



Perceived Product Quality and Economic Value on Badminton Players' Purchase Intentions: An Empirical Study on Synthetic Feather Shuttlecocks

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ABSTRACT

This study explores the interrelationships among customer perceived value (CPV), technology acceptance model (TAM), and purchase intention in the context of Taiwan's badminton market for synthetic feather shuttlecocks. The appropriate theoretical and practical statistical relationships among these constructs are developed and verified. Using survey data from 206 out of 500 randomly selected badminton players, this study employs structure equation modeling (SEM) to scrutinize the research hypotheses. The findings reveal that (1) perceived product quality has significant influences on perceived usefulness, perceived ease of use, and behavioral intentions, (2) perceived economic value (price) has noteworthy effects on perceived usefulness and behavioral intentions, (3) both perceived usefulness and perceived ease of use have significant impacts on behavioral intentions, & (4) the indirect impacts of both perceived quality and perceived economic value (price) on behavioral intentions confirm the mediating effects of perceived usefulness and perceived ease of use. This pioneer exploratory research offers practical guidelines for promotion strategies. The findings and the statistical results provide supportive evidence for implementing appropriate sports marketing management on antecedents of purchase intention to reinforce the appreciation of synthetic feather shuttlecocks.

KEYWORDS: Customer Perceived Value, Technology Acceptance Model, & Purchase Intention.

Introduction

Regarding badminton, what is the most expendable merchandise in this exercise? The answer is shuttlecocks (KK News, 2020). The shuttlecocks' quantity demanded/consumed varies with the levels of tournaments. Public statistics reveal that an Olympic Men's Single Contest uses an average of 45 shuttlecocks per three games (KK News, 2020). To reduce the consumption of natural feather shuttlecocks, as well as turn out to be less reliant on natural feathers for shuttlecocks, "Badminton World Federation (BWF) has approved the use of synthetic feather shuttlecocks at BWF International sanctioned tournaments of all levels from 2021" to reinforce the long-term sustainability within this sport (BWF, 2020). On the other hand, BWF also updated the equipment certification on the overall technical permission criteria for the laws of badminton on the shuttle (BWF, 2020) to acknowledge any possible practical variance between natural and synthetic feather shuttlecocks within the approval procedure.

BWF official experimental results from the comparison between natural and synthetic feather shuttlecocks indicate the following outcomes: 1. Flight trajectory is very similar; 2. Playability is pretty much the same; 3. Performance is comparable; 4. Synthetic feather shuttlecocks are more durable and

economical (BWF, 2020). Most importantly, BWF looks forward to seeing "greater acceptance and widespread use of synthetic feather shuttlecocks from 2021 and beyond" (BWF, 2020, p. 3). It appears that new synthetic feather shuttlecocks have been successfully launched. However, to the best knowledge of the authors, only a scarcity of empirical research has focused on synthetic feather shuttlecocks among consumers in the badminton industry (Chiu, Chen, and Hsu, 2019; Lin, et al., 2020). To fill this gap, the current study attempts to investigate to what extent marketers may utilize the Customer Perceived Value and Technology Acceptance Model to predict Purchase Intention on synthetic feather shuttlecocks.

Previous studies indicated that customer-perceived value provides marketers with suggestions on how to better satisfy the needs and/or wants of their targeted customers (Chiu, et al., 2010; Chiu, et al., 2011). Additionally, perceived product quality and economic value of the product serve as important antecedents of value and either directly or indirectly initiate purchase intention (Olorunniwo and Hsu, 2006; Wang, Pelton, and Hsu, 2019). Moreover, past research illustrated that perceived product quality and price have significant effects on the Technology Acceptance Model (Cho, 2015). On the other hand, the Technology

Acceptance Model has been proven to be appropriate as a theoretical groundwork for “consumers’ adoption of innovative products” (Oh and Yoon, 2014, p. 585). Thus, the present manuscript attempts to investigate the interrelationships among

Customer Perceived Value, Technology Acceptance Model, and Purchase Intention concerning synthetic feather shuttlecocks.

