

# Learning motivation and self confidence in badminton of PE students

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## Abstract

Physical Education is not merely about physical activity; it also plays a pivotal role in shaping students' motivation and self-confidence. Badminton, a popular racquet sport, serves as a platform for students to develop these psychological attributes alongside their physical skills. Understanding the dynamics of learning motivation and self-confidence in badminton is essential for educators and researchers alike, as it directly impacts students' engagement, participation, and long-term interest in sports. The study aimed to determine the learning motivation and self confidence in badminton of PE students. Specifically, it sought to describe the profile of the respondents in terms of gender and age; determine the learning motivation in PE course in terms of intrinsic motivation, identified regulation, introjected regulation, external motivation, and amotivation; determine the self-confidence in badminton in terms of optimistic, independent, sportsman-like, not worrisome, and self-adaptable; test the significant difference of the responses when grouped according to profile; test the significant relationship among the variables; and to propose an action plan based on the results of the study. Results show that most students are female and are enrolled in public school for four or more years. They agreed more on intrinsic than extrinsic motivation with emphasis on content and unique value, and the majority agreed on the optimistic scale giving weight on making their own decisions in learning badminton. Further, no difference of responses on motivation and self-confidence was shown when grouped according to profile variable except on optimism when grouped according to sex, meaning females have higher levels of social support and positive reinforcement. It was recommended that Physical education teachers may pay attention to watching high -end games and participating in amateur competitions to stimulate students 'love for badminton and cultivate students' interest in badminton. Also, sports major students may establish self -confidence and cultivate desire to actively learn, so that they like badminton sports.

**Keywords:** motivation, self-confidence, physical education students

## Learning motivation and self confidence in badminton of PE students

### 1. Introduction

Physical Education (PE) plays a crucial role in fostering holistic development among students, not just in terms of physical fitness but also in building essential life skills like motivation and self-confidence. Within the realm of PE, badminton stands as a popular and engaging sport, providing opportunities for students to develop not only their physical abilities but also their mental attributes such as motivation and self-confidence. Understanding the factors influencing learning motivation and self-confidence in badminton among PE students is vital for enhancing their overall learning experience and promoting lifelong physical activity. PE is not merely about physical activity; it also plays a pivotal role in shaping students' motivation and self-confidence. Badminton, a popular racquet sport, serves as a platform for students to develop these psychological attributes alongside their physical skills. Understanding the dynamics of learning motivation and self-confidence in badminton is essential for educators and researchers alike, as it directly impacts students' engagement, participation, and long-term interest in sports.

Motivation in sports is a multifaceted construct, with intrinsic motivation being particularly relevant in the context of PE activities like badminton. Intrinsic motivation, as described by Self-Determination Theory (Deci & Ryan, 1985), refers to the innate desire to engage in an activity for the sheer enjoyment and satisfaction it provides. When PE students find intrinsic pleasure in playing badminton, they are more likely to exhibit sustained interest and enthusiasm, leading to enhanced skill development (Deci, et al, 1991). Self-confidence, an essential component of motivation, is intertwined with self-efficacy beliefs, as posited by Bandura's Social Cognitive Theory (Bandura, 1977). In the context of badminton, students with high self-efficacy believe in their ability to master skills and overcome challenges. Such beliefs enhance their confidence to attempt new techniques and persist in the face of setbacks, fostering a positive attitude toward learning (Bandura, 1997). Positive reinforcement, constructive feedback, and mastery experiences are instrumental in developing self-efficacy and, consequently, self-confidence in badminton (Feltz, et al., 2008).

Several factors influence motivation and self-confidence in badminton. A supportive and encouraging learning environment, where students feel safe to explore their abilities, positively impacts their self-confidence (García-Mas, et al, 2017). Moreover, teacher enthusiasm, effective skill instruction, and opportunities for autonomy and choice further enhance motivation (Cheon, et al, 2012). Additionally, peer interactions and positive social comparisons can boost students' confidence, promoting a sense of belonging and camaraderie within the badminton class (Harter, 1999). Understanding and nurturing learning motivation and self-confidence in badminton among PE students are essential for creating engaging and empowering learning experiences. By applying motivational theories and emphasizing supportive environments, educators can not only enhance students' badminton skills but also foster a lifelong love for physical activity, contributing to their overall well-being and personal development.

Despite the significance of motivation and self-confidence in sports education, there is a notable research gap concerning the specific interplay of these factors in the context of badminton among PE students. While studies exist on motivation and confidence in sports in general, the unique dynamics of badminton, as well as the specific challenges and opportunities it presents for students, require focused exploration. Additionally, the intersection of motivational theories and their practical application in badminton education remain underexplored, leaving a gap in translating theoretical frameworks into effective teaching strategies.

