



**A STUDY OF THE FACTORS INFLUENCING CONSUMER
LOYALTY TOWARD LI NING BADMINTON PRODUCTS**

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**AN INDEPENDENT STUDY SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
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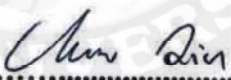
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This Independent Study Has Been Approved as a Partial Fulfillment of the
Requirements for the Degree of Master of Business Administration

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ABSTRACT

This study investigated the influence of product quality and brand image on consumer loyalty to Li-Ning's badminton products. With the rapid growth of the badminton industry and increasing competition among sports brands, understanding the factors that drive consumer loyalty has become essential for sustaining market advantage. A quantitative research design was adopted, and data were collected through an online questionnaire administered to consumers who had used Li-Ning's badminton products. A total of 267 valid responses were obtained. Descriptive statistics, correlation analysis, and multiple regression analysis were employed to examine the relationships among variables.

The results revealed that both product quality and brand image have significant positive effects on consumer loyalty, with product quality being the stronger predictor. These findings support Expectation-Confirmation Theory, which posits that product performance influences satisfaction and loyalty, as well as Brand Equity Theory, which emphasizes the role of brand associations in shaping consumer behavior. The study concludes that both functional product attributes and psychological brand perceptions play critical roles in fostering consumer loyalty to Li-Ning. Recommendations are provided for enhancing product innovation, strengthening brand identity, and improving customer engagement to further increase loyalty. This research contributes to the literature on sports marketing and offers practical insights for sports brand management.

Keywords: product quality, brand image, consumer loyalty, Li-Ning, badminton products

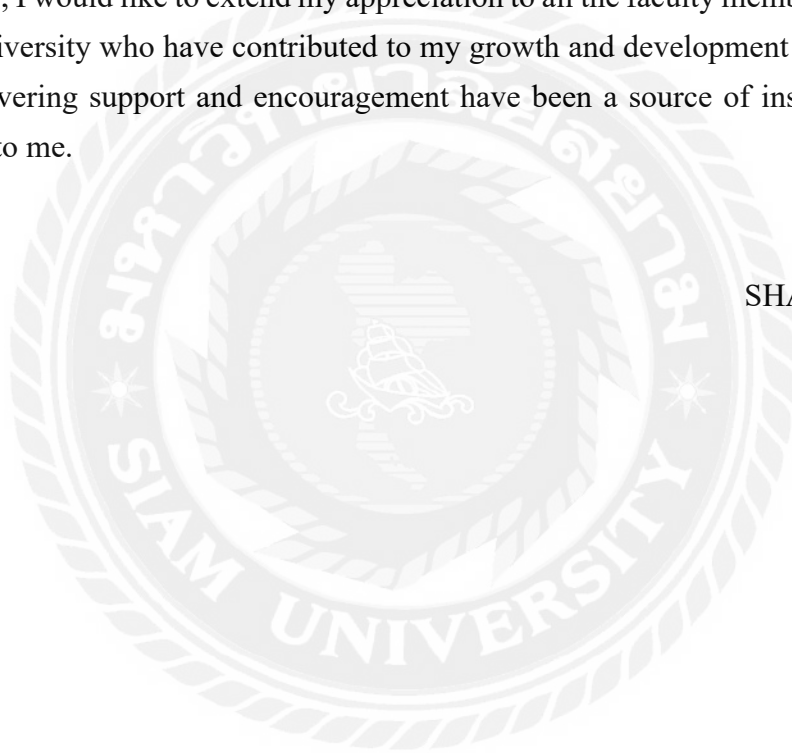
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SHAO JINYAN



DECLARATION

I, SHAO JINYAN, hereby declare that this Independent Study entitled “A Study of the Factors Influencing Consumer Loyalty toward Li Ning Badminton Products” is an original work and has never been submitted to any academic institution for a degree.

(SHAO JINYAN)

Dec 11, 2025



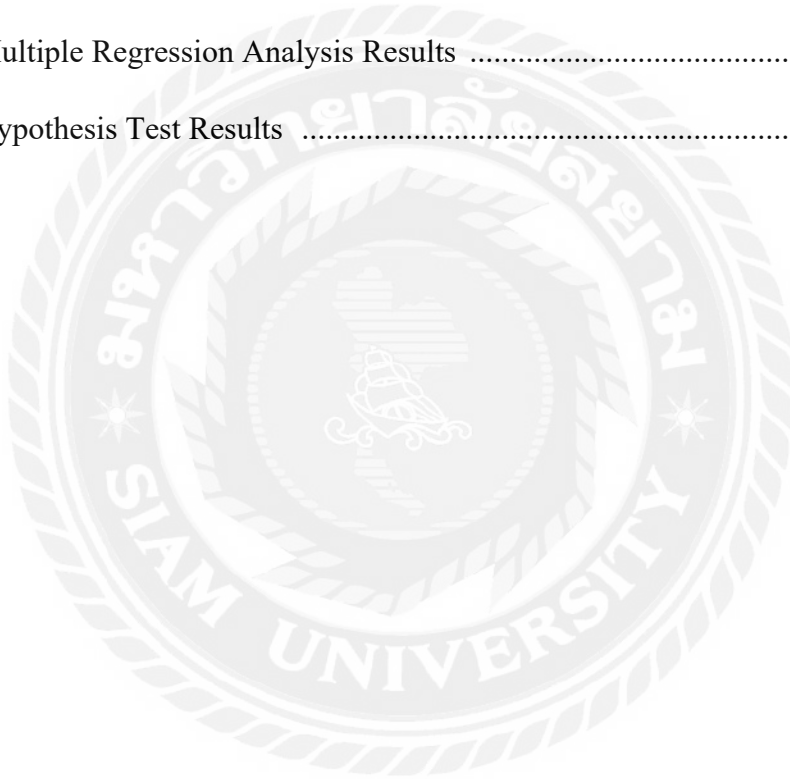
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Chapter 1 Introduction

