

Coaching Attitudes on Athletic Motivation of Volleyball Elective Students

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ABSTRACT

The caliber of physical education instructors plays a crucial role in fostering the holistic development of college students, integrating moral, intellectual, and aesthetic dimensions into their physical and mental evolution. This study sought to examine the correlation between coaching attitudes and levels of athletic motivation among college athletes. Employing a correlational research design, the study surveyed 218 volleyball elective students, analyzing their perceptions of coaching attitudes in various motivational domains. The results revealed agreeable to good perceptions of coaching attitudes across the domains of Adaptive Pedagogy, Player Development, Self-Improvement, and Collaborative Team Spirit, with mean scores ranging from 3.30 to 3.36. Specifically, Collaborative Team Spirit received the highest rank, indicating its pivotal role in motivating athletes. The domain of Competence Support was identified as the most influential on athletic motivation with a mean score of 3.37. Additionally, Communication Dynamics, Competitive Needs, and Pacing Influence also contributed positively to athletic motivation, with mean scores indicating general agreement on their beneficial impact. A key finding from the study was the very strong positive correlation (Pearson $r = 0.93$) between coaching attitudes and athletic motivation, with a p-value of less than 0.001, which led to the rejection of the null hypothesis and confirmed the significant association between the variables. In response to these findings, the "MVP: Motivation and Victory Program" is recommended. This comprehensive initiative is designed to enhance athletic motivation by improving coaching competencies that align with the most impactful motivational factors identified in the study. The program seeks to equip coaches with the skills necessary to support athletes' psychological needs and to foster an environment where athletes can thrive both competitively and personally.

KEYWORDS

Athletic Motivation; Coaching Attitudes; Volleyball; Physical Education.

1. INTRODUCTION

The seminal role of universities in orchestrating adept higher education, particularly in crafting students who exude a harmonious blend of moral, intellectual, and physical prowess, remains indisputable. This task extends beyond mere academic enrichment, weaving into the fabric of societal advancement by buttressing the nation with a robust talent pool and intellectual scaffolding, instrumental in sculpting a comprehensively prosperous society. Physical education, in this multifaceted educational tapestry, occupies a special niche, not merely as a curriculum segment but as a pivotal conduit that channels mental and physical wellbeing into the student body, thereby epitomizing an indispensable chapter in China's higher educational narrative. The nuanced amalgamation of moral, intellectual, and aesthetic education, orchestrated to catalyze the physical and mental evolution of college students, hinges significantly on the caliber of physical education

instructors. Their expertise, methodologies, and professional attitudes become a linchpin, impacting the trajectory and quality of physical education, particularly in the discipline of volleyball - a sport that has traditionally enamored students and securely positioned itself as a staple in university physical education across China.

The professional attitudes of educators not only intertwine with but significantly influence their perceptual clarity towards teaching objectives, methodological accuracy, and the depth of technical and psychological guidance they extend to students. This, in turn, casts a meaningful impact upon their educational philosophies and resultant behaviors. Herein lies the quintessence of aligning and continually refining the professional attitudes of teachers, ensuring the stabilization and fortification of the teaching workforce, and by extension, maintaining an educational standard that is both relevant and impactful.

In the sports-oriented corridors of physical education in China's standard universities, volleyball has steadfastly remained a beloved sporting endeavor, simultaneously embodying a traditional teaching project that has invariably captivated student interest and participation. Especially in the expansive academic landscapes of Guangdong Province, the sport doesn't merely thrive; it resonates, drawing students into its kinetic world, thereby necessitating a correspondingly elevated number of proficient volleyball instructors.

While technical prowess in the sport remains vital, the professional attitudes of volleyball teachers within universities in Guangdong Province become an undulating pulse that directly regulates their pedagogical enthusiasm and dynamism, impacting work quality and subsequently, pedagogical efficacy. This dynamic intricately weaves into the realization of educational goals, fostering an environment that is conducive for nurturing talents capable of navigating the demands of advanced national requisites.