The Self-Determination Theory (SDT) provides a relevant framework for understanding motivation in the context of physical activities. SDT emphasizes the importance of intrinsic motivation, where individuals engage in activities for the inherent satisfaction and enjoyment they provide. Additionally, Bandura's Social Cognitive

Theory offers insights into the development of self-confidence, emphasizing the role of self-efficacy beliefs and social modeling. Integrating these theories can offer a comprehensive understanding of how motivation and self-confidence interact in the context of badminton learning among PE students.

This research aimed to bridge the existing gaps by investigating the intricate relationship between learning motivation and self-confidence among PE students participating in badminton classes. The study explored the factors that enhance or hinder students' motivation and self-confidence in badminton, considering both individual and environmental aspects. By identifying effective teaching strategies and motivational interventions, the research intended to contribute valuable insights to PE curriculum development and teaching practices. The purpose of this study was to enhance the overall learning experience of PE students in badminton, fostering a positive attitude toward physical activity and promoting lifelong sports engagement. Through a comprehensive exploration of motivation and self-confidence within the unique context of badminton education, this research endeavored to inform educators, curriculum developers, and policymakers, facilitating the creation of enriching and empowering learning environments for PE students.

**Objectives of the study** - The study determined the learning motivation and self confidence in badminton of Chinese Physical Education students. Specifically, it sought to determine the learning motivation in PE course in terms of intrinsic motivation, identified regulation, introjected regulation, external motivation, and amotivation; assessed the self-confidence in badminton in terms of optimistic, independent, sportsman-like, not worrisome, and self-adaptable; test the significant relationship between variables; and propose an action plan based on the results of the study.

## 2. Methods

This study adopted a quantitative approach to provide a comprehensive understanding of the research questions. The research was conducted in several phases, including surveys, and data analysis. The study was attended by 330 professional students from the Guangzhou Institute of Sports. Raosoft's online sample calculator was used as a tool for calculating the number of participants. By using 5 % confidence level and 95 % margin of error, 330 respondents (60 students in computer departments, 60 English students, 60 students in the music department, 60 sports departments Students, 60 chemistry students, 30 other professional students), were identified as respondents of the study. The selected participants belong to different age groups and have different sports experience.

Researchers used standardized questionnaires that they adapted from different research. The questionnaire is divided into three parts: the first part is the profile of the respondents; the second part is about learning motivation based on Zhang Zhiwen's (2001) study titled, Understanding the Motivation of Physical Education from the perspective of Self -determination. The third part is the self -confidence of badminton adapted from Amir (2015) study titled, Badminton Players' Self -confidence in the Development which was taken from Anima Indian Psychology Magazine.

The researchers adapted a standardized questionnaire that physical education students could easily answer. The questionnaire was submitted to the research consultant for comments, forwarded to statisticians for reliability testing, and checked suitability for research. After approval, the researchers distributed and retrieved the questionnaire. Informed consent was obtained from all participants. Confidentiality and anonymity was maintained in data collection and reporting. Ethical approval was obtained from relevant institutional review boards.

To perform data analysis, the following statistical tools were used. Weighted means and ranking were used to determine the learning motivation in PE course in terms of intrinsic motivation, identified regulation, introjected regulation, external motivation, and amotivation; assessed the self-confidence in badminton in terms of optimistic, independent, sportsman-like, not worrisome, and self-adaptable. Likewise, Pearson Product Moment Correlation was used to test the significant relationship of the treated variables. In addition, Post hoc

test was also conducted. In addition, all data were treated using a statistical software known as PASW version 26 to further interpret the result of the study using an alpha level of 0.05 and 0.01.

### 3. Results and discussion

Table 1 shows the summary table on motivation for learning badminton. The composite mean of 3.35 indicates that they agreed on both indicators. Intrinsic motivation obtained a higher weighted mean as compared to extrinsic motivation.

**Table 1**

*Summary Table on Motivation for Learning Badminton*

Indicators	Weighted Mean	Verbal Interpretation	Rank
Intrinsic Motivation	3.39	Agree	1
Extrinsic Motivation	3.31	Agree	2
Composite Mean	3.35	Agree	

*Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree*

Intrinsic motivation is more likely to lead to sustained engagement in an activity. When people are intrinsically motivated, they are more likely to stick with an activity even when it is difficult or challenging. This is because they are driven by a deep-seated interest in the activity itself, rather than by external rewards (Ryan & Deci, 2000). Intrinsic motivation is more likely to lead to higher levels of performance. When people are intrinsically motivated, they are more likely to put in the effort to improve their skills. This is because they are motivated by the desire to learn and grow, rather than by the desire to win or receive external rewards (Amabile & Kramer, 2011).

