical Manual of mental disorders*. (5<sup>th</sup>ed). Washington, D.C.; Author.
- Anxiety Centre. 1 November 2016. <https://www.anxietycentre.com/>.
- Berman, M. I., Morton, S. N., & Hegel, M. T. (2016). Health at every size and acceptance and commitment therapy for obese, depressed women: Treatment development and clinical application. *Clinical Social Work Journal*, 44(3), 265-278.  
doi:<http://dx.doi.org.ezproxy.ferris.edu/10.1007/s10615-015-0565-y>.
- de Figueiredo, J.,M., & Griffith, J. L. (2016). Chronic pain, chronic demoralization, and the role of psychotherapy. *Journal of Contemporary Psychotherapy*, 46(3), 167-177.  
doi:<http://dx.doi.org.ezproxy.ferris.edu/10.1007/s10879-016-9331-x>.
- Godse, A. S., Shejwal, B. R., & Godse, A. A. (2015). Effects of suryanamaskar on relaxation among college students with high stress in Pune, India. *International Journal of Yoga*, 8(1), 15–21. doi 10.4103/0973-6131.146049.
- Hanisch, S. E., Twomey, C. D., Szeto, A. C. H., Birner, U. W., Nowak, D., & Sabariego, C. (2016). The effectiveness of interventions targeting the stigma of mental illness at the workplace: A systematic review. *BMC Psychiatry*, 16 Retrieved from <http://search.proquest.com.ezproxy.ferris.edu/docview/1767656938?accountid=10825>.
- Harkess, K. N., Delfabbro, P., Mortimer, J., Hannaford, Z., & Cohen-Woods, S. (2016). Brief report on the psychophysiological effects of a yoga intervention for chronic stress: Preliminary findings. *Journal of Psychophysiology*,  
doi:<http://dx.doi.org.ezproxy.ferris.edu/10.1027/0269-8803/a000169>.

- Harvard Health Publications (1 November, 2016). Harvard Medical School. Retrieved from <http://www.health.harvard.edu/exercise-and-fitness/physical-benefits-of-yoga>.
- Krafstow, G. (2014). Yoga Therapy: The Profession. Perspective The Distinction Between a Yoga Class and a Yoga Therapy Session. *International Journal of Yoga Therapy*,(24).
- Narr, R. K., & Teachman, B. A. (2017). Using advances from cognitive behavioral models of anxiety to guide treatment for social anxiety disorder. *Journal Of Clinical Psychology*, 73(5), 524-535.
- Nelson, D., Reed, J. e., & Buck, S. M. (2014). Effect of a 16-Week Yoga Program on Blood Pressure in Healthy College Students. *Physical Educator*, 71(3), 533-544.
- Petersen, A. (2016). College students flood mental-health centers. *Wall Street Journal*  
Retrieved from <http://search.proquest.com.ezproxy.ferris.edu/docview/1827570802?accountid=10825>.
- Russinova, Z., Wewiorski, N. J., & Cash, D. (2002). Use of alternative health care practices by persons with serious mental illness: perceived benefits. *American Journal Of Public Health*, 92(10), 1600-1603. doi 10.2105/AJPH.92.10.1600.
- SAMSHA. (18 October, 2016). Retrieved from <http://www.samhsa.gov/school-campus-health>.
- Shearer, A., Hunt, M., Chowdhury, M., & Nicol, L. (2016). Effects of a brief mindfulness meditation intervention on student stress and heart rate variability. *International Journal of Stress Management*, 23(2), 232-254. Retrieved from <http://doi.org/10.4103/0973-6131.146049>



<http://search.proquest.com.ezproxy.ferris.edu/docview/1721921991?accountid=10825>

Taylor C. C., Knapp, S. E., Bomyea, J. A., Ramsawh, H. J., Paulus, M. P., & Stein, M. B. (2017). What good are positive emotions for treatment? Trait positive emotionality predicts response to Cognitive Behavioral Therapy for anxiety. *Behaviour Research & Therapy*, 936-12.

Telles, S., Gaur, V., & Balkrishna, A. (2009). Effect of a yoga practice session and a yoga theory session on state anxiety. *Perceptual & Motor Skills*, 109(3), 924-930.

Villate, V. v. (2015). Yoga for College Students: An empowering form of movement and connection. *Physical Educator*, 72(1), 44-66. Retrieved from <http://web.b.ebscohost.com.ezproxy.ferris.edu/ehost/detail/detail?sid=10a5d37b-a8da-4ae3-af3e-34a5abb72981%40sessionmgr107&vid=0&hid=125&bdata=JnNpdGU9ZWZWhvc3QtbGl2ZQ%3d%3d#AN=100606336&db=eft>