



## STUDENT SATISFACTION WITH THE BADMINTON CLUB: A CASE STUDY OF UNIVERSITY OF FINANCE – MARKETING

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### Abstract:

This study aims to evaluate student satisfaction regarding their participation in the sports club at University of Finance – Marketing. Utilizing routine research methods, the authors developed a specialized scale to measure satisfaction levels among regular student members. The resulting scale demonstrated high reliability, comprising 20 observed variables categorized into 5 primary factor groups. Empirical findings indicate a generally positive reception of the club's activities. Specifically, 17 out of 20 factors were rated at the "Satisfied" level, reflecting the club's success in meeting student expectations in core areas. However, 3 factors received "Neutral" ratings, suggesting specific aspects that require further improvement to enhance service quality. These results provide a scientific basis for UFM administrators to refine extracurricular sports models, thereby promoting physical activity and soft skill development among the student body.

**Keywords:** club, basketball, University of Finance – Marketing, students, members, satisfaction

### 1. Introduction

Sports clubs in universities represent a key component of extracurricular activities for students. Their primary objectives are to enable students to pursue their athletic passions, improve physical health, and refine motor skills, while also serving as a platform to scout athletes for university teams competing in regional and national tournaments. The

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University of Finance – Marketing currently operates seven student sports clubs, including Martial Arts, Basketball, Volleyball, Badminton, Table Tennis, Football, and Pickleball. At present, these clubs attract a significant number of student members.

The UFM Basketball Club is one of the earliest established extracurricular sports clubs. In recent years, teams selected from this club have achieved high rankings in university-level, city-level, and national competitions. To further refine and enhance the operational quality of the Basketball Club at University of Finance – Marketing, we conducted this study titled: "Assessing the Satisfaction of Students Participating in the Basketball Club at University of Finance – Marketing".

### 1.1 Research Methods

Literature review, interviews, and statistical mathematical methods.

### 1.2 Research Subjects

30 experts, coaches, and senior lecturers with extensive teaching experience, along with 51 students who are active members of the UFM Basketball Club.

## 2. Research Results and Discussion

### 2.1 Determining the Scale to Evaluate Student Satisfaction with the Club at University of Finance – Marketing

Through a review of relevant literature and consultations with experts and researchers, we initially developed a framework consisting of 6 factors with 21 observed variables to evaluate the satisfaction of student members in the UFM Basketball Club. According to the research model, the observed variables were coded as follows:

- **Coaching Staff (HLV):** 4 observed variables.
- **Training Program (CT):** 4 observed variables.
- **Facilities and Premises (CSVC):** 4 observed variables.
- **Training Time and Space (TGKG):** 4 observed variables.
- **Rules and Regulations (NQ):** 5 observed variables.

The questionnaire utilized a Likert scale to measure satisfaction levels as follows: [1]: Very dissatisfied; [2]: Dissatisfied; [3]: Neutral; [4]: Satisfied; [5]: Very satisfied.

The interpretation of the mean values for the Likert scale used in the sociological survey is as follows:

- Interval value = (Maximum – Minimum) / n = (5 - 1) / 5 = 0.8
- Mean Score Interpretation:
  - 1.00 – 1.80: Very dissatisfied.
  - 1.81 – 2.60: Dissatisfied.
  - 2.61 – 3.40: Neutral.
  - 3.41 – 4.20: Satisfied.
  - 4.21 – 5.00: Very satisfied.

Subsequently, a pilot interview was conducted with 30 students who are regular members of the UFM Basketball Club to refine the satisfaction scale. The results of the Cronbach’s Alpha reliability coefficient test are as follows:

**Table 1:** Summary of Cronbach's Alpha Reliability Test Results for the Preliminary Scale

No.	Satisfaction Measurement Scale	Number of Observed Variables (Before)	Number of Observed Variables (After)	Excluded Variables	Cronbach’s Alpha
1	Coaching Staff (HLV)	4	4	0	0.658
2	Training Program (CT)	4	4	0	0.871
3	Facilities and Premises (CSVC)	4	4	0	0.892
4	Training Time and Space (TGKG)	4	4	0	0.684
5	Rules and Regulations (NQ)	5	5	0	0.819
	<b>Total</b>	<b>21</b>	<b>21</b>	<b>0</b>	

Source: Survey data analysis results.