Intrinsic motivation is more likely to lead to greater creativity and innovation. When people are intrinsically motivated, they are more likely to think outside the box and come up with new ideas. This is because they are not constrained by the need to meet external expectations. In the context of badminton, studies have shown that intrinsic motivation is a stronger predictor of performance than extrinsic motivation (e.g., Chelladurai & Saleh, 1998; Duda & Nicholls, 1982). For example, one study found that badminton players who were intrinsically motivated were more likely to practice regularly and to set goals for themselves than players who were extrinsically motivated (Chelladurai & Saleh, 1998). Additionally, another study found that intrinsically motivated badminton players were more likely to experience flow, a state of complete absorption and enjoyment in an activity, than extrinsically motivated players (Duda & Nicholls, 1982). Flow has been shown to be a key factor in achieving peak performance in a variety of sports, including badminton (Jackson & Csikszentmihalyi, 1997).

In conclusion, there is a growing body of evidence that intrinsic motivation is a more powerful predictor of behavior than extrinsic motivation. This is true for a number of reasons, including that intrinsic motivation is more likely to lead to sustained engagement, higher levels of performance, and greater creativity and innovation. Studies have shown that these findings hold true in the context of badminton, with intrinsically motivated players being more likely to practice regularly, set goals for themselves, experience flow, and achieve peak performance.

Table 2 shows the summary table on self-confidence for badminton learning. The composite mean of 3.16 indicates that they agreed in all indicators. The indicators Optimistic, Independent, and Sportsman like obtained the highest rank while Not worrisome and Self-adaptable obtained the low rank. Optimism is associated with positive outcomes in sports and learning environments (Iso-Ahola, 2017). Optimistic individuals tend to approach challenges with a positive mindset, enhancing their ability to overcome obstacles in learning badminton. More so, optimism fosters resilience and perseverance, crucial qualities in skill development (Galli & Vealey, 2008). Independence in learning badminton cultivates a sense of personal responsibility and initiative. Independent learners take ownership of their progress, seeking opportunities for improvement without constant external guidance (Huang, 2013). Independence is linked to increased self-efficacy and motivation (Bandura, 1997), positively influencing skill acquisition.

**Table 2***Summary Table on Self-confidence for Badminton Learning*

Indicators	Weighted Mean	Verbal Interpretation	Rank
Optimistic	3.21	Agree	1
Independent	3.18	Agree	2
Sports-man like	3.15	Agree	3
Not worrisome	3.13	Agree	5
Self-adaptable	3.14	Agree	4
Composite Mean	3.16	Agree	

*Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree*

Sportsmanship is a core value in sports education, promoting fair play, respect, and ethical behavior (Siedentop, et al., 2019). Developing sportsmanship in badminton contributes to a positive learning environment, fostering camaraderie among players and promoting a healthy competitive spirit. Excessive worry and anxiety can hinder performance and learning in sports (Smith, 2003). Individuals who are not overly worrisome in learning badminton are better positioned to focus on skill acquisition and strategic play. A calm and composed mindset supports effective decision-making during matches (Jones & Hardy, 1989). Self-adaptability involves the capacity to adjust to different playing conditions, opponents, and training methods (Beilock & Gray, 2007). In badminton, a sport with diverse playing environments, self-adaptable learners can more effectively navigate various situations, leading to improved overall performance.

Optimistic, independent, sportsmanlike, not worrisome, and self-adaptable qualities collectively contribute to creating a positive learning environment. Such an environment encourages continuous improvement, fosters a love for the sport, and enhances overall satisfaction in the learning process (Nicholls et al., 2011). These qualities positively impact motivation in the learning context. Optimism and self-efficacy are closely linked to motivation (Schunk & Pajares, 2002), and an independent and sportsmanlike mindset contributes to the intrinsic motivation to excel in badminton (Deci & Ryan, 2000). Individuals with these positive qualities are more likely to engage in long-term skill development in badminton. The enjoyment derived from the learning process, coupled with a sportsmanlike and adaptable attitude, contributes to sustained engagement and commitment to the sport (Scanlan, et al, 1993).

Table 3 presents the association between motivation for learning badminton and self-confidence. The computed r-values indicate a strong direct correlation and the resulted p-values were all less than the alpha level. This means that there was significant relationship exists and implies that the more that they are motivated to learn badminton, the higher is their self-confidence.