1.1 Background of the Study

The global sports equipment market has experienced rapid growth in recent years, driven by rising health awareness and increasing participation in competitive sports (Euromonitor International, 2023). Within this industry, the badminton market has expanded significantly, especially in Asia, where the sport has deep cultural and professional roots (Phomsoupha & Laffaye, 2015). As a leading Chinese sports brand, Li-Ning has invested heavily in product innovation and branding strategies to strengthen its position against global competitors such as Yonex and Victor, reflecting China's growing influence in the global sportswear market (Zhang & Kim, 2018). In such a competitive environment, consumer loyalty has become crucial for sustaining long-term brand success.

Among the many factors affecting consumer loyalty, product quality and brand image are consistently recognized as key determinants. Product quality, plays a direct role in shaping consumer satisfaction and repurchase intention (Zeithaml, 1988; Nguyen et al., 2020). Meanwhile, brand image influences consumer perceptions on a psychological level, as strong brand associations and credibility significantly enhance trust and loyalty (Keller, 1993; Aaker, 1996). For sports brands, endorsements by professional athletes and strong brand identity further strengthen emotional attachment among consumers (Biscaia et al., 2013).

Despite Li-Ning's rapid international growth, empirical studies focusing specifically on how badminton consumers perceive its product quality and brand image remain limited. Understanding these factors is essential for improving competitive advantage and guiding strategic brand development in the sports industry. Therefore, this study aimed to investigate the impact of product quality and brand image on consumer loyalty toward Li-Ning's badminton products, contributing both academic insights and practical implications for brand management.

1.2 Questions of the Study

1. How does product quality influence consumer loyalty toward Li-Ning's badminton products?
2. How does brand image affect consumer loyalty toward Li-Ning's badminton products?

1.3 Objectives of the Study

1. To examine the effect of product quality on consumer loyalty toward Li-Ning's badminton products.
2. To examine the influence of brand image on consumer loyalty toward Li-Ning's badminton products.

1.4 Scope of the Study

This study focused specifically on examining how product quality and brand image influence consumer loyalty toward Li-Ning's badminton products. The research was limited to consumers who had purchased or used Li-Ning badminton items, such as rackets, shoes, shuttlecocks, or sportswear, within the past year. The study employed a quantitative research design using a structured questionnaire. Geographically, the scope of the study was restricted to consumers residing in regions where Li-Ning badminton products are widely available, particularly within Asian markets where badminton participation is high. The study examined only two independent variables (product quality and brand image), and one dependent variable (consumer loyalty). Therefore, the results provide a focused understanding of how these two core determinants shape loyalty within the context of Li-Ning's badminton product line.

1.5 Significance of the Study

This study contributes both theoretical and practical significance. Theoretically, it enhances the understanding of consumer loyalty within the sports equipment industry by empirically validating the influence of product quality and brand image, two variables widely recognized but underexplored in the context of Chinese sports brands. The findings add to existing literature on brand management and consumer behavior, particularly within the fast-growing Asian badminton market. Practically, the study provides valuable insights for Li-Ning and other sports brands seeking to strengthen their competitive position. By identifying the factors that most strongly influence consumer loyalty, the results can guide strategic decisions related to product development, branding, quality improvement, and market positioning. Additionally, retailers, marketers, and sports organizations can use the findings to improve customer engagement and promote long-term loyalty among badminton consumers. Overall, the study offers meaningful implications for enhancing brand competitiveness in an increasingly crowded global sports market.

