

Students' Self-Control and Self-Efficacy Through Yoga Practices and Their Influences on Academic Performance

Su Fuyan

Emilio Aguinaldo College fuyan.su.mnl@eac.edu.ph

Abstract: This study explores the influence of yoga practices on self-control, self-efficacy, and academic performance among female college students at Yunnan Vocational and Technical College of Agriculture. A qualitative approach was employed, involving semi-structured interviews with thirty female students enrolled in yoga courses. The integration of yoga philosophy and Self-Determination Theory (SDT) provided a theoretical framework for examining the potential benefits of yoga practice. Thematic analysis revealed that yoga significantly enhances self-control through mindfulness and self-discipline, improves self-efficacy by fostering a sense of accomplishment and community, and positively impacts academic performance by promoting stress management and focus. These findings suggest that integrating yoga into educational settings can support students' well-being and academic success. However, the study's limitations, including its focus on female participants and potential biases, indicate the need for further research to generalize the results across diverse populations and educational contexts.

Keywords: Yoga, Self-control, Self-efficacy, Academic performance, College students

I. Introduction

The influence of yoga on college students' self-control, self-efficacy, and academic performance is a topic of growing interest in the field of educational psychology and wellness^[1]. College students often face various challenges, such as academic pressures, time management issues, and stress-related problems, which can impact their overall well-being and academic performance. Yoga, as a mind-body practice, has gained recognition for its potential to improve mental health, self-regulation, and overall performance^[2]. This study is to explore the potential benefits of yoga on college students' self-control, self-efficacy, and academic performance. The study will be conducted at Yunnan Vocational and Technical College of Agriculture, focusing specifically on female students who have chosen yoga courses. The selection of female students is based on the premise that they may experience unique challenges and could potentially benefit from the holistic approach of yoga.

1.1 Background

The practice of yoga has garnered widespread attention for its holistic approach to well-being, encompassing physical, mental, and emotional dimensions. Within the academic realm, scholars have increasingly turned their gaze towards understanding the impact of yoga on various facets of student life. As college students navigate the complexities of their academic journey, the cultivation of self-control and self-efficacy emerges as pivotal factors influencing their success and overall satisfaction.

1.2 Statement of the Problem

While numerous studies have explored the benefits of yoga, a gap persists in understanding how this ancient practice might contribute to the enhancement of self-control, self-efficacy, and academic performance among college students. This study aims to bridge this gap by investigating the experiences of female students who have chosen to engage in yoga courses at Yunnan Vocational and Technical College of Agriculture.

1.3 Purpose of the Study

The primary purpose of this qualitative inquiry is to unravel the intricate relationships between yoga, self-control, selfefficacy, and academic performance among college students. By focusing on the unique context of a vocational and technical college and specifically targeting female students, we aim to provide nuanced insights that contribute to the existing body of knowledge in both the fields of yoga studies and education.

1.4 Research Questions

This study addresses the following key research questions:

How does the practice of yoga influence self-control among female college students?

In what ways does engagement in yoga impact the self-efficacy of female college students?

What associations, if any, exist between regular yoga practice and academic performance among female college students? 1.5 Rationale

[[]Received 31 January 2023; Accepted 12 May 2024; Published (online) 20, February, 2024]

Attribution 4.0 International (CC BY 4.0)

Understanding the potential influence of yoga on self-control, self-efficacy, and academic performance is crucial for educators, policymakers, and practitioners^[3]. The choice to specifically focus on female students in the study is grounded in a deliberate and thoughtful rationale. Rooted in ancient Indian philosophy, yoga has historical associations with female practitioners, contributing to its perceived alignment with female well-being. Media often portrays yoga in ways that appeal to women, emphasizing benefits such as flexibility and stress reduction. The growing emphasis on wellness and mindfulness has led to an increased interest in activities promoting mental and emotional health, making yoga particularly attractive to women seeking holistic well-being. Female students is rooted in the recognition that they may encounter unique challenges during their academic journey that could be effectively addressed through the holistic approach of yoga. By studying the experiences of female students who have voluntarily enrolled in yoga courses, the study aims to capture the nuanced ways in which yoga practices may influence their well-being and academic success. This targeted approach acknowledges the potential variations in how different genders engage with and benefit from yoga, contributing to a more comprehensive understanding of the subject matter.