The conceptual model of this study is depicted in Figure 1.

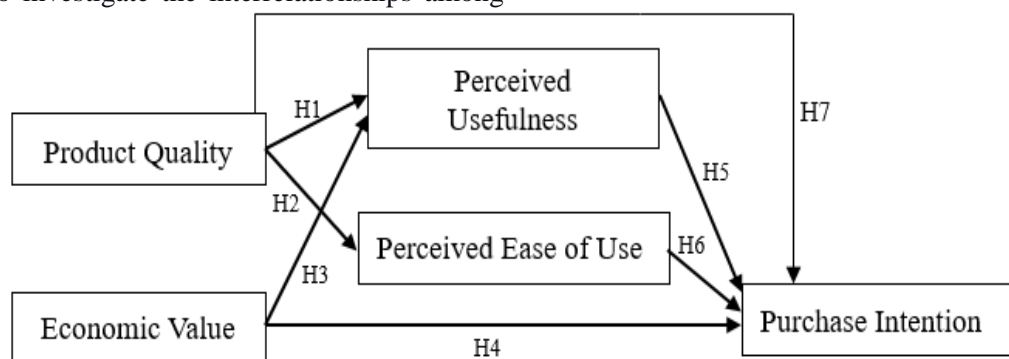


Figure 1: The Conceptual Model of this Study

The purposes of the present exploratory script are as follows: (1) to realize consumers’ Customer Perceived Value toward synthetic feather shuttlecocks, (2) to investigate the relationship between Customer Perceived Value (i.e., product quality and economic value of the product) and key elements in Technology Acceptance Model (i.e., perceived usefulness and perceived ease of use), and (3) to explore the statistical linkage between the Technology Acceptance Model and Purchase Intention.

Literature Review

Customer Perceived Value (CPV)

The prominence of CPV has been recognized as a noteworthy concept in the marketing literature (Eggert, et al., 2006; Hansen, et al., 2008; Chiu, et al., 2010; Chiu, et al., 2011; Kokemuller, 2019; Brudner, 2020). The definition is “the trade-off between the multiple benefits and sacrifices of a supplier’s offering, as perceived by key decision-makers in the customer’s organization, and taking into consideration the available alternative suppliers’ offerings in a specific use situation” (Eggert & Ulaga, 2002, p. 110). Furthermore, there are three consistent essentials in this construct: “(1) the multiple components of value, (2) the subjectivity of value perceptions and (3) the importance of competition” (Eggert and Ulaga, 2002, p. 109).

First, the multiple components of value refer to a combination of product/service attribute/s and/or technological innovation/s associated with a specific utilization. Second, value perceptions are based on customers’ subjective judgement/s, not objective, in nature (Mansfield, 2018). In other words, different individuals might have an assortment of value perceptions for an identical product/service. Third, commercial/industrial competition has remarkable influences on customer perceived value. Competitors generate sustainable competitive advantage by offering a better trade-off between benefit/s and sacrifice/s in a commodity/service. So as such, customer perceived value is derived by computing the difference between customer’s expected benefits and his/her perceived cost (Brudner, 2020).

On the other hand, “there are two elements to perceived value: these are the customer’s perception of your product and

the price he is willing to pay for it” (Philip, 2020; Parasuraman and Grewal, 2000). These two concepts are further illustrated below:

(1) Product quality. Product quality refers to “how well a product does what it is supposed to do as defined by the customer” (Bearden, et al., 2001, p. 186). At a specified price, all customers favor a superior product quality in terms of safety, availability, compatibility, reliability, durability, and usability as well as confirmation of customers’ expectations (Oh and Yoon, 2014; Cho, 2015; Yocco, 2015). Consumers depend more on apparent features of products than on merely brand names if they can positively judge those physical appearances that display product quality. Cretu and Brodie (2007) claimed that product quality is authoritative for markets where distinct physical variations among competing products occur, or where the consumer decision-making process is a very complex situation.