1.6 Definition of Key Terms

1. Product Quality

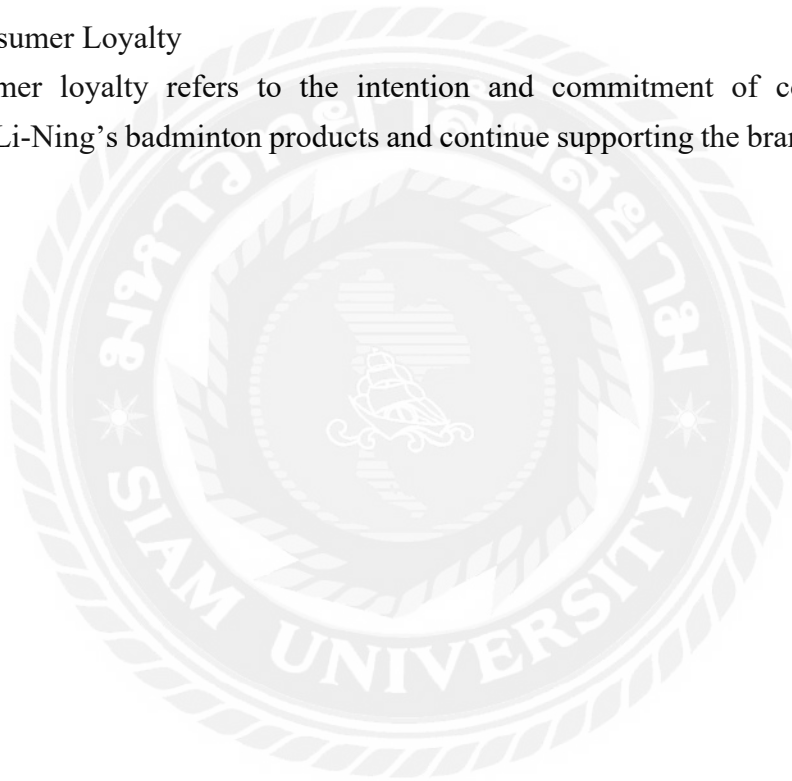
Product quality refers to consumers' evaluation of the overall excellence and performance of Li-Ning's badminton products. In this study, product quality includes attributes such as durability, functionality, materials, comfort, and performance effectiveness of items such as rackets, shoes, and sportswear.

2. Brand Image

Brand image refers to the perceptions, associations, and mental impressions consumers hold about the Li-Ning brand. This includes emotional, symbolic, and functional attributes shaped by brand reputation, endorsements, product design, and marketing communication.

3. Consumer Loyalty

Consumer loyalty refers to the intention and commitment of consumers to repurchase Li-Ning's badminton products and continue supporting the brand over time.



Chapter 2 Literature Review

2.1 Product Quality

Product quality has long been recognized as a fundamental determinant of consumer evaluations and behavioral intentions across various product categories, including sports equipment. Zeithaml (1988) defined product quality as the consumer's subjective judgment of a product's overall excellence or superiority. In the context of sports products, quality is often assessed through functional performance, durability, reliability, safety, and material craftsmanship—attributes that directly influence consumer satisfaction and repeated usage (Yee et al., 2010). High perceived product quality contributes to greater perceived value, enhances consumer trust, and strengthens long-term loyalty (Nguyen et al., 2020).

Research in the sports equipment market also emphasizes that product quality plays a crucial role in shaping athletes' and recreational users' purchasing decisions. For example, Ko and Kim (2014) found that functional performance and product durability significantly affect consumer attitudes toward sports brands. Similarly, Biscaia et al. (2013) highlighted that product quality reinforces brand credibility and increases consumers' willingness to develop loyalty toward sports teams and related merchandise. When applied to badminton products, quality factors such as racket stiffness, balance, grip comfort, and material strength are essential in determining overall product performance and consumer satisfaction (Phomsoupha & Laffaye, 2015).

Furthermore, empirical studies support the positive relationship between product quality and consumer loyalty. Nguyen et al. (2020) demonstrated that higher perceived product quality leads to increased customer satisfaction, which in turn promotes loyalty behaviors such as repurchase intention and positive word-of-mouth. This aligns with Expectation–Confirmation Theory, which posits that satisfaction results from the confirmation of product performance relative to expectations (Oliver, 1980). Thus, in competitive markets such as badminton sports equipment, brands like Li-Ning must continuously maintain and enhance product quality to secure consumer loyalty and strengthen competitive advantage.

2.2 Brand Image

Brand image is a central construct in consumer behavior and brand management research, representing the set of perceptions, associations, and emotional meanings that consumers attach to a brand (Keller, 1993). A positive brand image is built through consistent marketing communication, product experience, brand reputation, and

symbolic value, all of which contribute to shaping how consumers evaluate and relate to a brand. Aaker (1996) emphasized that brand image is a key component of brand equity, influencing how consumers differentiate a brand from its competitors and developing emotional attachment and trust toward the brand.

In the sports industry, brand image plays a particularly influential role because consumers often associate sports brands with athlete endorsements, national identity, performance attributes, and lifestyle symbolism. Research shows that a strong brand image enhances brand credibility and fosters favorable attitudes toward both the brand and its products (Biscaia et al., 2013). For example, brand associations linked to professional athletes or national teams strengthen consumers' perceptions of competence, authenticity, and prestige, which translate into increased preference and loyalty (Ko & Kim, 2014). This is especially relevant in markets like badminton, where brands invest heavily in sponsorships and professional partnerships to cultivate a strong brand identity.

