The Effects of Yoga on College Students

Research Thesis

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By

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Intro

My senior distinction project focused on the effects of Yoga on college students. I created an IRB approved study that surveyed college students participating in Yoga to monitor their progress in the class and see if any effects were occurring mentally or physically. My purpose with this study was to gain clarity on whether yoga could be a safe and effective outlet college students could utilize to release stress and tension throughout a semester.

Relationship to the Field

I began my yoga journey the summer of my junior year when a 200-hour yoga certification was offered at the department of dance at Ohio State. Before this I had taken a couple of yoga classes, but never immersed myself in the practice, and always had the ambition to. While completing my yoga certification, I began to connect with the breathing of yoga and how it would help me stretch muscles that had been sore or tight from previous dance classes. Other participants in the class were also feeling an effect from doing yoga every day and began to discuss how this could have a positive effect on other college students.

From this discussion, I became interested in creating a study to answer the research question of if yoga would affect college students. From the knowledge I learned in dance science I was able to create a research protocol that included the objectives, rationale, procedures such as research design, sample, measurement, and the detailed study procedures to obtain an approved study from the Institutional Review Board (IRB). During this process of acquiring approval, I became certified in Human Subjects Protection, Conflict of Interest, and Responsible Conduct of Research training to work with human participants.

My relationship to both yoga and dance research that developed throughout my time at Ohio State was my purpose for pursuing this project in hopes of finding healthy ways college students can release stress mentally and physically through the practice of yoga.

Description of Research

My research focused on the practice of Yoga and analyzed the question “Can Yoga have an effect on college students mentally or physically throughout a semester?” I was curious if continuous repetition of yoga for 14 weeks (about 3 months) throughout a semester could impact a college student's life, specifically looking at the healthy ways students can channel stress and tension that builds up throughout a semester. To obtain the best results for my study, I wanted to get the personal experiences of the student throughout the semester, tracking if any progress was made from start to finish. To accomplish this, I created two surveys containing multiple choice and short answer questions pertaining to the yoga class and participants individual feedback about how they were understanding the practice of yoga. The two surveys were distributed during midterm and finals week, and questions did vary between both surveys. For the first survey, I wanted to get an understanding of participants past experience with yoga, their reasoning for taking the class, and if there was any particular aspect of yoga that resonated with them midway through the semester amongst other questions about if they were looking forward coming to class and what poses did they enjoy the most. The 2nd survey sent out was to comprehend what the participants took away from the class, explaining if they felt any change mentally or physically throughout the semester, if they could go home and teach themselves a yoga class, and if they are going to continue their journey with yoga. To achieve the best results, I reached out to Ohio State college students that were enrolled in the two yoga classes offered at The Ohio State Dance Department. A recruitment letter was sent out to students, and those who responded were given a consent form to sign before officially participating in the study.

Originating in Ancient India, yoga is a type of physical and mental discipline used to create unison between mind, body, and spirit. The intention for yoga has shifted with society, but one of the main findings is to emphasize altering energy and shifting consciousness. The yoga class offered at Ohio State mainly concentrates on breathing and stability to help flexibility and strength in muscles and joints alongside learning poses and their benefits. The main goal at the end of class is to accomplish a mind body connection that is in tune with the natural circadian rhythm of the heart. The practice of yoga has four principles that create the student's intention whilst in class, typically choosing one to focus on while completing a yoga flow. The first principle is poses and posture, typically seen as the main intention of yoga to calm and steady the mind. Easing the mind into focusing on engaging a certain body part in a difficult pose helps gives your thoughts a rest, achieving the mind, body and spirt connection. The second principle is ujjayi breath, which is a deep breath focused on filling and emptying the lungs with each breath cycle. Also known as “ocean-sounding breath” due to the breath producing a sound the mind can anchor throughout the flow, and aids in achieving a calm mind and keeps the body relaxed. The third principle is the use of focus and gaze which helps the mind center into a deep concentration achieving physical and mental balance. The last principle is self-inquiry, which is an awareness of the opportunity and growth yoga has to offer, bringing you in tune with your inner self.