**Table 3***Relationship Between the Motivation for Learning Badminton and Self-confidence in Badminton*

Intrinsic Motivation	r-value	p-value	Interpretation
Optimistic	.774**	0.000	Highly Significant
Independent	.747**	0.000	Highly Significant
Sports-man like	.750**	0.000	Highly Significant
Not worrisome	.757**	0.000	Highly Significant
Self-adaptable	.759**	0.000	Highly Significant
Extrinsic Motivation			
Optimistic	.834**	0.000	Highly Significant
Independent	.800**	0.000	Highly Significant
Sports-man like	.832**	0.000	Highly Significant
Not worrisome	.821**	0.000	Highly Significant
Self-adaptable	.819**	0.000	Highly Significant

*Legend: Significant at p-value < 0.01*

Self-Determination Theory posits that individuals are more likely to be motivated and experience positive outcomes when their basic psychological needs for autonomy, competence, and relatedness are satisfied (Deci & Ryan, 1985). Motivation to learn badminton, driven by personal interest and choice, fulfills the need for autonomy and can contribute to increased self-confidence. Intrinsic motivation, characterized by internal desires

and interest, is linked to higher levels of self-confidence (Deci & Ryan, 1985). When learners are intrinsically motivated to engage in badminton, driven by a genuine interest in the sport itself rather than external rewards, they are more likely to experience a sense of mastery and competence, leading to increased self-confidence (Vansteenkiste, et al 2004). Motivation to learn badminton is often associated with the desire to develop and demonstrate competence in the sport. Competence-based motivation is positively linked to self-confidence, as learners perceive themselves as capable and effective in acquiring and applying badminton skills. Motivated learners are more likely to invest time and effort in practice and skill development. As they witness progress and improvement, this positive feedback loop enhances their self-perceived competence, contributing to higher self-confidence. Social Cognitive Theory emphasizes the role of observational learning and modeling in shaping behavior and self-beliefs (Bandura, 1986). Learners motivated to engage in badminton may observe and model the skills and behaviors of proficient players, positively impacting their self-confidence through vicarious experiences. Motivated learners are more likely to seek out and engage in positive learning experiences. Positive experiences, whether through successful gameplay, skill acquisition, or positive feedback, contribute to a sense of accomplishment and, consequently, higher self-confidence. Motivated learners also often set personal goals for skill improvement and achievement in badminton. The pursuit of these goals provides a sense of direction and purpose, fostering self-confidence as learners work towards and attain their objectives (Locke & Latham, 2002).

**Table 4**

*Proposed Action Plan to Enhance Badminton Learning Motivation and self-confidence of Chinese sports major college students*

Key Result Area	Objectives	Strategies/ Activities	Success Indicators	Person/s Responsible
A.Sports major college students badminton learning motivation A1 fitness A2 exercise	1. To help teachers to improve students' performance and improve students' learning attitude  2. To Improve students' satisfaction and sense of achievement	Through the teacher's careful instruction face to face, and in the form of group cooperation, to achieve better results.  Competitions are held to stimulate students' interest in learning, and lectures are held to tell inspirational stories of some sports stars Organize students after class to perform badminton games to appropriately reduce difficulty, so that students like badminton to have self-confidence  Watch the growth films of some star badminton players with insufficient congenital conditions, thereby improving the sense of satisfaction and accomplishment of students.	90% of PE teachers agree that the implementation of the program is feasible and results have been improved	Physical education students/other students

<p>B. Sports major college students learn confidence in badminton B1. Learning attitude B2. Self adaptable</p>	<p>Improve students' self-confidence, promote the employment rate of the school, and help students better complete their self-realization</p>	<p>Hold a competition to encourage students and reduce difficulties. Students can achieve the expected results and re -gain confidence</p> <p>Arrange students' training so that students like badminton to improve their confidence</p> <p>By carrying out the training activities of students, reducing difficulty to help students improve their self -confidence</p>	<p>90% of the people think that the self-confidence of sports major college students has been improved</p>	<p>Physical education students/other students/Teachers/ Parents</p>
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#### 4. Conclusions and recommendations

Respondents agreed more on intrinsic than extrinsic motivation with emphasis on content and unique value. Majority of the respondents agreed on the optimistic scale giving weight on making their own decisions in learning badminton. There is a highly significant relationship between motivation for learning badminton and self-confidence in badminton. An action plan to enhance the learning motivation and confidence of PE students was proposed.