Embarking upon a systematic exploration of the professional attitudes of volleyball teachers within universities in Guangdong Province transcends mere academic inquiry; it becomes a catalyst for change and enhancement, spotlighting a pathway towards an enriched understanding of their professional demeanors. In doing so, it enables the delineation and implementation of nuanced, contextually relevant policies and initiatives. This, in essence, guides educators towards fostering a professional attitude that is not merely positive but also ascendant, bolstering work quality and stabilizing the community of volleyball instructors, all while enhancing the broader educational landscape.

2. STATEMENT OF THE PROBLEM

The primary objective of this research is to examine the correlation between the caliber of coaching attitude and the levels of athletic motivation. By understanding this link, the research aims to offer insights that could assist in the development of a coaching improvement initiative, particularly designed for bolstering the performance and engagement of volleyball elective students. In particular, this research seeks to address the subsequent research questions:

(1) What is the demographic profile of the respondents in terms of:

- 1) Sex
- 2) Age
- 3) Year Level

(2) What is the assessment of the respondents on the volleyball coaches' attitudes in terms of :

- 1) Adaptive pedagogy;
- 2) Player development;

3) Self-improvement; and

4) Collaborative team spirit

(3) Is there a significant difference in the assessment of the respondents on the volleyball coaches' attitudes when compared to demographic profile?

(4) What is the assessment of the respondents on their athletic motivation in terms of:

1) Competence support;

2) Communication dynamics;

3) Competitive needs; and

4) Pacing influence

(5) Is there a significant difference in the assessment of the respondents on their athletic motivation when compared to demographic profile?

(6) Is there a significant relationship between the assessed level of coaching attitudes and athletic motivation?

(7) What coach-enhancement program can be developed based on the results of the study?

3. HYPOTHESIS

In light of the growing body of research pointing to possible relationships between these variables, the objective of this study is to examine the corresponding null hypotheses:

(1) There is no significant difference in the assessment of the respondents on the volleyball coaches' attitudes when compared to demographic profile.

(2) There is no significant difference in the assessment of the respondents on their athletic motivation when compared to demographic profile.

(3) There is no significant relationship between the assessed level of coaching attitudes and athletic motivation.

4. SCOPE AND DELIMITATION

This research is primarily anchored on exploring the intricate relationship between coaching attitude and athletic motivation among volleyball elective students. To provide depth and precision, the study delves into specific dimensions of coaching attitude, namely Adaptive Pedagogy, Player Development, Self-improvement, and Collaborative Team Spirit. In parallel, it assesses the domains of athletic motivation that include Competence Support, Communication Dynamics, Competitive Needs, and Pacing Influence.

The demographic profile of the participants, encompassing aspects like age, sex, and year level, offers a foundation for the research. This is essential in discerning how coaching attitudes might variably influence different segments of the student population. Data collection, a pivotal aspect of this study, is planned to be executed through structured questionnaires or interviews. These instruments are designed to capture the nuanced perceptions and experiences of students concerning the coaching attitudes they've been exposed to and the subsequent impact on their motivation levels. It's noteworthy to mention that the target population for this research is confined to volleyball elective students within a specified region or institution, ensuring a concentrated and pertinent dataset.

However, while the scope provides clarity on the research's breadth, there are inherent delimitations to consider. The exclusive focus on volleyball elective students means the findings might not resonate

directly with professional athletes or those in other sports disciplines. Even within the realm of coaching attitude, while four critical dimensions are explored, there's an acknowledgment that other significant influencers might remain outside this study's purview. Another aspect to consider is the subjectivity embedded in the responses. Personal biases or individual variations in experiences might influence the collated data. Moreover, the geographical concentration might lead to results that reflect the unique nuances of that particular region or institution, making broader generalizations a task for subsequent studies. The study's temporal aspect, being bound to a specific timeframe, captures a snapshot, implying that evolving coaching methodologies or changing student attitudes could necessitate revisiting the research in future epochs. Lastly, this study is honed in on the direct relationship between coaching attitude and motivation, potentially sidelining other influential external factors like infrastructure quality or peer dynamics.

5. RESEARCH DESIGN

The study adopted a quantitative research design to ascertain the nature and degree of association between coaching attitudes and athletic motivation among volleyball elective students. Quantitative research methods are preferred in this context due to their ability to produce objective and numerical data that can be statistically analyzed to draw valid conclusions.