Critical Analysis of the Work

My purpose for pursuing this research was to grasp a better understanding of the affect's yoga can have on students and see if this could be a healthy outlet for students to engage in during stressful times of the semester. I began to analyze the practice of yoga from a research standpoint when I decided to get my yoga certification, and discovered the positive results it was having for me, and others involved in the class. To further my understanding of yoga I decided to study

other research that had been about yoga and its effects. Looking into current research done I discovered studies done on college students featuring yoga and how it can affect high stress levels and anxiety. I specifically connected with the study "Yoga classes as an early intervention for college students reporting high levels of stress and anxiety: A pilot study" by Robin Nemeroff. This study focused on using yoga classes to manage college students stress and anxiety levels that could prove to be more cost effective to the university rather than paying out of pocket for a therapist. I resonated with the study's purpose for using yoga to find successful outlets for college students that were accessible. To build upon this research in my own study I wanted to expand upon the physicality of yoga, and how it can have similar affects mentally. As college students maintaining exercise can be difficult with the mental load of homework and exams, I was curious if having a yoga class already built into the schedule of a busy college student would be helpful, and was asked in the surveys.

Motivation

My motivation to pursue a research-based distinction project began my junior year while taking Dance Science. The goal of this course was to formulate an IRB approved study that tackled a hypothesis in the dance field. I focused on burnout in college students majoring in dance and asked the question "In dancers performing at the collegiate level what are the different causes of burnout and does short-term injury correlate? Throughout the process of researching articles related to dancer burnout and the different causes, I created a research protocol similar to what would need to be submitted to the IRB, with survey and interview questions. While researching different articles about dancer burnout, a lot of them contained research structured towards helpful tips dancers could do to combat burnout. Those tips included a healthy diet, structured rest, and mindful practices such as yoga and Pilates. These research articles also motivated me to pursue a yoga-based research study. Having gone through a mock IRB trial with dance science

helped with the overall process of applying to the IRB and having a clear intention in mind with my research question.

While creating this study, I also had in mind the accessibility of having free yoga classes offered to students. While yoga is a mindful practice that is offered at multiple studios, prices can vary based on location and the instructor. My incentive with the results of this study was to have yoga classes offered throughout Ohio States main campus that were offered as a part of a colleges curriculum or free at the RPAC.

Summary of the Results

The first survey distributed during midterm week showed that all participants had taken yoga before and had different levels of experience. Some participants were dance majors that had done yoga before to stretch before class, while others had done a class or two and were just curious in taking the class. One participant stated that they "have been to several yoga classes including regular yoga, hot yoga, and aerial." When asked about what their favorite part about yoga thus far participants stated "... yoga helps me feel centered and more ready for the day... The final rest at the end of class is really nice because it allows me to quiet my mind for a small part of my day." The first survey multiple choice section showed that participants had gained some knowledge about yoga, especially ujjayi breath and when to inhale and exhale during poses. The first survey showed that some participants were feeling mentally better coming to yoga in the morning and that it was helping them become more mindful. The second survey distributed during finals week resulted in all participants feeling that they had gained a better understanding of the practice of yoga. While about 50% of participants felt that they could lead themselves through a yoga flow without teacher instruction, mainly dance major participants. The short answer portion of the second survey asked "If they felt physically better when taking yoga? And

if yes, what poses aided?" One participant stated that "Plank and Cobra have improved my core and tricep strength while Cat Cow has been a great way to warm my back up for the rest of the day ahead." Another participant stated about the same question "The child's pose was the perfect pose for my typically tight hips. I have also grown to love the rag doll to loosen my tight hamstrings." Mentally participants felt yoga had aided them throughout the semester, and most looked forward to coming to class in the morning. Participants also felt that yoga helped them breath more throughout their day to day life, and were more focused on themselves to have a clearer attitude to start the day. One participant stated "Yoga has helped me relax. It takes my mind off of the worries and stress of school. I am able to zone out and focus on my mental and physical well-being. This has allowed for a more calm semester." Overall, participants did find that yoga helped them in some way mentally or physically throughout the semester. While analyzing the results it became clear that dance majors took the class to feel better physically while non dance majors took the class for exercise and movement for their day. With the participants different intention for the class, different aspects of the class resonated more of them and which yoga principle they would focus on. From the survey participants that were non dance majors connected with the ujjayi breath principle and utilized this technique in other academic classes. Dance major participants associated more with the poses of yoga and intentionally breathing to stretch the body and joints more. The last main multiple-choice question of the survey asked if participants could teach themselves a yoga class with no teacher instruction. About 50% of participants said that they would be able to guide themselves through a flow, and the majority were dance majors. The other 50% of participants who said they would need an instructor to do their own flow were mainly non dance majors.