While the decision to focus on female students offers an opportunity for in-depth exploration, it also introduces potential limitations and implications for the generalizability of the study's findings. The exclusive emphasis on female participants may restrict the applicability of the results to a broader, more diverse student population. It assumes that the experiences and benefits observed among female students can be extrapolated to male students, which may not necessarily hold true. Additionally, it reinforces gender-specific stereotypes by implying that females, as a group, encounter distinct challenges that warrant separate examination. As such, the study's outcomes should be interpreted within the context of this deliberate participant selection, recognizing both its advantages in providing detailed insights and its limitations in terms of broader applicability to the entire college student demographic.

2. Literature Review:

The influence of yoga on college students' self-control, self-efficacy, and academic performance has garnered attention in universities, reflecting a growing interest in holistic approaches to student well-being and success. Self-control is a crucial aspect of college students' lives as they navigate academic demands, personal responsibilities, and social activities. Studies have suggested that regular yoga practice can enhance self-control by promoting mindfulness, emotional regulation, and self-awareness^[4]. Yoga's emphasis on breath control, meditation, and physical postures cultivates discipline and focus, potentially improving students' ability to resist distractions, manage impulses, and maintain self-regulation in their daily lives.

Self-efficacy, or individuals' belief in their abilities to succeed in specific domains, is a key predictor of academic performance. Research suggests that yoga can positively influence self-efficacy by fostering a sense of competence, autonomy, and mastery. Through yoga practice, students may develop a greater belief in their capacity to overcome academic challenges, cope with stress, and achieve their academic goals^[5]. The mind-body connection cultivated in yoga may enhance students' confidence in their abilities and increase their motivation to persist in the face of difficulties^[6].

Academic performance is a multifaceted outcome influenced by various factors. Studies exploring the influence of yoga on academic performance have yielded promising results^[7]. Yoga interventions have been associated with improved cognitive functioning, including attention, memory, and information processing^[8]. The relaxation and stress reduction benefits of yoga have been linked to decreased test anxiety and improved performance in academic tasks. Moreover, yoga's impact on self-control and self-efficacy may indirectly contribute to better academic outcomes by facilitating effective study habits, time management, and goal setting^[9].

While research on the influence of yoga on college students' self-control, self-efficacy, and academic performance is still emerging, preliminary findings indicate its potential benefits^[10]. However, existing studies often focus on diverse populations and lack specific investigations targeting college students. Therefore, this current study at Yunnan Vocational and Technical College of Agriculture aims to contribute to the existing literature by exploring the experiences and perspectives of female college students who have chosen yoga courses. By utilizing qualitative research methods and conducting in-depth interviews, this study seeks to provide a nuanced understanding of how yoga may influence self-control, self-efficacy, and academic performance among college students, particularly in the context of an agricultural college.

3. Theoretical Framework

3.1 Integration of Yoga Philosophy and Self-Determination Theory

This study draws upon two primary theoretical frameworks to guide the exploration of the influence of yoga on college students' self-control, self-efficacy, and academic performance: Yoga Philosophy and Self-Determination Theory (SDT). 3.1.1 Yoga Philosophy

Yoga, rooted in ancient Indian philosophy, offers a comprehensive framework for understanding the interconnectedness of the mind, body, and spirit. Central to yoga philosophy is the concept of self-awareness and self-regulation through practices such as asanas (physical postures), pranayama (breath control), and dhyana (meditation). These practices are believed to cultivate self-discipline, mindfulness, and a harmonious balance between various aspects of one's being.

The yogic perspective suggests that the integration of physical postures and breath control can contribute to enhanced self-control by promoting a heightened awareness of one's actions and reactions. Furthermore, the cultivation of

mindfulness through meditation practices may foster greater self-efficacy, empowering individuals to navigate challenges with resilience and a sense of inner strength.

3.1.2 Self-Determination Theory (SDT)

Complementing the yogic philosophy, Self-Determination Theory (SDT) provides a psychological lens to examine the innate human need for autonomy, competence, and relatedness^[11]. SDT posits that individuals are motivated to pursue activities that satisfy these fundamental psychological needs, leading to increased well-being and optimal functioning^[12]. (Figure 1)

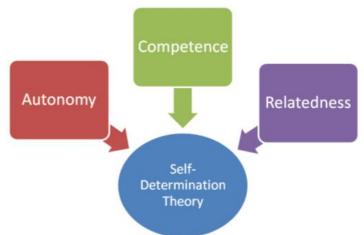


Figure 1, the three elements of self-determination theory (Source:https://www.urmc.rochester.edu/community-health/patient-care/self-determination-theory.aspx)

The application of SDT allows for an exploration of how the practice of yoga may fulfill these psychological needs, consequently influencing self-efficacy and academic performance. The autonomy granted through personal choice to engage in yoga, the development of competence in mastering yogic practices, and the potential for enhanced social connectedness within the yoga community are all aspects that align with the principles of SDT.