The primary component of this research is centered on a correlational design. This approach was chosen to determine the strength and direction of the linear relationship between the independent variable (coaching attitude) and the dependent variable (athletic motivation). By employing this design, the study seeks to ascertain whether certain aspects of coaching attitude, such as Adaptive Pedagogy or Collaborative Team Spirit, positively or negatively influence athletic motivation components like Competence Support or Competitive Needs. Pearson's correlation coefficient was instrumental in measuring this relationship. In addition to the correlational component, a comparative design was integrated to examine how coaching attitudes and athletic motivation differ across various demographic profiles, namely age, sex, and year level of volleyball elective students. This comparative analysis aimed to identify significant variances in the perception or experience of coaching attitudes and their resultant effect on motivation across diverse student segments. Techniques like Analysis of Variance (ANOVA) or t-tests were employed to discern these differences, depending on the data distribution and nature of the demographic variables.

6. SAMPLING METHOD

The research was conducted at the Guangdong Institute of Technology, a reputable institution known for its commitment to physical education and sports development. The Institute offers public physical education classes to its freshman and sophomore students, and within this curriculum, there are 16 elective classes dedicated to volleyball. These classes are overseen by a team of five proficient volleyball teachers, ensuring a comprehensive learning and training experience for the students.

In addition to the elective classes, the Guangdong Institute of Technology proudly houses a vibrant volleyball club, boasting a membership of over 200 enthusiastic students. This club serves as a hub for volleyball aficionados to gather, train, and share their passion for the sport.

Moreover, the Institute's men's volleyball team has carved a niche for itself in the collegiate sports arena. Their commendable performance in the Guangdong University Volleyball League is a testament to the quality of training and the dedication of the players. The success stories from this league not only instill pride in the institution but also serve as motivation for aspiring volleyball players.

The decision to choose Guangdong Institute of Technology as the research locale is anchored in its rich volleyball ecosystem. The presence of elective classes, an active volleyball club, and a high-

performing men's team offers a diverse pool of participants, experiences, and insights, making it an ideal setting for this study.

For this research, the sample size was determined using the Raosoft Sample Size Calculator, a reliable and widely-used tool for statistical sample size computation.

- Given the parameters for the research:
- Margin of Error: 5%
- Confidence Interval: 95%
- Distribution Rate: 50%
- Total Population of Volleyball Elective Students: 500

The calculator suggests a sample size of 218 respondents. This means that out of the total population of 500 volleyball elective students at the Guangdong Institute of Technology, 218 students were selected to participate in the study to ensure that the results are representative of the entire population, with a 95% confidence level and a 5% margin of error.

The sampling technique chosen for this research is Simple Random Sampling. This method ensures that every student in the population has an equal and unbiased chance of being selected for the study. Simple Random Sampling is a robust technique as it minimizes biases and maximizes the generalizability of the study results to the broader population.

7. RESEARCH INSTRUMENT

The research instrument for this study was crafted to align with the objectives and provide comprehensive insights into the variables of interest. This instrument was structured into three primary sections, ensuring a systematic approach to data collection.

The first part focuses on gathering demographic information, serving as a foundational context for subsequent data. Respondents were provided details about their age, gender, and year level in the volleyball elective. This information is pivotal as it assists in understanding any differential responses that might emerge based on these demographic factors.

Diving deeper, the second part introduces the Coaching Attitudes Questionnaire. Tailored specifically for this study, it examines respondents' perceptions about different facets of coaching. It encompasses four distinct constructs: Adaptive Pedagogy, Player Development, Self-improvement, and Collaborative Team Spirit. Each of these constructs is further broken down into seven statements. Participants will express their level of agreement with each statement using a 4-point Likert scale, ensuring a differentiated understanding of their perspectives. This researcher-made questionnaire is based on the literature review and exhibited good psychometric properties (CVI = 0.84; Cronbach alpha = 0.91)

Similarly, the third part presents the Athletic Motivation Questionnaire. This section aims to measure the motivational drivers related to volleyball and sports in general. The constructs here mirror the structure of the previous section, with focus areas being Competence Support, Communication Dynamics, Competitive Needs, and Pacing Influence. Once again, a 4-point Likert scale aids respondents in detailing their sentiments. The questionnaire developed for this research, grounded in the literature review, demonstrated robust psychometric qualities, with a Content Validity Index (CVI) of 0.78 and a Cronbach's alpha coefficient of 0.94, indicating high reliability and validity.

