The influence of buyer knowledge and economic level on sports product purchasing decisions
La influencia del conocimiento del comprador y el nivel económico en las decisiones de compra de productos deportivos

Authors

Ilham Ilham [1]
Raihan Alfarobi [2]
Bekir Erhan Orhan [3]
Vlad Adrian Geantă [4]

[1,2] Universitas Negeri Padang (Indonesia)
[3] Istanbul Aydın University (Turkey)
[4] Aurel Vlaicu University of Arad (Romania)

Corresponding author:
Ilham Ilham
ilhamf@fik.unp.ac.id

Abstract

Introduction: Buyer knowledge is recognized as an influential factor in purchasing decisions for sports products, potentially moderated by economic level.
Objective: This study investigates the effects of buyer knowledge and economic level on purchasing decisions in the sports product sector.
Methodology: A mixed-methods approach was used to analyze data from a random sample of 278 residents in Padang City. Measurement reliability and validity were assessed using Cronbach's alpha and Composite Reliability. Hypotheses were tested through linear regression analysis with a significance threshold of $p < 0.05$.
Results: Buyer knowledge significantly positively affected sports product purchasing decisions ($p = 0.000$). Economic level demonstrated varied impacts: a low economic level correlated significantly with buyer knowledge and purchasing decisions ($p = 0.048$ and $p = 0.026$, respectively). An intermediate economic level was associated only with buyer knowledge ($p = 0.041$), with no significant impact on purchasing decisions ($p = 0.149$). A high economic level showed no significant association with either variable.
Discussion: These findings highlight the key role of buyer knowledge and suggest that economic level shapes purchasing decisions in complex, indirect ways.
Conclusions: The findings suggest that buyer knowledge consistently influences sports product purchasing decisions, but the impact of the economic level is more nuanced. These results indicate that economic level alone may not reliably predict purchasing behavior without considering buyer knowledge, emphasizing the complexity of consumer decision-making in the sports product market.

Keywords

Buyer knowledge, consumer behavior, economic level, purchase decision-making, sports product market, sports product purchasing.

Resumen

Introducción: El conocimiento del comprador se reconoce como un factor influyente en las decisiones de compra de productos deportivos, potencialmente moderado por el nivel económico.
Objetivo: Este estudio investiga los efectos del conocimiento del comprador y el nivel económico en las decisiones de compra en el sector de productos deportivos.
Metodología: Se utilizó un enfoque de métodos mixtos para analizar datos de una muestra aleatoria de 278 residentes de la ciudad de Padang. La fiabilidad y la validez de las mediciones se evaluaron mediante el alfa de Cronbach y la fiabilidad compuesta. Las hipótesis se probaron mediante análisis de regresión lineal con un umbral de significancia de $p < 0.05$.
Resultados: El conocimiento del comprador tuvo un efecto positivo significativo en las decisiones de compra de productos deportivos ($p = 0.000$). El nivel económico mostró impactos variados: un nivel económico bajo se correlacionó significativamente tanto con el conocimiento del comprador como con las decisiones de compra ($p = 0.048$ y $p = 0.026$, respectivamente). Un nivel económico intermedio se asoció solo con el conocimiento del comprador ($p = 0.041$), sin un impacto significativo en las decisiones de compra ($p = 0.149$). Un nivel económico alto no mostró asociación significativa con ninguna de las variables.
Discusión: Estos hallazgos destacan el papel clave del conocimiento del comprador y sugieren que el nivel económico influye en las decisiones de compra de manera compleja e indirecta.
Conclusiones: Los resultados sugieren que el conocimiento del comprador influye de manera constante en las decisiones de compra de productos deportivos, pero el impacto del nivel económico es más matizado. Estos resultados indican que el nivel económico por sí solo puede no predecir de manera fiable el comportamiento de compra sin considerar el conocimiento del comprador, lo que enfatiza la complejidad de la toma de decisiones del consumidor en el mercado de productos deportivos.

Palabras clave

Comportamiento del consumidor, conocimiento del comprador, nivel económico, mercado de productos deportivos, toma de decisiones de compra, compra de productos deportivos.

Introduction

Sports companies collaborate closely with celebrities to promote their products to consumers through endorsements (Shahul Hameed, Madhavan, & Arumugam, 2020). Although consumers receive celebrity endorsement information, this often does not significantly influence their purchasing decisions for the endorsed sports products (Munjal, 2020). One reason for this limited impact is the high price point set by the company, which often deters buyers from making purchases (Rai, Yousaf, Itani, & Singh, 2021)(Wijanarko, Wisnu, & Praharjo, 2023). Furthermore, the high price may not align with the perceived or actual quality of the product; for example, some lower-priced products may outperform higher-priced items, leading to consumer disappointment with products from certain sports companies (Sepehrian, Mirzazadeh, & Aghaei Shahri, 2023). This disappointment often arises when consumers experience discomfort using a product whose quality does not meet their expectations (Chaerudin & Syafarudin, 2021). Consequently, the perceived discomfort and lack of quality become key factors in a buyer's decision to repurchase sports products (Nico Gerard Doan & Ali, 2021).