(2) Price. Price is undeniably one of the most imperative marketing mix elements. A customer “invests (price) and experiences an outcome (quality)” (Rust & Oliver, 1994, p. 8). Customers evaluate the price of a product with their expectations on quality and/or previous consumption understanding. Rational consumers tend to maximize the quality-price ratio as well as boost return on investment. “Price sensitive consumer is less likely to purchase a product unless he/she considers the purchase a worthy investment” (Wang, Pelton, and Hsu, 2019, p. 840). If the quality-price ratio is inferior to average or worse than their anticipations, customers are less likely to complete the acquisition. Therefore, the proposition between price and purchase intention is also supported.

Technology Acceptance Model (TAM)

Davis (1986) developed TAM to describe the background and determinants of computer usage. There are two major elements in the original TAM model: perceived usefulness and perceived ease of use. Davis (1989) defined the first element as “the degree to which a person believes that using a particular system would enhance his or her job performance”, and the second one as “the degree to which a person believes that using a particular system would be free of effort” (p. 320). Additionally,



Davis, et. al. (1989) indicated that both perceived usefulness and perceived ease of use demonstrate significant influence on behavioral intentions (Rachmadi, Yuningtyas, & Candra, 2023; Yusron, & Suryandari, 2023).

TAM has been authenticated in a variety of perspectives (Igbaria and Iiravi, 1995; Igbaria, Zinatelli, Cragg, and Cavaye, 1997; Karahanna and Limayem, 2000; Wu and Huang, 2020), exhibited significant reliability and validity in constructs (Chin, and Todd, 1995; Doll, Hendrickson, and Deng, 1999), and consistently described a noteworthy extent of usage intentions in various contexts (Jiang, Hsu, Klein, & Lin, 2000; Lee, et al., 2007; Turel and Yuan, 2007, Yiu, Grant, and Edgar, 2007; Wu and Huang, 2020). Besides the applications in the above viewpoints, TAM has been verified to be appropriate for consumers' adoption of innovative merchandise (Oh and Yoon, 2014). "TAM has been widely used to study the predictive power of technology users' attitude toward their intention in adopting an innovation" (Hsu, Wang, and Chiu, 2009, p. 414). Since perceived usefulness and perceived ease of use are two major variables in TAM, these two variables are proposed to deduce individuals' intentions to use, as well as purchase, synthetic feather shuttlecocks.

On the other hand, an empirically significant relationship between CPV and TAM has also been illustrated (Cho, 2015). Cost perception is severely associated with consumers' attitudes toward the adoption of a new technology. Price and product quality had statistically substantial influences on perceived usefulness. Furthermore, product quality had a statistically momentous impact on perceived ease of use. Therefore, the propositions between CPV and TAM are supported.

Purchase Intention

Purchase intention was defined as "the total of cognitive, affective and behavioral towards adoption, purchase, and use of the product, services, ideas or certain behaviors" (IGI Global, 2020). Marketing researchers shed light on this concept to: 1. understand individuals' intention/s to make a purchase action for any product and/or service; 2. verify consumers' conscious plan/s for buying any brand; 3. examine people's willingness of purchasing behavior in any specific situation or at any precise timing, and 4. predict customers' inclination for procurement/s shortly. Accordingly, marketers often apply and measure this construct as input for comprehending buyers' decisions about

newly launched and/or existing brand/s, product/s, and service/s (Morwitz, 2012; Wang, Pelton, and Hsu, 2019; Wu and Huang, 2020; Anisa, et al. 2023; Yusron, & Suryandari, 2023).