Based on the internal reliability analysis, we have finalized the satisfaction evaluation scale for student members of the UFM Basketball Club, consisting of 5 factor groups with 21 observed variables. The variables have been coded as follows:

- **Coaching Staff (4 variables):** HLV1 – HLV4.
- **Training Program (4 variables):** CT1 – CT4.
- **Facilities (4 variables):** CSVC1 – CSVC4.
- **Training Time and Space (4 variables):** TGKG1 – TGKG4.
- **Club Rules and Regulations (5 variables):** NQ1 – NQ5.

## 2.2 Determining the Evaluation Criteria for Student Satisfaction in the UFM Basketball Club

After finalizing the preliminary scale, we conducted interviews with 51 students who were regular members of the UFM Basketball Club in 2025. To evaluate the internal consistency and unidimensionality of each research concept, the study performed reliability testing and factor analysis.

The process of developing the formal scale was carried out in two steps:

- **Step 1:** Testing the scale's reliability using Cronbach’s Alpha.
- **Step 2:** Testing the scale's validity using Exploratory Factor Analysis (EFA) to assess the discriminant and convergent validity of the scale. During this process, any observed variable that did not meet the reliability requirements was excluded.

The results of the first Cronbach’s Alpha test for all 5 factor groups were > 0.6, ensuring suitability for reliability analysis. However, in the "Training Time and Space"

factor group, the observed variable TGKG4 had a corrected item-total correlation coefficient  $< 0.3$  and was therefore excluded from the scale.

The results of the second Cronbach's Alpha test for the "Training Time and Space" factor group, after removing the "noise" variables, were all  $> 0.6$  with item-total correlation coefficients  $> 0.3$ . Consequently, the remaining variables are appropriate for inclusion in the subsequent analysis stages.

The results of the first Cronbach's Alpha test are presented in Table 2 and Table 3.

**Table 2:** Results of the first Cronbach's Alpha reliability test for the formal scale

Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
<b>Coaching Staff (HLV)</b>				
HLV1	10.6863	4.580	0.577	0.756
HLV2	10.8431	4.615	0.553	0.766
HLV3	10.8627	3.881	0.643	0.721
HLV4	10.9020	3.690	0.657	0.715
<b>Cronbach's Alpha (HLV)</b>	<b>0.793</b>			
<b>Training Program (CT)</b>				
CT1	10.5490	3.933	0.792	0.736
CT2	10.5882	4.007	0.563	0.827
CT3	10.6471	3.553	0.621	0.810
CT4	10.6275	3.918	0.700	0.767
<b>Cronbach's Alpha (CT)</b>	<b>0.829</b>			
<b>Facilities and Premises (CSVC)</b>				
CSVC1	10.4510	5.213	0.784	0.799
CSVC2	10.5294	5.254	0.691	0.837
CSVC3	10.4314	5.170	0.738	0.816
CSVC4	10.4118	5.567	0.644	0.854
<b>Cronbach's Alpha (CSVC)</b>	<b>0.864</b>			
<b>Training Time and Space (TGKG)</b>				
TGKG1	9.6275	4.998	0.587	0.506
TGKG2	9.7059	4.732	0.573	0.499
TGKG3	9.8431	4.095	0.637	0.432
TGKG4	10.2353	5.944	0.099	0.835
<b>Cronbach's Alpha (TGKG)</b>	<b>0.655</b>			
<b>Rules and Regulations (NQ)</b>				
NQ1	13.4902	9.855	0.571	0.857
NQ2	13.5882	8.727	0.702	0.825
NQ3	13.5294	8.134	0.808	0.796
NQ4	13.7255	8.843	0.677	0.832
NQ5	13.7451	9.674	0.642	0.841
<b>Cronbach's Alpha (NQ)</b>	<b>0.861</b>			

**Table 3:** Results of the second Cronbach's Alpha reliability test for the "Training Time and Space" (TGKG) factor group

Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
TGKG1	6.7255	3.123	0.721	0.756
TGKG2	6.8039	2.881	0.707	0.760
TGKG3	6.9412	2.576	0.678	0.801
<b>Cronbach's Alpha (TGKG)</b>	<b>0.835</b>			

The study examined the conditions for performing Exploratory Factor Analysis (EFA). The sample size of 51 members meets the minimum requirement of 50 observations according to Hair et al. (2009).

**Table 4:** KMO and Bartlett's Test for the formal scale

<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</b>	<b>0.626</b>
<b>Bartlett's Test of Sphericity</b>	
Approx. Chi-Square	546.869
df	190
Sig.	.000

The results of the EFA (Table 4) show a KMO coefficient of 0.626 ( $> 0.5$ ) and Bartlett's Test Significance = 0.000 ( $< 0.05$ ). All factor loadings are  $> 0.5$ , indicating practical significance, with a Total Variance Explained of 70.158% ( $> 50%$ ) and factors extracted at Eigenvalues = 1.914 ( $> 1$ ).