3.2 Hypothesized Relationships

Based on the integration of yoga philosophy and SDT, the following hypothesized relationships guide this study:

- ♦ Yoga and Self-Control: It is hypothesized that regular engagement in yoga practices, emphasizing self-discipline and mindfulness, will positively influence college students' self-control.
- ♦ Yoga and Self-Efficacy: The study posits that the integration of yoga into students' lives may contribute to increased self-efficacy through the development of competence, autonomy, and a sense of mastery in facing challenges.
- ♦ Yoga and Academic Performance: The theoretical framework suggests that the positive psychological outcomes associated with yoga, such as improved self-control and self-efficacy, may contribute to enhanced academic performance among college students.

4. Research Design

4.1 Research Approach

This study employs a qualitative research approach to explore the nuanced experiences of female college students at Yunnan Vocational and Technical College of Agriculture who have chosen to engage in yoga courses. Qualitative methods are well-suited to capture the depth and richness of individual perspectives, allowing for a holistic understanding of the influence of yoga on self-control, self-efficacy, and academic performance.

4.2 Participants

4.2.1 Sampling

The study involves a purposive random sampling method. Thirty female students enrolled in yoga courses at Yunnan Vocational and Technical College of Agriculture will be randomly selected to participate in semi-structured interviews. This sample size is chosen to ensure a diverse range of experiences and perspectives while maintaining manageability for in-depth qualitative analysis.

4.2.2 Inclusion Criteria

Female students enrolled in yoga courses at Yunnan Vocational and Technical College of Agriculture.

Willingness to voluntarily participate in the study and provide informed consent.

4.3 Data Collection

4.3.1 Semi-Structured Interviews

Semi-structured interviews will serve as the primary method of data collection. The interview protocol will be designed to elicit participants' narratives regarding their experiences with yoga, perceived changes in self-control, self-efficacy, and

reflections on any observed impact on academic performance. The open-ended nature of the interviews allows for flexibility and the emergence of unexpected insights.

4.3.2 Interview Process

Informed Consent: Prior to the interviews, participants will be provided with detailed information about the study, and written informed consent will be obtained.

Interview Sessions: Interviews will be conducted individually, allowing participants to express themselves freely. Each session is estimated to last approximately 45-60 minutes.

Recording: With participants' consent, interviews will be audio-recorded to ensure accuracy during transcription. 4.4 Data Analysis

Thematic analysis will be employed to identify, analyze, and report patterns (themes) within the qualitative data. The analysis will be conducted in multiple phases:

- Data Familiarization: Transcripts will be reviewed to gain familiarity with the content.
- Generating Initial Codes: Codes will be systematically applied to segments of data.
- Identifying Themes: Codes will be grouped into potential themes.
- Reviewing and Defining Themes: Themes will be refined through an iterative process.
- Writing the Report: The final step involves interpreting and presenting the findings coherently.

4.5 Ethical Considerations

Ethical guidelines will be strictly followed throughout the research process. Participants will be informed of their right to withdraw at any point, and confidentiality will be maintained in reporting findings. The study has received ethical approval from the relevant institutional review board.

5. Findings and Discussion

5.1 Overview of Participants

Thirty female students from Yunnan Vocational and Technical College of Agriculture, enrolled in yoga courses, participated in the qualitative interviews. The participants' are from different majors and age groups. Their diverse backgrounds and experiences contribute to a comprehensive understanding of the influence of yoga on self-control, self-efficacy, and academic performance.

5.2 Themes and Patterns

5.2.1 Impact on Self-Control

The analysis revealed a prominent theme related to the influence of yoga on self-control. Participants consistently expressed that regular yoga practice heightened their awareness of thoughts and actions. The mindfulness cultivated through yoga postures and breathing exercises emerged as a significant factor in promoting self-discipline and control over impulsive behaviors. Many participants noted a transferability of these skills to academic settings, describing improved focus during study sessions and enhanced ability to manage stress.

Participant A Quote:

"Yoga taught me to be present in the moment, and that carries into my studies. I find myself more focused, and it's easier to resist distractions."

5.2.2 Development of Self-Efficacy

The findings indicate a positive association between yoga practice and the development of self-efficacy. Participants reported increased confidence in their ability to overcome challenges, both academically and personally. The sense of accomplishment derived from mastering yoga postures and the supportive community within the yoga classes contributed to a heightened belief in their capabilities.

Participant B Quote:

"When I first started yoga, some poses seemed impossible. But with practice, I conquered them. It's the same with my studies now. I believe in my ability to overcome challenges."