Future Goals

My aspiration with conclusion of my research is to have it implemented into the wellness of college students at Ohio State. While conducting my study I found that only 2 yoga classes are offered at Ohio State through the dance department, which fill up at capacity every semester. Looking at the results of this study and discerning the positive results it had on participants, I hope that more yoga classes will be offered at Ohio State as a part of the curriculum. I understand that another obstacle for college students getting access to yoga classes is the expensive prices that are associated. My ambition is that multiple departments will offer yoga classes as a part of wellness or having the RPAC provide free classes multiple times throughout the semester for students. I also believe that college students should be aware of the practice of yoga, as I believe it will be helpful in their wellness journey.

Survey Questions

1st Survey: Midterm Week
1.) Have you participated in a Yoga Class before?
Yes/ No
2.) I have practiced the aspects of Yoga before I took this class.
Yes/No
3.) If yes, what aspects of Yoga have you practiced? (2-3 sentences)
4.) I utilize my Ujjayi breathe in class.
Never, Rarely, Sometimes, Often, Always
5.) I have used my Ujjayi breathe outside of class.
Never, Rarely, Sometimes, Often, Always
6.) Do you practice Yoga outside of class?
Never, Rarely, Sometimes, Often, Always
7.) If so, how many times a week do you practice?
1-2 times, 3-4 times, Everyday, Whenever I get the chance
8.) Do you utilize the 8 Limbs of Yoga we have discussed in class?
Never, Rarely, Sometimes, Often, Always
9.) Has Yoga been beneficial to start your morning?
Never, Rarely, Sometimes, Often, Always
10.) Have you thought about making Yoga a part of your daily life?
Never, Rarely, Sometimes, Often, Always
11.) Specifically discuss what aspects of Yoga you resonate the most with. (4-5 sentences)
12.) What is your favorite part about Yoga class? (2-3 sentences)

13.) Has yoga affected your mental health? And if so How? (4-5 sentences)
14.) How has Yoga been to your body physically ie; strengthening, core, breath, stability, etc... (4-5 sentences)
15.) Why did you decide to enroll in Yoga?

2nd Survey: Finals Week
1.) I am happy with my choice of taking this Yoga Class.Never, Rarely, Sometimes, Often, Always
2.) I have found a flow that is comfortable to my body.
Never, Rarely, Sometimes, Often, Always
3.) I utilize my Ujjayi breathe more when I am in Class.
Never, Rarely, Sometimes, Often, Always
4.) I have more familiarity with the 8 Limbs of the body than I did before taking this class.
Yes/No
5.) I looked forward to coming to Yoga class throughout the semester.
Never, Rarely, Sometimes, Often, Always
6.) I found this Yoga class helpful when I was stressed during the semester.
Never, Rarely, Sometimes, Often, Always
7.) I thought/think about Yoga aspects and how they pertain to other aspects of my college life.
Never, Rarely, Sometimes, Often, Always
8.) Has Yoga helped you mentally throughout the semester? (4-5 sentences)
9.) What aspects of Yoga do you enjoy the most? (4-5 sentences)
10.) Have those aspects been helpful in stressful times of college? (4-5 sentences)
12.) Have you physically felt better when taking Yoga class? And if yes, what poses and benefits do they have? (4-5 sentences)
13.) How has the 8 Limbs of Yoga been helpful in understanding Yoga? (4-5 Sentences)
14.) Will you be taking Yoga semester? Explain why or why not. (2-3 sentences)

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