**Table 5:** Pattern Matrix for the measurement scale

No.	Observed Variables	Component				
		1	2	3	4	5
1	NQ3	.885				
2	NQ2	.816				
3	NQ5	.777				
4	NQ4	.767				
5	NQ1	.722				
6	CSVC1		.878			
7	CSVC3		.856			
8	CSVC2		.804			
9	CSVC4		.784			
10	CT1			.899		
11	CT4			.857		
12	CT3			.783		
13	CT2			.727		
14	HLV4				.808	
15	HLV3				.794	
16	HLV2				.770	
17	HLV1				.731	

18	TGKG1					.902
19	TGKG2					.822
20	TGKG3					.821

Based on the Pattern Matrix, all coefficients satisfy the requirements (factor loadings > 0.5) and are organized into 5 distinct factor groups: HLV (Coaching Staff), CT (Training Program), CSVC (Facilities and Premises), TGKG (Training Time and Space), and NQ (Rules and Regulations).

In conclusion, through Cronbach’s Alpha testing and Exploratory Factor Analysis (EFA), we have established a satisfaction evaluation scale for student members of the UFM Basketball Club consisting of 5 factor groups with 20 observed variables.

Dưới đây là bản dịch phần 2.3 và Bảng 6 sang tiếng Anh chuyên ngành để bạn đưa vào bài báo. Tôi đã chuẩn hóa các thuật ngữ theo phong cách báo chí khoa học quốc tế:

### 2.3 Survey Results on Student Satisfaction with the UFM Basketball Club

The survey results regarding the satisfaction levels of students participating in the Basketball Club at UFM are presented in Table 6 and Figure 1.

**Table 6:** Survey Results of Student Satisfaction with the UFM Basketball Club

Code	Item Description			
<b>HLV</b>	<b>Coaching Staff</b>	<b>N</b>	<b>Mean</b>	<b>Standard Deviation</b>
HLV1	Coaches possess solid knowledge and deep professional expertise.	51	3.745	0.744
HLV2	Coaches strictly adhere to club regulations regarding professional conduct, training time, and programs.	51	3.588	0.753
HLV3	Coaches maintain a gentle, friendly, and enthusiastic attitude, providing effective support for members' progress.	51	3.569	0.900
HLV4	Coaches encourage proactive learning and practice, correcting technical errors and addressing all member inquiries satisfactorily.	51	3.530	0.946
<b>CT</b>	<b>Training Program</b>	<b>N</b>	<b>Mean</b>	<b>Standard Deviation</b>
CT1	The training and coaching programs are suitable for students at different skill levels.	51	3.588	0.669
CT2	The training program is clearly and fully communicated to members at the beginning of each week.	51	3.549	0.808
CT3	The duration and physical workload of each session are appropriate for the members' physical characteristics.	51	3.490	0.903
CT4	Periodic friendly competitions are organized among members and teams from other university clubs.	51	3.510	0.731
<b>CSV</b>	<b>Facilities</b>	<b>N</b>	<b>Mean</b>	<b>Standard Deviation</b>
CSV1	The courts ensure standard dimensions for practice and competition.	51	3.490	0.857

CSVC2	Training equipment (balls, posts, nets, hoops, etc.) is fully provided.	51	3.412	0.920
CSVC3	The courts are cleaned and maintained before each training session.	51	3.510	0.903
CSVC4	Restrooms are located near the training area, convenient for members to use.	51	3.529	0.880
<b>TGKG</b>	<b>Training Time and Space</b>	<b>N</b>	<b>Mean</b>	<b>Standard Deviation</b>
TGKG1	The club's activity schedule is suitable.	51	3.510	0.834
TGKG2	The duration of each training session is sufficient and reasonable.	51	3.431	0.922
TGKG3	The club's practice location is convenient for members to participate.	51	3.294	1.045
<b>NQ</b>	<b>Rules and Regulations</b>	<b>N</b>	<b>Mean</b>	<b>Standard Deviation</b>
NQ1	Rules and regulations are detailed and specifically communicated to all members.	51	3.529	0.859
NQ2	Membership fees and activity costs are appropriate and reasonable.	51	3.431	0.964
NQ3	The reward and disciplinary system is fair and logical.	51	3.490	0.987
NQ4	Feedback is periodically collected to adjust rules and regulations.	51	3.294	0.965
NQ5	The Management Board manages, monitors, and handles club affairs promptly and reasonably.	51	3.274	