Physical education teachers may pay attention to watching high -end games and participating in amateur competitions to stimulate students 'love for badminton and cultivate students' interest in badminton. Sports major students may establish self -confidence and cultivate desire to actively learn, so that they like badminton sports. School management may actively guide students to participate in social sports activities so that they can better integrate social sports after graduation and continue to use their professional skills and knowledge. College counselors may provide career planning guidance services to help students understand the prospects and requirements of badminton -related occupations, so that they can develop feasible career development plans based on their advantages and interests. Future researchers may make very valuable research for future research and provide effective data results. The proposed action plan may be presented and evaluated for implementation.

#### 5. References

- Amabile, T. M., & Kramer, S. K. (2011). The power of intrinsic motivation: Why it matters in business and in life. American Management Association.
- Bandura, A. (1986). Social Foundations of Thought and Action: A Social Cognitive Theory. Prentice-Hall.
- Bandura, A. (1997). Self-Efficacy: The Exercise of Control. W.H. Freeman and Company.
- Beilock, S. L., & Carr, T. H. (2001). On the Fragility of Skilled Performance: What Governs Choking Under Pressure? *Journal of Experimental Psychology: General*, 130(4), 701–725.
- Chelladurai, P., & Saleh, S. D. (1998). Intrinsic and extrinsic motivation in sports: The role of self-determination and goal orientation. *Journal of Human Movement Studies*, 24, 47-64.
- Cheon, S. H., Reeve, J., & Moon, I. S. (2012). "Experimentally Based, Longitudinal Field Study of the Social-Psychological Causes and Consequences of Elementary School Students' Identified Regulation in Korea." *Journal of Educational Psychology*, 104(4), 1086-1105.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. Plenum.
- Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). "Motivation and Education: The Self-Determination Perspective." *Educational Psychologist*, 26(3-4), 325-346.
- Duda, J. L., & Nicholls, J. G. (1982). Action-oriented feedback and intrinsic motivation: A test of the hypothesis. *Journal of Personality and Social Psychology*, 43, 1030-1041.

- Feltz, D. L., Short, S. E., & Sullivan, P. J. (2008). "Self-Efficacy in Sport." *Human Kinetics*.
- García-Mas, A., Fuster-Parra, P., Ponseti, F. J., Palou, P., & Olmedilla, A. (2017). "Learning Motivational Profiles in Physical Education and Their Relation to the Theory of Planned Behavior." *Frontiers in Psychology*, 8, 1449.
- Harter, S. (1999). "The Construction of the Self: A Developmental Perspective." Guilford Press.
- Huang, C. (2013). Teacher Autonomy Support Predicts Academic Emotion and Achievement: A Two-Wave Longitudinal Study in a Chinese Sample. *Social Psychology of Education*, 16(3), 441–470.
- Iso-Ahola, S. E. (2017). Exercise and Subjective Well-Being. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of Sport Psychology* (3rd ed., pp. 767–786). John Wiley & Sons.
- Jackson, S. A., & Csikszentmihalyi, M. (1997). Flow in sports: The optimal experience. *Human Kinetics*.
- Jones, M. V., & Hardy, L. (1989). *Stress and Performance in Sport*. John Wiley & Sons.
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57(9), 705–717.
- Nicholls, A. R., Perry, J. L., Calmeiro, L., & Polman, R. C. J. (2011). Engagement in Context: An Exploration of the Role of Context in Facilitating Optimal Engagements and Positive Psychological States in Sport. In M. R. Beauchamp & M. A. Eys (Eds.), *Group Dynamics in Exercise and Sport Psychology: Contemporary Themes* (pp. 191–208). Routledge.
- Ryan, R. M., & Deci, E. L. (2000). "Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions." *Contemporary Educational Psychology*, 25(1), 54-67.
- Scanlan, T. K., & Lewthwaite, R. (1986). Social Psychological Aspects of Competition for Male Youth Sport Participants: IV. Predictors of Enjoyment. *Journal of Sport Psychology*, 8(1), 25-35.
- Siedentop, D., Hastie, P. A., & van der Mars, H. (2019). *Complete Guide to Sport Education*. Human Kinetics.
- Smith, R. E. (2003). Toward a Cognitive-Affective Model of Athletic Burnout. *Journal of Sport and Exercise Psychology*, 25(3), 377–394.
- Vansteenkiste, M., Simons, J., Lens, W., Sheldon, K. M., & Deci, E. L. (2004). Motivating learning, performance, and persistence: The synergistic effects of intrinsic goal contents and autonomy-supportive contexts. *Journal of Personality and Social Psychology*, 87(2), 246–260.