8. RESULTS, ANALYSIS, AND INTERPRETATION

This section offers a comprehensive overview of the data collected from the participants of the study. It outlines the research findings and their importance in addressing the research questions posed.

Demographic Profile of the Respondents.

The first research question asked, what is the demographic profile of the respondents:

Table 1. Demographic Profile of the Respondents

Demographic Profile	Frequency	Categories	Frequency	Percentage
Sex		Male	138	63.30
		Female	80	36.70
		Total	218	100.00
Age		Below 18 years old	8	3.67
		18-20 years old	116	53.21
		21-23 years old	57	26.15
		24-26 years old	<u>22</u>	10.09
		Above 26 years old	<u>15</u>	6.88
		Total	218	100.00
Year Level		Freshman	<u>46</u>	21.10
		Sophomore	<u>94</u>	43.12
		Junior	<u>37</u>	16.97
		Senior	<u>41</u>	18.81
		Total	218	100.00

Table 1 presents the demographic profile of the respondents in a survey, segmented into three main categories: sex, age, and year level.

In the sex category, the respondents are predominantly male, accounting for 138 individuals or 63.30% of the total participants. Female respondents make up the remaining 36.70%, totaling 80 individuals. The overall count of respondents in this demographic section sums up to 218, which is the base number for calculating the given percentages.

Age-wise, the respondents are primarily in the 18-20 years old bracket, with 116 individuals representing 53.21% of the total. The 21-23 years old category follows with 57 individuals, amounting to 26.15%. Those in the 24-26 years old bracket account for 10.09%, which equals 22 respondents. The least represented are those below 18 years old and those above 26 years old, with 8 (3.67%) and 15 (6.88%) respondents respectively. All age groups combined reach the total respondent count of 218.

Regarding the year level, sophomores constitute the largest group with 94 respondents, which is 43.12% of the total. Freshmen are the next most significant group, with 46 individuals making up 21.10%. Seniors and juniors are relatively less represented, with seniors at 41 respondents (18.81%) and

juniors at 37 respondents (16.97%). The cumulative total for the year level demographic remains consistent at 218 respondents.

Across each category, the total number of respondents is consistently reported as 218, ensuring that the percentages reflect the proportions within the entire surveyed population.

Coaching Attitudes.

The second research question asked, what is the assessment of the respondents on the coaching attitudes:

Verbal Description/Interpretation.

Table 2. Assessment of Coaching Attitudes – Adaptive Pedagogy

Indicators	Mean	SD	Verbal Description/Interpretation	Rank
My coach frequently adjusts teaching styles to fit the needs of different players.	3.31	0.90	Agree/Good	5
The training methods used are tailored to cater to diverse learning preferences.	3.33	0.88	Agree/Good	3
My coach is open to feedback and makes changes in training techniques accordingly.	33.30	0.89	Agree/Good	6
I feel the coaching I receive is personalized to my strengths and areas of improvement.	3.26	0.98	Agree/Good	7
The coach uses a variety of drills and exercises in our training sessions.	3.33	0.87	Agree/Good	3
Players are encouraged to share their learning preferences with the coach.	3.36	0.82	Agree/Good	2
My coach understands that each player might need a different approach to learning.	3.43	0.77	Agree/Good	1
Adaptive Pedagogy (composite Mean	3.33	0.64	Agree/Good	

Table 2 provides an assessment of coaching attitudes towards adaptive pedagogy, highlighting how well coaches tailor their teaching styles to meet the needs of different players.

The indicators are assessed on a scale, with the mean scores suggesting the level of agreement to the statements presented. The standard deviation (SD) indicates the variability of the responses. A lower SD suggests more consensus among the responses, while a higher SD indicates more diversity in the opinions of the respondents.