5.2.3 Academic Performance Reflections

While the influence of yoga on academic performance varied among participants, a notable number shared positive reflections. Improved self-control and self-efficacy were perceived as contributing factors to enhanced academic outcomes. Participants described a more resilient approach to academic challenges and an increased ability to manage time effectively.

Participant C Quote:

"Yoga gave me a toolkit for dealing with stress. Exams used to overwhelm me, but now I approach them with a calmer mind. It makes a difference."

5.3 Comparison with Theoretical Framework

The identified themes align with the theoretical framework, particularly the integration of yoga philosophy and Self-Determination Theory (SDT). The cultivation of self-discipline and mindfulness through yoga resonates with the principles of autonomy and competence within SDT. The positive impact on self-efficacy aligns with SDT's emphasis on fostering individuals' belief in their capabilities through meaningful activities.

5.4 Implications for Practice and Future Research

5.4.1 Educational Practices

The findings suggest that integrating yoga into educational settings could potentially contribute to the development of students' self-control and self-efficacy. Institutions may consider offering yoga courses or incorporating mindfulness practices into existing programs to support students' well-being and academic success.

5.4.2 Future Research Directions

While this study provides valuable insights, further research is warranted to explore the longitudinal effects of yoga on academic performance and to investigate potential differences based on individual characteristics. Comparative studies with a control group and exploration of diverse educational contexts could enhance the generalizability of findings.

5.5 Bias and Implications of the Study:

The study exhibits potential biases that may impact the validity and generalizability of its findings. Notably, sampling bias is introduced through the use of purposive random sampling, specifically targeting female students enrolled in yoga courses at Yunnan Vocational and Technical College of Agriculture. This approach may lead to an underrepresentation of diverse perspectives, as the findings might not be applicable to male students or those in different academic environments. Additionally, selection bias is evident, focusing exclusively on students who have chosen to engage in yoga courses, potentially influencing the reported positive outcomes.

The exclusive focus on female students practicing yoga limits the generalizability of the findings to a broader student population. The positive outcomes reported by participants may be influenced by their pre-existing interest in yoga, introducing the risk of overestimating the benefits. Furthermore, confirmation bias, stemming from the researchers' focus on positive impacts, and social desirability bias, where participants may provide socially acceptable responses, can collectively result in a skewed representation of the nuanced experiences and potential drawbacks associated with yoga. Acknowledging and addressing these biases is crucial for a more accurate interpretation of the study's outcomes and for informing practical applications in educational settings.

6. Implications and Recommendations

6.1 Implications for Educational Practices

6.1.1 Integration of Yoga Programs

The positive findings of this study suggest that integrating yoga programs into educational settings, particularly in vocational and technical colleges, may offer students valuable tools for enhancing self-control and self-efficacy. Educational institutions, including Yunnan Vocational and Technical College of Agriculture, may consider incorporating yoga courses into their curriculum or offering mindfulness sessions as part of student support services.

6.1.2 Wellness Initiatives

The development of wellness initiatives that include yoga as a component can contribute to a more comprehensive approach to student well-being. These initiatives could be designed to address stress management, enhance focus, and promote mental health. Institutions may collaborate with qualified yoga instructors to provide accessible and inclusive classes for students.

6.2 Recommendations for Future Research

6.2.1 Longitudinal Studies

Given the preliminary nature of this study, future research should consider conducting longitudinal studies to explore the sustained effects of yoga on self-control, self-efficacy, and academic performance over an extended period. This would provide a more in-depth understanding of the long-term impact of regular yoga practice on college students.

6.2.2 Comparative Studies

To enhance the robustness of findings, researchers could conduct comparative studies involving a control group that does not engage in yoga. This would help isolate the specific effects of yoga on the variables under investigation and provide a clearer picture of its influence in comparison to non-yoga practitioners.

6.3 Recommendations for Students and Practitioners

6.3.1 Encouraging Student Engagement

Educational institutions can encourage students to explore and engage in yoga by providing information about its potential benefits for self-control, self-efficacy, and academic performance. Workshops, informational sessions, or introductory classes may serve as effective ways to introduce students to the practice.

6.3.2 Collaboration with Mental Health Services

Recognizing the connection between yoga and mental well-being, colleges may consider collaborating with mental health services to integrate yoga as a complementary approach to stress reduction. This collaborative effort could include joint workshops, resources, and support services that address both physical and mental aspects of student health.

6.4 Limitations and Caution

6.4.1 Generalizability

While the findings of this study offer valuable insights, caution should be exercised in generalizing the results beyond the specific context of Yunnan Vocational and Technical College of Agriculture. Future research with diverse populations and settings is essential to establish broader applicability.