Empirical studies consistently demonstrate that brand image has a significant impact on consumer loyalty and behavioral intentions. For instance, Wu and Wang (2014) found that a positive brand image increases customers' willingness to repurchase and recommend a brand, highlighting its importance in relationship building. Similarly, Tu et al. (2012) emphasized that brand image contributes to both attitudinal and behavioral loyalty by reinforcing consumers' emotional connections and reducing brand-switching intentions. In competitive markets such as sports equipment, a strong brand image not only enhances brand value but also serves as a strategic asset that encourages long-term consumer commitment.

Overall, existing literature indicates that brand image is a critical determinant of consumer loyalty. In the context of Li-Ning's badminton products, brand image formed through product design, athlete sponsorships, brand reputation, and marketing communication plays a crucial role in shaping consumer perceptions and loyalty behavior.

2.3 Consumer Loyalty

Consumer loyalty is a fundamental concept in marketing research and is often defined as a consumer's commitment to repurchase a preferred product or service consistently in the future, despite situational or competitive pressures (Oliver, 1999). Loyalty comprises both behavioral components, such as repeated purchasing, and attitudinal components, such as emotional attachment, preference, and advocacy (Chaudhuri & Holbrook, 2001). In competitive markets such as the sports equipment

industry, cultivating consumer loyalty is essential for brand survival, reducing marketing costs, and generating stable long-term revenue.

Researchers widely acknowledge that consumer loyalty is shaped by a combination of product-related attributes, brand perceptions, satisfaction, and trust. For instance, Deng et al. (2010) emphasized that satisfaction is a core antecedent of loyalty, supporting the Expectation–Confirmation view that consumers remain loyal when products meet or exceed expectations. Trust has also been identified as a critical predictor of loyalty, as it reduces perceived risk and strengthens long-term customer–brand relationships (Morgan & Hunt, 1994). In the context of sports brands, loyalty is influenced not only by functional performance but also by symbolic meanings, brand identity, and emotional value (Biscaia et al., 2013).

Recent empirical research further demonstrates that loyalty is strongly affected by consumers' perceptions of product quality and brand image, particularly in the sports apparel and equipment markets. For example, Lin and Wang (2010) found that both brand image and perceived value significantly predict loyalty in the sporting goods industry, while Algharabat (2017) reported that positive brand associations enhance both attitudinal and behavioral loyalty. In badminton markets specifically, consumers often develop loyalty through consistent product performance, brand credibility, and identification with professional athlete endorsements (Ko & Kim, 2014). These findings underscore the multidimensional nature of loyalty and its importance as an outcome variable in consumer behavior research.

Overall, the literature highlights consumer loyalty as a dynamic, psychologically grounded construct that results from consumers' cumulative experiences with a brand. In the case of Li-Ning's badminton products, loyalty reflects the extent to which consumers are committed to continuing their use of the brand, influenced by product performance, brand associations, emotional attachment, and perceived brand credibility.

2.4 Expectation–Confirmation Theory

Expectation–Confirmation Theory (ECT), originally developed by Oliver (1980), is a widely used theoretical framework for explaining consumer satisfaction and post-purchase behavior. According to ECT, consumers form initial expectations before purchasing a product and later compare the perceived performance with these expectations. When the performance meets or exceeds expectations, positive confirmation occurs, leading to higher satisfaction and greater likelihood of continued usage or repurchase. Negative confirmation, on the other hand, reduces satisfaction and weakens loyalty (Bhattacharjee, 2001). ECT has been extensively applied in marketing,

consumer behavior, and information systems research to understand how perceptions of product quality influence satisfaction and subsequent behavioral intentions.

Empirical studies support the central proposition of ECT that perceived product performance strongly influences satisfaction and loyalty. For example, Deng et al. (2010) demonstrated that positive confirmation significantly enhances consumer satisfaction, which in turn predicts loyalty in digital product usage. In the context of physical consumer goods, product quality has been shown to be a primary driver of performance confirmation, especially for categories requiring functional reliability, such as sports equipment (Ko & Kim, 2014). As a result, ECT provides a robust foundation for understanding how product quality leads to consumer loyalty in performance-oriented markets, including badminton products such as rackets and shoes.

2.5 Brand Equity Theory

Brand Equity Theory provides another important foundation for understanding how brand-related perceptions influence consumer loyalty. Keller (1993) conceptualized customer-based brand equity as the differential effect of brand knowledge on consumer response, emphasizing that strong, favorable, and unique brand associations enhance consumer evaluation and behavioral intentions. Aaker (1996) similarly identified brand image as a core component of brand equity, comprising symbolic meanings, perceived quality, brand personality, and associations that differentiate a brand from competitors. These brand associations strengthen emotional attachment and trust, leading to higher levels of loyalty.

Substantial empirical research supports the link between brand image and consumer loyalty within the Brand Equity Theory framework. Chaudhuri and Holbrook (2001) found that brand trust and brand affect directly increase both purchase loyalty and attitudinal loyalty. In the sports industry, brand image derived from endorsements, performance reputation, and symbolic value significantly influences consumer loyalty and repurchase intentions (Biscaia et al., 2013). Moreover, Lin and Wang (2010) demonstrated that brand image plays a pivotal role in forming consumer loyalty by enhancing satisfaction and perceived value. Thus, Brand Equity Theory provides a comprehensive explanation for how brand image shapes consumer loyalty, particularly in the competitive sportswear and equipment market where emotional and symbolic associations are strong.