Each indicator is also assigned a rank based on its mean score, with a verbal description provided to interpret these scores. The indicator with the highest mean score of 3.43 is "My coach understands that each player might need a different approach to learning," with a standard deviation of 0.77, ranking 1st among the indicators and interpreted as "Agree/Good." This suggests a strong agreement among respondents that coaches recognize individual learning needs.

Closely following is the statement "Players are encouraged to share their learning preferences with the coach," with a mean score of 3.36 and the lowest SD of 0.82, ranking 2nd. This implies that players feel they are actively encouraged to communicate their learning needs, which is a key aspect of adaptive pedagogy.

Two indicators share the rank of 3rd with a mean score of 3.33: "The training methods used are tailored to cater to diverse learning preferences" and "The coach uses a variety of drills and exercises in our training sessions." Both have low standard deviations (0.88 and 0.87, respectively), indicating a general agreement that training is diverse and caters to different preferences.

The indicator "My coach frequently adjusts teaching styles to fit the needs of different players" has a mean of 3.31 and a SD of 0.90, ranking 5th. It is followed by "My coach is open to feedback and makes changes in training techniques accordingly," with a mean of 3.30 and a SD of 0.89, ranking 6th. Both scores show agreement but with slightly more variability in responses compared to the top indicators.

The lowest-ranked individual statement, yet still within the agreement range, is "I feel the coaching I receive is personalized to my strengths and areas of improvement," with a mean of 3.26 and the highest SD of 0.98, placing it at 7th. This indicates a good level of personalization in coaching but suggests slightly less consensus among the respondents on this aspect.

Finally, the overall assessment for Adaptive Pedagogy is given a mean score of 3.33 with a standard deviation of 0.64. This score is not ranked but is interpreted as "Agree/Good," reflecting a positive consensus on the adaptive pedagogical approaches of the coaches in general. Zaitseva et al. (2022) emphasize the importance of adaptive pedagogy in nurturing volitional qualities and emotional maturity in athletes, highlighting that responsive and tailored coaching strategies are essential for developing a well- rounded athlete.

9. CONCLUSION

The comprehensive investigation into the relationship between coaching attitudes and athletic motivation has yielded insightful results, with a particular focus on how various coaching practices and demographic factors intertwine to influence motivation.

Throughout the study, the impact of coaching attitudes on athletic motivation was a recurring theme, with clear evidence suggesting that positive coaching is a significant predictor of enhanced motivation among athletes. The data revealed a very strong positive correlation, as indicated by the Pearson r coefficient of 0.93, suggesting that coaches who provide competence support, effective communication, and an emphasis on competitive needs and pacing strategies are instrumental in fostering high levels of motivation. This correlation not only reinforces the importance of skillful coaching but also highlights the coaches' role in satisfying the psychological needs of athletes, which is central to their intrinsic motivation as per Self-Determination Theory.

Demographic variables such as sex and academic year level did not present significant differences in athletic motivation, indicating that motivation is not constrained by these factors and may be more influenced by individual characteristics and the quality of the coaching environment. On the other hand, age emerged as a significant factor affecting motivation, with notable differences across age groups. This suggests a developmental component to motivation, which coaches need to consider in their approach.

This study underscores the critical role of coaches in shaping an athlete's motivational landscape. The findings advocate for a holistic approach to coaching that goes beyond physical training to include psychological empowerment and support. By adopting coaching attitudes that align with the principles of Self-Determination Theory- emphasizing autonomy, competence, and relatedness- coaches can significantly elevate the intrinsic motivation of their athletes. Such motivation is essential

not only for athletic performance but also for the overall satisfaction and long-term engagement of athletes in sports. Coaches, therefore, are not merely instructors of the sport but are pivotal in nurturing the motivational climate that drives athletes to excel.

10. RECOMMENDATIONS

Based on the study's findings, a comprehensive program titled "MVP: Motivation and Victory Program" for coaches and athletes is proposed. The MVP program would have several key components aimed at enhancing athletic motivation by addressing the factors identified in the study.

Program Objectives:

- To enhance athletic motivation through targeted coaching practices.
- To address key factors affecting athletic motivation such as competence support, communication dynamics, competitive needs, and pacing influence.
- To provide professional development for coaches focusing on motivational strategies within sports psychology.
- To implement athlete-centered training modules and leadership programs.

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