Scholars devoted themselves to exploring, identifying, and manipulating antecedents of purchase intention from numerous perspectives. For example, Eunju, Kim, and Zhang (2012) recognized that country of origin, perceived quality, perceived price, and brand image have significant influences on the purchase intention of sportswear in China and Korea. Moreover, Dachyar and Banjarnahor (2017) detected that trust, risk, benefits, and perceived usefulness are significantly related to purchase intention among different companies in consumer-to-consumer e-commerce. Likewise, Wang, Pelton, and Hsu (2019) diagnosed noteworthy associations among price sensitivity, attitude toward U.S. brands, perceived quality, brand awareness, emotional value, and purchase intention in the luxury apparel industry (Anisa, et al. 2023).

Based on the above discussion, the following hypotheses are postulated:

H1: A significant relationship exists between product quality and perceived usefulness.

H2: A significant relationship exists between product quality and perceived ease of use.

H3: A significant relationship exists between price and perceived usefulness.

H4: A significant relationship exists between price and purchase intention.

H5: A significant relationship exists between perceived usefulness and purchase intention.

H6: A significant relationship exists between perceived ease of use and purchase intention.

H7: A significant relationship exists between product quality and purchase intention.

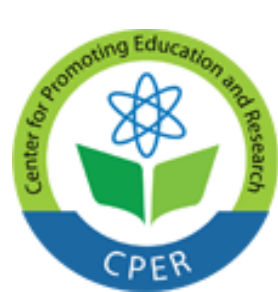
Methodology

Measurements, Scale, and References

Table 1 displays a summary of survey question items and references that they were quoted from. Each item was collaborated with a 7-point Likert-type scale (1= strongly disagree, 2= disagree, 3= somewhat disagree, 4= neutral, 5= somewhat agree, 6= agree, 7= strongly agree).

Table 1: Measurements and References

Constructs	Survey question items	References
Product Quality	Reliability, workmanship, good quality, dependability, durability.	Dodds, Monroe, & Grewal, (1991).
Price	Good value for the money, economical, a good buy, acceptable price, a bargain.	Dodds, Monroe, & Grewal, (1991).
Perceived Usefulness	Improve performance, easier for task execution, increase score productivity, general usefulness.	Davis, (1989); Hsu, Wang, & Chiu, (2009).
Perceived Ease of Use	Easy to use, easy to learn how to use, easy for adaptation, easy to use for application.	Davis, (1989); Hsu, Wang, & Chiu, (2009).
Purchase Intention	Intend to buy frequently, plan to buy more often.	Lee, et. al., (2008), Wang, Pelton, and Hsu, (2019).



Sampling Procedure and Data Analysis Method

In Jan 2023, a convenience sample of 30 respondents was randomly selected in the Taoyuan Civil Sports Center (Taoyuan, Taiwan) for a pilot study to assess both individual questions and sequence (Churchill, 1995). Thereafter, the authors made only minor changes to the wording. The research design was a cross-sectional field study.

In Feb. 2023, a total of 500 badminton players were randomly selected from Civil Sports Centers in Taipei City, New Taipei City, Taoyuan City, and Taichung City (Taiwan). Subsequently, 206 respondents participated in the following manner: 1. to play synthetic feather shuttlecocks for 10 minutes as a warm-up, 2. to partake in an actual gaming test (21 points, foursome doubles) (Yeh and Chen, 2018), and 3. to complete the questionnaire. Every respondent received both a natural feather shuttlecock and a synthetic feather shuttlecock as gratitude for participation. Accordingly, Structure Equation Modelling (SEM) was deployed to examine the research hypotheses.

Sample description

Concerning sample description, 66.5% of these badminton players are males and 41.7% of the respondents are married. Additionally, 96.6% of these respondents are younger than 55 years and they are almost evenly distributed among different age categories between 16 and 55. Regarding income level, 82.5% of these samples' earnings are lower than \$1,200,000 NTD; 8.7% of them earn more than \$2,100,000 NTD. Moreover, 88.4% of these respondents represent a relatively high education level (i.e., bachelor and master) in Taiwan.