2.6 Conceptual Framework

The conceptual framework of this study is developed based on Expectation–Confirmation Theory (ECT) and Brand Equity Theory, which together explain how product-related evaluations and brand perceptions influence consumer loyalty. According to ECT, product quality contributes to loyalty by shaping consumers’ performance confirmation and satisfaction. Brand Equity Theory suggests that a strong brand image enhances emotional attachment, brand trust, and favorable evaluations, which also lead to higher levels of consumer loyalty.

Drawing from these theoretical foundations, the framework proposes that Product Quality and Brand Image are the two key independent variables that directly influence the dependent variable, Consumer Loyalty, toward Li-Ning’s badminton products.

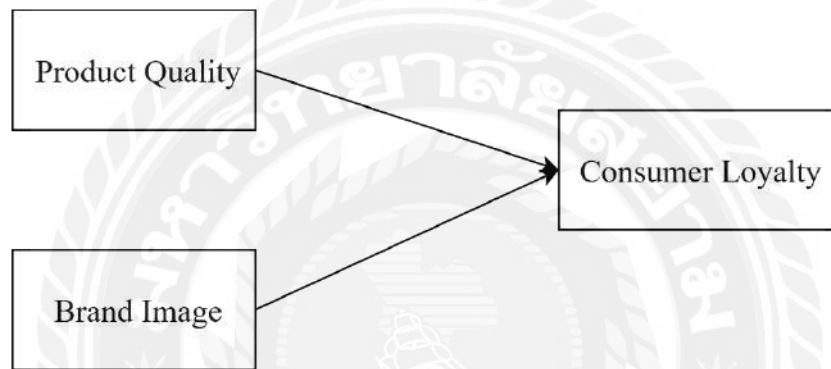


Figure 2.1 Conceptual Framework

Chapter 3 Research Methodology

3.1 Research Design

This study employed a quantitative research design to examine the effects of product quality and brand image on consumer loyalty toward Li-Ning's badminton products. A quantitative approach was selected because it allows for objective measurement of consumer perceptions and enables statistical testing of hypothesized relationships among variables. A structured questionnaire with a five-point Likert scale was developed to measure the constructs of product quality, brand image, and consumer loyalty. The research design incorporated descriptive statistics, reliability analysis, correlation analysis, and multiple linear regression to determine the strength and significance of the relationships proposed in the conceptual framework. This systematic and empirical approach provide a reliable basis for assessing how product-related attributes and brand perceptions influence loyalty among badminton consumers.

3.2 Questionnaire Design

Table 3.1 Measurement Items

Variable	Code	Measurement Item	Scale
Product Quality	PQ1	Li-Ning's badminton products are durable during play.	Zeithaml (1988); Yee et al. (2010)
	PQ2	The materials used in Li-Ning's badminton products are of high quality.	
	PQ3	The products perform well and meet my expectations.	
	PQ4	The products are reliable and consistent in use.	
	PQ5	Overall, Li-Ning's badminton products offer excellent functional performance.	
Brand Image	BI1	Li-Ning has a good reputation in the badminton market.	Keller (1993); Aaker (1996); Tu et al. (2012)
	BI2	Li-Ning's brand identity is attractive and professional.	
	BI3	Li-Ning's sponsorships or athlete endorsements positively influence my perception of the brand.	

	BI4	I believe Li-Ning is a trustworthy and credible brand.	
	BI5	Overall, I have a positive impression of Li-Ning as a brand.	
Consumer Loyalty	CL1	I intend to continue purchasing Li-Ning's badminton products.	Oliver (1999); Chaudhuri & Holbrook (2001)
	CL2	I prefer Li-Ning over other badminton brands.	
	CL3	I would recommend Li-Ning's badminton products to others.	
	CL4	I feel loyal to Li-Ning's badminton product line.	
	CL5	Even if other brands offer similar products, I would still choose Li-Ning.	

3.3 Hypothesis

H1: Product quality has a positive and significant effect on consumer loyalty.

H2: Brand image has a positive and significant effect on consumer loyalty.

3.4 Population and Sample

The population of this study consisted of consumers who had purchased or used Li-Ning's badminton products within the past twelve months. This group included active badminton players, recreational users, and sports consumers familiar with Li-Ning's product lines such as rackets, shoes, shuttlecocks, and sportswear. These individuals were selected because their direct experience enables reliable evaluation of product quality, brand image, and loyalty.

A simple random sampling method was employed to select respondents with actual usage experience.

3.5 Data Collection

The online questionnaire was distributed through badminton clubs, sports communities, and social media platforms targeting badminton enthusiasts. A total of 320 questionnaires were distributed. And 267 questionnaires were deemed valid and used for data analysis, producing an effective response rate of 82.5%.