6.4.2 Individual Differences

Recognizing the diverse nature of individual experiences, institutions should acknowledge that the benefits of yoga may vary among students. Personal preferences, cultural factors, and individual differences should be considered when implementing yoga programs.

7. Conclusion

This study provides valuable insights into the potential benefits of yoga for college students, particularly in enhancing self-control, self-efficacy, and academic performance. The findings indicate that regular yoga practice fosters mindfulness, emotional regulation, and self-discipline, contributing to improved self-control. Additionally, the sense of accomplishment and supportive community within yoga classes boosts students' self-efficacy, empowering them to tackle academic and personal challenges with greater confidence. The positive impact on academic performance, though varied, is linked to better stress management and increased focus during study sessions. The theoretical integration of yoga philosophy and Self-Determination Theory (SDT) offers a comprehensive understanding of how yoga meets students' psychological needs for autonomy, competence, and relatedness, thereby promoting overall well-being. These insights have practical implications for educational institutions, suggesting that incorporating yoga programs can be a valuable component of student support services aimed at enhancing mental health and academic success.

However, the study's limitations, such as the exclusive focus on female students and potential sampling and selection biases, necessitate caution in generalizing the findings. Future research should consider longitudinal studies to explore the sustained effects of yoga and comparative studies with control groups to isolate the specific benefits of yoga practice. Additionally, expanding the research to diverse populations and educational settings will enhance the generalizability and applicability of the findings.

References

^[7] Streeter, C. C., Jensen, J. E., Perlmutter, R. M., Cabral, H. J., Tian, H., Terhune, D. B., . . . Hennen, J. (2007). Yoga Asana sessions increase brain GABA levels: A pilot study. Journal of Alternative and Complementary Medicine, 13(4), 419-426. doi: 10.1089/acm.2007.6338

^[8] Pascoe, M. C., Thompson, D. R., Jenkins, Z. M., & Ski, C. F. (2017). Mindfulness mediates the physiological markers of stress: Systematic review and meta-analysis. Journal of Psychiatric Research, 95, 156-178. doi: 10.1016/j.jpsychires.2017.08.004

^[9] Tang, Y.-Y., Hölzel, B. K., & Posner, M. I. (2015). The neuroscience of mindfulness meditation. Nature Reviews Neuroscience, 16(4), 213-225. doi: 10.1038/nrn3916

^[10] Uebelacker, L. A., Epstein-Lubow, G., Gaudiano, B. A., Tremont, G., Battle, C. L., & Miller, I. W. (2010). Hatha yoga for depression: Critical review of the evidence for efficacy, plausible mechanisms of action, and directions for future research. Journal of Psychiatric Practice, 16(1), 22-33. doi: 10.1097/01.pra.0000367775.88388.96

^[1] Birdee, G. S., Yeh, G. Y., Wayne, P. M., Phillips, R. S., Davis, R. B., & Gardiner, P. (2009). Clinical applications of yoga for the pediatric population: A systematic review. Academic Pediatrics, 9(4), 212-220.

^[2] Carmody, J., & Baer, R. A. (2008). Relationships between mindfulness practice and levels of mindfulness, medical and psychological symptoms, and well-being in a mindfulness-based stress reduction program. Journal of Behavioral Medicine, 31(1), 23-33.

^[3] Conboy, L. A., Noggle, J. J., Frey, J. L., Kudesia, R. S., & Khalsa, S. B. (2013). Qualitative evaluation of a high school yoga program: Feasibility and perceived benefits. Explore: The Journal of Science and Healing, 9(3), 171-180.

^[4] Keng, S.-L., Smoski, M. J., & Robins, C. J. (2011). Effects of mindfulness on psychological health: A review of empirical studies. Clinical Psychology Review, 31(6), 1041-1056. doi: 10.1016/j.cpr.2011.04.006

^[5] Lippelt, D. P., Hommel, B., & Colzato, L. S. (2014). Focused attention, open monitoring and loving kindness meditation: Effects on attention, conflict monitoring, and creativity. Frontiers in Psychology, *5*, 1083. doi: 10.3389/fpsyg.2014.01083

^[6] McEwen, B. S. (2017). Neurobiological and systemic effects of chronic stress. Chronic Stress, 1, 2470547017692328. doi: 10.1177/2470547017692328

^[11] Ryan, R. M., & Deci, E. L. (2017). Self-determination theory. Basic psychological needs in motivation, development, and wellness.

^[12] Deci, E. L., & Ryan, R. M. (2012). Self-determination theory. Handbook of theories of social psychology, 1(20), 416-436.