Results

Measurement model

A measure model was specified to enable the assessment of the reliability and discriminant validity of the latent variables, including product quality, price, usefulness, ease of use perception, and behavioral intentions. The most current version of Stata software (i.e., Stata 16.0) was used to examine the measurement model at the time of model estimation. All the goodness-of-fit indices are reported in Table 2.

Table 2: The goodness-of-fit index

	χ^2 / df	Adjusted χ^2 / df	RMSEA (< .08)	CFI (> .95)	TLI (> .95)	SRMR (< .10)
Measurement Model	1.898	1.832	.066	.974	.968	.036
Structure Path Model	2.273	2.193	.079	.962	.955	.075

The fit indices of the measurement model revealed a chi-square value of 296.163 with 156 df. Furthermore, the values of RMSEA, CFI, TLI, and SRMR were .066, .974, .968, .036, respectively. According to the model evaluation criteria suggested by Hu and Benter (1999), this goodness of fit indices indicates acceptable model performance. That is, the measurement model fits the data well.

Reliability was examined via Cronbach Alpha and composite reliability of latent variables. The reliability of constructed measures is considered acceptable when the composite reliability is higher than .70 (Fornell & Larcker, 1981). As Table 3 shows, the Cronbach alpha of latent variables ranged from .924 to .971. It is worth noting that Raykov's composite reliability coefficients were between .906 and .966 (see Table 4), which indicates strong reliability.

The standardized loadings ranged from .683 to .970, all significant at the .001 level; the average variance extracted was between .713 and .929. Together, these indices revealed good convergent validity of constructs included in the measurement model. In addition, discriminant validity was mainly used to check whether different constructs were notably distinct from each other. Empirically, one checks whether the average variances extracted (AVE) value exceeds the .50 threshold and also examines if every AVE value belonging to each latent construct is larger than any squared correlation coefficient that involves the corresponding latent construct (Chin, 1998). As Table 3 reveals, the AVE values are not only larger than .50 but also larger than the relevant squared correlation coefficients, which indicates adequate discriminant validity. Subsequently, the structural path model was examined.

Table 3: Convergent and Discriminant Validity Assessment

	PQ	PR	PU	PEOU	BI
Product Quality (PQ)	.713				
Price (PR)	.548	.867			
Perceived Usefulness (PU)	.406	.493	.761		
Perceived Ease of Use (PEOU)	.463	.526	.479	.825	
Behavior Intention (BI)	.593	.690	.569	.589	.929
Mean (Std. Dev.)	4.580 (1.44)	4.041 (1.68)	3.460 (1.46)	4.574 (1.50)	3.721 (1.77)
Cronbach Alpha	.924	.971	.938	.954	.963

Note: average variance extracted (AVE) value is shown on the diagonal of the matrix; squared inter-construct correlations are shown off the diagonal.



Table 4: Confirmatory Factor Analysis Outcome

Latent Variables	Observed Variables	Standard Loading	T Statistic	Raykov's Composite Reliability	AVE
Product quality	Taking everything into consideration, the reliability feature of the product is much better than similar products sold by competitors.	.906	58.07	.910	.713
	The workmanship of the product is much better than similar products sold by competitors.	.791	27.51		
	The quality of the product is much better than similar products sold by competitors.	.888	50.81		
	The dependability of the product is much better than similar products sold by competitors.	.929	69.97		
	The durability of the product is much better than similar products sold by competitors.	.683	17.33		
Price	This product has a pretty value for the money.	.930	85.07	.966	.867
	This product is economically priced.	.952	116.14		
	This product is a pretty good buy.	.916	92.62		
	The price of the product is reasonably acceptable.	.930	84.49		
	The product is a good bargain.	.926	80.26		
Perceived Usefulness	This product may help me improve performance when I am in an exercise with other Badminton players	.814	31.19	.906	.761
	This brand is of help to my task execution	.819	30.84		
	This brand may increase my score productivity	.887	48.35		
	My teammates and I both consider this brand a useful one	.961	80.60		
Perceived Ease of Use	This brand is easy to use.	.881	49.76	.940	.825
	This brand is easy to learn how to use.	.867	44.90		
	This brand is easy for adaptation,	.923	72.46		
	This brand is easy to use for application	.959	103.85		
Behavioral intentions	I intend to Intend to buy this brand frequently.	.970	126.97	.963	.929
	I am very likely to buy this brand often	.957	110.28		