The student survey results indicate:

- **Coaching Staff factors:** All items in this group were rated at a "Satisfied" level, with mean values ranging from  $3.530 \pm 0.946$  to  $3.745 \pm 0.744$ . Notably, students expressed the highest satisfaction with the criterion: "Coaches possess solid knowledge and deep professional expertise."
- **Training Program factors:** This group also received "Satisfied" ratings, with mean values fluctuating between  $3.490 \pm 0.903$  and  $3.588 \pm 0.669$ . This suggests that students are quite satisfied with the training programs developed by the Club Management Board.
- **Facilities factors:** The item receiving the highest satisfaction was "Restrooms are located near the training area, convenient for members to use" ( $3.529 \pm 0.880$ ), while the lowest was "Training equipment (balls, posts, nets, hoops, etc.) is fully provided" ( $3.412 \pm 0.920$ ). Overall, the mean values reflect a general level of satisfaction with the facilities provided for the basketball club's activities.
- **Training Time and Space factors:** Two items were rated as "Satisfied": "The club's activity schedule is suitable" ( $3.510 \pm 0.834$ ) and "The duration of each training session is sufficient and reasonable" ( $3.431 \pm 0.922$ ). However, the item "The club's practice location is convenient for members to participate" was rated at a "Neutral" level ( $3.294 \pm 1.045$ ). This stems from the fact that the club only operates at one

campus, while the university has four campuses across Ho Chi Minh City located far apart, making travel difficult for some members.

- **Rules and Regulations factors:** Three items in this group were rated at a "Satisfied" level, with mean values ranging from  $3.431 \pm 0.964$  to  $3.529 \pm 0.859$ . Two items were rated as "Neutral": "Feedback is periodically collected to adjust rules and regulations" ( $3.294 \pm 0.965$ ) and "The Management Board manages, monitors, and handles club affairs promptly and reasonably" ( $3.274 \pm 0.827$ ).

In summary, among the 20 factors surveyed regarding the satisfaction of student members in the UFM Basketball Club, 17 were rated as "Satisfied" and 3 were rated as "Neutral." The Club Management Board needs to research and propose solutions to further enhance the operational quality of the Basketball Club at University of Finance – Marketing.

### 3. Recommendations

Based on the research findings, the authors propose several theoretical and practical recommendations to enhance the quality of the Basketball Club at the University of Finance – Marketing :

- **Expanding Practice Locations:** To address the "Neutral" satisfaction regarding the practice location, the University and the Physical Education Center should consider rotating training sessions among different campuses or establishing satellite basketball sub-clubs at other UFM campuses in Ho Chi Minh City. This would reduce travel difficulties for members residing far from the main facility.
- **Enhancing Management and Communication:** The Club Management Board should improve its responsiveness by digitizing administrative tasks. Implementing a formal feedback channel (such as a monthly digital survey or a dedicated suggestion box) would allow for the periodic collection of student opinions to adjust rules and regulations more effectively.
- **Upgrading Facilities and Equipment:** Although students are generally satisfied, continuous investment in training tools (such as modern hoops, high-quality balls, and specialized training aids) is necessary. A regular maintenance and cleaning schedule for the courts should be strictly enforced to ensure a professional and safe training environment.
- **Diversifying Training and Exchange Activities:** The club should increase the frequency of friendly matches with other universities and internal tournaments. This not only improves professional skills but also fosters a stronger sense of community and social impact among students.
- **Future Research Directions:** Further studies should explore the impact of digital transformation on club management or apply a broader range of psychological factors to evaluate student engagement more deeply.

#### **4. Conclusion**

Based on the research results, the following conclusions are drawn:

- Through rigorous testing and validation procedures, the study has identified 5 factor groups with 20 observed variables suitable for evaluating student satisfaction among members of the UFM Basketball Club.
- Survey results regarding student satisfaction within the UFM Basketball Club indicate that 17 factors were rated at a "Satisfied" level, while 3 factors were rated as "Neutral." The Club Management Board should conduct further research and propose strategic solutions to enhance the operational quality of the Basketball Club at University of Finance - Marketing. This will help attract more members and increase overall student satisfaction levels.

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#### **7. Conclusion**

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### **Conflict of Interest Statement**

The authors declare no conflicts of interest.

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