3.6 Data Analysis

The data collected from the 267 valid questionnaires were analyzed using SPSS to examine the relationships among product quality, brand image, and consumer loyalty. The analysis consisted of several statistical procedures designed to ensure data accuracy, assess measurement reliability, and test the proposed hypotheses.

1. Reliability Analysis and Validity Analysis of the Scale

Reliability analysis was conducted to assess the internal consistency of the measurement scales used for product quality, brand image, and consumer loyalty. Cronbach's alpha coefficients were calculated for each construct. A minimum threshold of 0.70 was adopted to indicate acceptable reliability. The results showed that all constructs exceeded this threshold, demonstrating strong internal consistency and suitability for further statistical analysis. Construct validity was examined using the Kaiser–Meyer–Olkin (KMO) measure and Bartlett's Test of Sphericity. A KMO value above 0.60 indicates sampling adequacy, while a significant Bartlett's Test ($p < 0.05$) confirms that correlations among variables are sufficient for factor analysis. The results demonstrated that the scales met both criteria, confirming acceptable validity of the measurement items.

2. Descriptive Statistics

Initial data screening was conducted to check for missing values, outliers, and response inconsistencies. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize the demographic characteristics of respondents and to provide an overview of each variable's distribution.

3. Correlation Analysis

Pearson correlation analysis was performed to examine the strength and direction of the relationships among the key variables. This analysis provided preliminary evidence regarding whether product quality and brand image were significantly associated with consumer loyalty.

4. Regression Analysis

To test the hypotheses developed in the conceptual framework, multiple linear regression analysis was conducted. Consumer loyalty served as the dependent variable, while product quality and brand image were entered as independent variables. The significance of regression coefficients (β), the overall model fit (R^2), and the p-values were evaluated to determine whether the hypothesized relationships were supported.

3.7 Reliability and Validity Analysis of the Scale

Table 3.2 Reliability Analysis

Variable	No. of Items	Cronbach's Alpha
Product Quality	5	0.891
Brand Image	5	0.873
Consumer Loyalty	5	0.902
Overall Scale	15	0.917

The reliability analysis showed that all constructs achieved Cronbach's alpha values above 0.87, indicating excellent internal consistency. The overall reliability coefficient of 0.917 further confirms that the scale is highly reliable for quantitative analysis.

Table 3.3 KMO and Bartlett's Test^a

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.921
Bartlett's Test of Sphericity	Approx. Chi-Square	1854.37
	df	105
	Sig.	0.000

The KMO value of 0.921 indicated superb sampling adequacy for factor analysis. Bartlett's Test of Sphericity was significant ($p < 0.001$), suggesting that correlations among items were sufficient and valid for further statistical analysis.

Chapter 4 Findings and Discussion

4.1 Findings

4.1.1 Demographic Characteristics Description

Table 4.1 Demographic Characteristics Description

Variable	Category	Frequency	Percentage
Gender	Male	158	59.2%
	Female	109	40.8%
Age	< 20	36	13.5%
	20–29	142	53.2%
	30–39	63	23.6%
	≥ 40	26	9.7%
Playing Frequency	≤ 1 time/week	84	31.5%
	2–3 times/week	143	53.6%
	≥ 4 times/week	40	15.0%
Years Using Li-Ning	< 1 year	28	10.5%
	1–3 years	126	47.2%
	> 3 years	113	42.3%

A total of 267 valid responses were collected for this study, and the demographic characteristics of the respondents are summarized as follows. In terms of gender, the sample consisted of 158 males (59.2%) and 109 females (40.8%), indicating that male participants formed the majority of the respondents. Regarding age distribution, most respondents were between 20 and 29 years old, accounting for 142 individuals (53.2%). This was followed by 63 respondents (23.6%) aged 30–39, 36 respondents (13.5%) below 20 years of age, and 26 respondents (9.7%) who were 40 years old or above. This distribution suggests that the majority of Li-Ning badminton product users fall within the young adult demographic.

In terms of badminton playing frequency, the results show that 143 respondents (53.6%) played badminton two to three times per week, making it the most common playing frequency. Additionally, 84 respondents (31.5%) reported playing badminton once a week or less, while 40 respondents (15.0%) engaged in badminton more than four times per week. These findings indicate that a considerable proportion of respondents were active players who regularly participated in badminton activities.

With respect to the duration of using Li-Ning badminton products, 126 respondents (47.2%) reported using the products for one to three years, making it the

largest group. Meanwhile, 113 respondents (42.3%) had used Li-Ning products for more than three years, demonstrating a strong base of long-term users. A smaller proportion, 28 respondents (10.5%), had used the products for less than one year. These results indicate that most participants had sufficient experience with Li-Ning products to evaluate product quality, brand image, and consumer loyalty reliably.

Overall, the demographic profile shows that the respondent group was composed primarily of young, active badminton players with considerable experience using Li-Ning badminton products, making them an appropriate and relevant target population for the present study.