Structural path model

The standardized path loading reveals the degree to which a strong relationship exists between one question item and the underlying latent construct, while an R-squared value indicates the amount of variance in a question item is explained by the exogenous latent construct. As shown in Table 5, the proposed structure model was empirically supported by several acceptable goodness-of-fit indices (i.e., Chi-square/df =2.193, RMSEA=.079, CFI=.962, TLI=.968, SRMR=.075). The standardized path coefficients and t-statistics and hypotheses tests are presented in Table 5. The impact of perceived product quality on perceived

usefulness (.288, $p<.05$), perceived ease of use (.695, $p<.05$), and behavioral intentions (.275, $p<.05$) suggest the significant influence of perceived product quality on perceived usefulness, perceived ease of use, and behavioral intentions, providing support to H1, H2, and H7. On the other hand, the impact of perceived value (good price) on perceived usefulness (.380, $p<.05$) and behavioral intentions (.356, $p<.05$) were also significant, giving support to H3, and H4. Further, it is found that both perceived usefulness and perceived ease of use have a significant impact on behavioral intentions, which offer support to H5 (.357, $p<.05$) and H6 (.264, $p<.05$).

Table 5: Structural Model Evaluation Indices and Hypothesis Test Outcome

Hypothesis	Relationships between Variables	Standardized Path Loadings	T-Statistic	Hypothesis Is Supported
H1	Product quality → Perceived usefulness	.288**	4.07	Yes
H2	Product quality → Perceived ease of use	.695**	11.81	Yes
H3	Price → Perceived usefulness	.380**	5.71	Yes
H4	Price → Behavioral intentions	.356**	5.01	Yes
H5	Perceived usefulness → Behavioral intentions	.357**	4.16	Yes
H6	Perceived ease of use → Behavioral intentions	.264**	3.65	Yes
H7	Product quality → Behavioral intentions	.275**	3.65	Yes

Note: ** stands for statistical significance at the .05 level.

It is worth noting that the structural path model reveals good predictive power. For the perceived usefulness, perceived ease of use, and behavioral intentions, the model explained 63.6%, 55.6%, and 84.3% of construct variance, respectively.

To shed additional light on the likely mediating roles of perceived usefulness and perceived ease of use, the present study empirically examined the indirect effect of perceived quality on behavioral intentions as well as the indirect effect of perceived



value on behavioral intentions. Empirical evidence reveals that perceived quality has a significant indirect effect on behavioral intentions (.286, $t = 4.99$, $p < .05$) and that perceived value also has a significant indirect effect on behavioral intentions (.136, $t = 3.47$, $p < .05$). In addition, perceived quality also has a significant total effect on behavioral intentions (.561, $p < .05$) and that perceived value has a significant total effect on behavioral intentions (.491, $p < .05$). Overall, it appears that perceived quality plays a slightly more important role than perceived value (price) on behavioral intentions. The proportion of the total effect from perceived quality to behavioral intentions that are mediated can be calculated by dividing the standardized indirect effect coefficient (.286) by the standardized total effect coefficient (.561), or over fifty percent (.510), which is a respectable amount. Likewise, the proportion of the total effect from perceived value to behavioral intentions that are mediated can be calculated by a ratio between the standardized indirect effect coefficient (.136) and the standardized total effect coefficient (.491), or over twenty-five percent (.277). which is arguably a sizable proportion.

One additional benefit of the direct, indirect, and total effect test is to reveal the mediating role of perceived usefulness and perceived ease of use in the model. As Cheung and Lau (2008) noted, “the mediation effect may be significant even if only one direct path is significant, but the second direct path is close to significance” (p. 313 & p. 317). Thus, the mediation effect should be assessed by testing the significance of the indirect effect. Empirical findings of the indirect effects confirm the mediating effect of TAM variables using the SEM approach. Still, one notable concern is that the indirect effect is not normally distributed, which may produce a biased indirect effect analysis outcome. Accordingly, we followed Cheung and Lau’s (2008) suggestion to establish confidence intervals for the mediation effects with the bias-corrected bootstrap method with “at least 500 to 1,000 bootstrap samples” (p. 321).

With a 2,000 bootstrap sample, additional evidence further confirms a significant indirect effect from perceived quality to behavioral intentions (.286, $t = 4.17$, $p < .05$) and a significant indirect effect from that perceived economic value to behavioral intentions (.136, $t = 2.70$, $p < .05$). Given that the bias-corrected bootstrap approach will perform better than the confidence intervals assuming normal distributions, conducting a bootstrapping test in the current study proves valuable, especially when the empirical evidence reveals a larger standard error for the mediation effect appears (which results in a smaller t -statistic) when an objective bootstrap approach is employed to examine the indirect effect.

Conclusions, Limitations, and Future Research

This manuscript is a pioneer exploratory research in the badminton synthetic feather shuttlecock market and assimilates contemporary related literature along with demanding statistical analyses to shed light on the interrelationships among customer perceived value, technology acceptance model, and purchase intention. To boost purchase intention, marketing managers should focus on improving customers’ perceived value. Consequently,

firms shall utilize the most significantly appraised customer perceived value variable(s) for developing their competitive advantage/s for enhancing market share, sales, and/or profit.

Evidence reveals that perceived product quality plays a more important role than perceived economic value in their total effect on behavioral intentions. A further examination of the direct and indirect relationship between these two independent variables (i.e., perceived product quality and perceived economic value) and the dependent variable (i.e., behavioral intentions) shows that the former (i.e., perceived product quality) has a slightly smaller direct impact on behavioral intentions than the latter. Together, our empirical findings suggest that shuttlecock marketers may achieve short-term success by promoting the economic value of the product (e.g., sales promotion) but shuttlecock marketers would not be able to achieve sustainable success without high product quality.

So as such, companies are reinvigorated to establish competitive priorities for resource allocation associated with customer perceived value traits. Particularly, “the prioritization of critical success factors can help practitioners understand their relative importance and develop improvement plans in cases where they lack sufficient resources to deal with all factors simultaneously” (Chin, Chan, & Lam, 2008, p. 437).

As sports marketing advertisements seldom deliver any conspicuous information related to TAM, companies may integrate these findings in their incorporated promotional strategies for advertising. The efficiency of this advertising approach deserves more investigation with precision. Future studies shall compare the convincing power of TAM with other marketing mix elements to better comprehend the relative influence of these variables on consumers’ purchase intention.

There are several limitations to this study. First, a convenience sample of this study may represent only one unique segment of the Badminton players. Second, a research design with a focus on Badminton players who primarily adopt natural feather shuttlecocks (with little experience with synthetic feather shuttlecocks) may allow us to examine whether perceived quality also plays a relatively more important role in influencing consumers’ purchase intentions. According, we encourage future studies to conduct a multi-group analysis, examining the model performance between the synthetic feather shuttlecocks group and the natural feather shuttlecocks group. Moreover, the inclusion of control variables (e.g., novice leisure players vs. professional players) and mediating variables (e.g., brand preference) in the research model may also result in ruling out likely confounding effects. Still, the present study explores a simple consumer behavior model in the context of sports marketing and we encourage other scholars to refine and replicate the current study in different sports marketing contexts. Additionally, some other constructs, such as innovation in the diffusion theory, product/brand awareness, and perceived enjoyment, may play the roles of antecedents for predicting purchase intention.



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