4.1.2 Descriptive Statistics of Variables

Table 4.2 Descriptive Statistics of Variables

Variable	Mean	Std. Deviation	Interpretation
Product Quality	4.12	0.63	High
Brand Image	4.08	0.67	High
Consumer Loyalty	4.15	0.61	High

Respondents reported high perceptions of product quality and brand image, along with strong loyalty toward Li-Ning's badminton products. All mean scores were above 4.00 on a 5-point scale, indicating generally positive evaluations.

4.2 Correlation Analysis

Table 4.3 Correlation Analysis Results

Variable	Product Quality	Brand Image	Consumer Loyalty
Product Quality	1		
Brand Image	.628**	1	
Consumer Loyalty	.624**	.587**	1
Note: $p < 0.01$ (two-tailed)			

All variables were positively and significantly correlated. Product quality showed a strong positive correlation with consumer loyalty ($r = .624$, $p < .01$), while brand image also demonstrated a significant positive correlation ($r = .587$, $p < .01$). These results provide preliminary support for the hypotheses.

4.3 Multiple Regression Analysis

Table 4.4 Multiple Regression Analysis Results

Variable	B	Beta (β)	t-value	Sig. (p)
Product Quality	0.412	0.409	7.623	< 0.001
Brand Image	0.361	0.355	6.224	< 0.001

Constant	0.821	—	4.112	< 0.001
R ²	0.524			
Adjusted R ²	0.519			
F-value	145.27		< 0.001	

Both independent variables significantly predicted consumer loyalty. Product quality had the stronger effect ($\beta = 0.409$, $p < 0.001$), followed by brand image ($\beta = 0.355$, $p < 0.001$). The model explained 52.4% of the variance in consumer loyalty, indicating strong explanatory power.

4.4 Hypothesis Test

Table 4.5 Hypothesis Test Results

Hypothesis	Statement	t-value	p-value	Result
H1	Product quality has a positive and significant effect on consumer loyalty.	7.623	< 0.001	Supported
H2	Brand image has a positive and significant effect on consumer loyalty.	6.224	< 0.001	Supported

The results of the hypothesis testing indicate that both hypotheses were supported. Product quality (H1) demonstrated a significant positive effect on consumer loyalty ($t = 7.623$, $p < 0.001$). Similarly, brand image (H2) also showed a significant positive influence on consumer loyalty ($t = 6.224$, $p < 0.001$). These findings confirm that both functional product attributes and psychological brand perceptions significantly contribute to the development of consumer loyalty toward Li-Ning's badminton products.

4.5 Discussion

The results revealed that both product quality and brand image exert significant positive effects on consumer loyalty, which aligns with the theoretical foundations of Expectation–Confirmation Theory (ECT) and Brand Equity Theory. Each hypothesis was supported, demonstrating that loyalty is shaped by both functional product attributes and psychological brand perceptions.

First, product quality was found to be the stronger predictor of consumer loyalty, indicating that consumers place high importance on the performance, durability, and reliability of Li-Ning's badminton products. Second, the analysis showed that brand image also significantly affects consumer loyalty, highlighting the importance of symbolic and emotional associations.

Chapter 5 Conclusion and Recommendation

5.1 Conclusion

This study investigated the effects of product quality and brand image on consumer loyalty toward Li-Ning's badminton products. Based on data collected from 267 respondents and analyzed using descriptive statistics, correlation analysis, and multiple regression analysis, the findings revealed that both product quality and brand image significantly and positively influence consumer loyalty. Product quality was identified as the stronger predictor, demonstrating that consumers' loyalty is highly dependent on the perceived performance, durability, and reliability of the badminton products they use. This aligns with Expectation–Confirmation Theory, which suggests that when product performance meets or exceeds expectations, consumers develop satisfaction that leads to loyalty.

Brand image was also found to be an important factor influencing consumer loyalty. A positive and credible brand image enhances consumers' trust, emotional attachment, and willingness to repurchase. This finding supports Brand Equity Theory, which emphasizes the importance of favorable brand associations and strong brand identity in shaping consumer loyalty behaviors. Overall, the results demonstrate that consumer loyalty is shaped by both functional product attributes and psychological brand perceptions. The study contributes to the existing literature by providing empirical evidence in the context of Li-Ning's badminton products and highlights the importance of integrating product development with strategic branding efforts.

5.2 Recommendation

Based on the findings of this study, several recommendations are proposed for Li-Ning and similar sports equipment brands seeking to enhance consumer loyalty:

1. Continue Enhancing Product Quality

As product quality emerged as the strongest predictor of consumer loyalty, Li-Ning should continue investing in research and development to improve the performance, durability, and comfort of its badminton products. Consistent innovation and quality assurance will reinforce positive user experiences and strengthen long-term loyalty.

2. Strengthen Brand Image through Strategic Marketing

Li-Ning should enhance storytelling, brand identity, and emotional branding to build stronger associations with consumers. Expanding athlete endorsements,

sponsoring international badminton events, and highlighting the brand's Chinese heritage may further enhance brand credibility and differentiation.

3. Improve Customer Engagement and Communication

Increasing interaction with badminton communities, clubs, and social media groups can help the brand stay connected with its target consumers. Providing educational content, product usage tips, and behind-the-scenes brand stories can deepen consumers' emotional attachment and foster brand loyalty.

4. Maintain Consistency across Product Lines

Ensuring uniform quality across all badminton-related product lines—rackets, shoes, apparel, and accessories—can reinforce a coherent brand perception. Consistency in quality strengthens consumers' trust and encourages repeat purchases across different product categories.

5. Focus on After-Sales Service and Customer Support

Strong after-sales services, such as warranty programs, product consultation, and responsive customer support, can enhance the customer experience and further increase loyalty. Providing efficient solutions to product issues builds consumer trust and encourages long-term commitment to the brand.

6. Explore Consumer Feedback for Continuous Improvement

Regularly collecting and analyzing consumer feedback will help Li-Ning identify evolving needs and expectations. This data-driven approach can support more targeted product development and branding strategies, helping the company sustain competitiveness in the fast-evolving sports market.

5.3 Further Study

Based on the findings and limitations of this research, several directions for future studies are recommended. First, future research may expand the scope of variables by including mediating or moderating factors such as customer satisfaction, perceived value, trust, or switching costs. Incorporating these constructs could provide a deeper understanding of the mechanisms through which product quality and brand image influence consumer loyalty. Second, this study focused specifically on Li-Ning's badminton products; therefore, future studies may replicate the model across different sports brands or product categories to enhance generalizability. Comparative studies between Li-Ning and international brands such as Yonex or Victor may also offer valuable insights into competitive positioning and consumer preferences.

Third, the current study employed a cross-sectional design, which captures consumer perceptions at a single point in time. Longitudinal studies could be conducted

to examine how consumer loyalty evolves over time as brand strategies or product innovations change. Fourth, while this research was conducted using a quantitative survey approach, future studies may consider adopting qualitative methods, such as interviews, focus groups, or netnography to gain richer insights into consumer experiences, motivations, and emotional attachments to sports brands. Lastly, expanding the sample size and targeting more diverse geographic regions may strengthen the external validity of future research, particularly in international markets where consumer behavior may differ. Such extensions would contribute to a more comprehensive understanding of the factors influencing loyalty in the sports equipment industry.



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Appendix

Section 1: Demographic Information

Please tick (✓) the appropriate answer.

1. **Gender**

- ☐ Male
☐ Female

2. **Age**

- ☐ Below 20
☐ 20–29
☐ 30–39
☐ 40 and above

3. **Badminton Playing Frequency**

- ☐ Once a week or less
☐ 2–3 times per week
☐ 4 times per week or more

4. **How long have you used Li-Ning's badminton products?**

- ☐ Less than 1 year
☐ 1–3 years
☐ More than 3 years

5. **Types of Li-Ning products you have used (check all that apply):**

- ☐ Rackets
☐ Shoes
☐ Shuttlecocks
☐ Sportswear
☐ Accessories
-

Section 2: Measurement Scales

Instruction: Please indicate your level of agreement with the following statements.

Scale:

- 1 = Strongly Disagree
2 = Disagree
3 = Neutral
4 = Agree
5 = Strongly Agree
-

A. Product Quality (PQ)

Item Code	Statement	1	2	3	4	5
PQ1	Li-Ning's badminton products are durable during play.	☐	☐	☐	☐	☐
PQ2	The materials used in Li-Ning's products are of high quality.	☐	☐	☐	☐	☐
PQ3	The products perform well and meet my expectations.	☐	☐	☐	☐	☐
PQ4	The products are reliable and consistent in use.	☐	☐	☐	☐	☐
PQ5	Overall, Li-Ning's badminton products offer excellent functional performance.	☐	☐	☐	☐	☐

B. Brand Image (BI)

Item Code	Statement	1	2	3	4	5
BI1	Li-Ning has a good reputation in the badminton market.	☐	☐	☐	☐	☐
BI2	Li-Ning's brand identity is attractive and professional.	☐	☐	☐	☐	☐
BI3	Athlete endorsements positively influence my perception of Li-Ning.	☐	☐	☐	☐	☐
BI4	I believe Li-Ning is a trustworthy and credible brand.	☐	☐	☐	☐	☐
BI5	Overall, I have a positive impression of the Li-Ning brand.	☐	☐	☐	☐	☐

C. Consumer Loyalty (CL)

Item Code	Statement	1	2	3	4	5
CL1	I intend to continue purchasing Li-Ning's badminton products.	☐	☐	☐	☐	☐
CL2	I prefer Li-Ning over other badminton brands.	☐	☐	☐	☐	☐
CL3	I would recommend Li-Ning's badminton products to others.	☐	☐	☐	☐	☐
CL4	I feel loyal to Li-Ning's badminton product line.	☐	☐	☐	☐	☐
CL5	Even when other brands offer similar products, I would still choose Li-Ning.	☐	☐	☐	☐	☐

Thank You for Your Participation

Your contribution is greatly appreciated and will help support academic research on consumer behavior in the sports equipment industry.