Consumer disappointment is a valuable learning experience, making them more cautious when purchasing sports products. Buyers must possess a foundational knowledge of sports product quality when purchasing these products. The sports industry, aware of the growing need for informed buying, incorporates promotions to foster this knowledge and capture consumer interest (Chiu, Shih, Chu, & Chen, 2022). Through strategic marketing, companies aim to influence buyers with compelling messages, highlighting the importance of understanding product suitability for enhancing performance (Purcell et al., 2022). Knowledgeable buyers, familiar with various sports routines, seek the best quality products that align with their needs and performance goals (Meijer & Buitelaar, 2023). When satisfied, consumers tend to develop loyalty to the brand due to consistent product reliability (Chung & Welty Peachey, 2022). The brand's reputation thus becomes an assurance of quality, as buyers trust the information provided about product attributes (Shirodkar & Deshpande, 2021).These attributes allow buyers to compare the advantages and disadvantages of different sports products, aiding in more informed decisions (Wang et al., 2020). High-quality sports products must prioritize safety and comfort, making features like ergonomic design and safety standards critical (Pratama et al., 2022). Buyers with attribute-specific knowledge can better assess product safety, injury prevention potential, and suitability for their preferred sports (Fuchs & Hovemann, 2022).

At higher economic levels, knowledge of sports products tends to be more in-depth and specific (Lee, 2021). High-income buyers generally have easier access to premium sports products and cutting-edge technology, such as advanced fitness trackers, specialized sports shoes, or personalized home gym equipment (Day, 2022). In evaluating sports products, high-income buyers often have specific expectations about quality, safety, and performance (Terason, 2021). Higher product quality standards encourage these consumers to be more selective, viewing such purchases as long-term investments in their health and fitness (Acquah-Sam, 2021). Additionally, many have access to health and fitness consultants who can provide tailored product recommendations, enhancing their knowledge of the sports products that best meet their needs (Su Guiyu & Prin Laksitamas, 2022). Therefore, these consumers frequently conduct detailed research, such as comparing brands, analyzing buyer reviews on social media, and examining product specifications and features (Roy, Debnath, Mitra, & Shrivastava, 2021). This process ensures that the purchased product meets its high-quality expectations, particularly in terms of durability, function, and the added benefits it offers (Sun, Bellezza, & Paharia, 2021). Once convinced, high-income buyers are often ready to make purchasing decisions that align with these elevated quality standards (Chen, Liu, & Su, 2022).

In contrast, middle- and low-income buyers also develop stronger knowledge of sports products (Dai & Menhas, 2020). Although their purchasing power may be more limited, and they may lack access to health and fitness consultants, these consumers can readily access information on sports products through the Internet (Jones, Ratten, & Hayduk, 2020). Their understanding of sports products often relies on social media reviews, recommendations from friends, or personal experience with affordable yet good-quality products (Elite, 2023). Typically, middle- and low-income buyers prioritize functionality and choose products that meet basic needs, such as standard running shoes, comfortable sportswear, or reasonably priced home fitness equipment. Due to financial considerations, they often find innovative

ways to adapt household items as exercise equipment, demonstrating creativity and resourcefulness in their fitness routines.

Our literature review identified several relevant studies examining consumer behaviors and purchasing decisions in the sports product market. One such study, titled "How Product Quality, Brand Image, and Price Perception Impact on Purchase Decision of Running Shoes?" (Steven, Purba, Budiono, & Adirinekso, 2021) analyzes how variables like product quality, brand image, and price perception influence purchasing decisions for Adidas running shoes in Jakarta. This study helps to understand these factors' essential and positive contributions to consumer decisions and provides valuable recommendations to companies to develop effective marketing strategies. The methodology employed in this study is quantitative, involving data collection through surveys and questionnaires distributed to a sample population in Jakarta. However, the study lacks specific details on sample size. The data collected were analyzed using statistical techniques to test the hypotheses. The findings indicate that product quality, brand image, and price perception all positively and significantly influence purchasing decisions. This study emphasizes that consumer knowledge positively affects purchasing decisions for sports products, contributing to a deeper understanding of the roles of product quality, brand image, and price perception in consumer behaviors.

This study examines the influence of product quality, brand, and promotion on purchasing decisions for sports equipment among athletes in a specific region. The research approach is quantitative, with athletes from the specified region serving as participants, using non-probability sampling with a purposive sampling method. The sample consisted of 90 respondents, and hypotheses were tested through a structural equation model (SEM) using SmartPLS 3.0. Results suggest that product quality significantly influences purchasing decisions for sports equipment, whereas brand and promotion have no notable impact on the purchase decisions of athletes in this region. Lastly, we examined a study titled "Analysis of the Effect of Product Quality and Price on Purchase Decision (Case Study of Adidas in India, Indonesia, and Malaysia)" (Pandey et al., 2021). This research investigates how product quality and price of Adidas products influence consumer purchasing decisions in India and Malaysia. Employing a quantitative methodology through the Ordinary Least Square (OLS) method, the study gathered data from 100 respondents through questionnaires. The findings show that both product quality and price significantly impact consumer purchasing decisions for Adidas products, with a combined contribution of 50.1% to the decision-making process, underscoring the importance of both factors in consumer behaviors across multiple regions. Area or on a specific group of buyers, the results may not be generalizable to the entire population of buyers of sports products.

The present study hypothesizes that:

H1: A significant relationship exists between specific indicators and the overall variables.

H2: There is a positive relationship between the independent and dependent variables.

The independent variables in this study are buyer knowledge and economic levels, categorized as high, medium, or low. The dependent variable is the decision to purchase sports products.

H3: A linear regression relationship exists between the independent and dependent variables.

A linear relationship is hypothesized because prior research indicates that changes in buyer knowledge and economic status directly and proportionally affect purchasing decisions (e.g., a higher level of product knowledge tends to lead to more informed purchases, which follows a linear pattern of influence).

Based on these hypotheses, this study's objectives are twofold: to assess the extent of buyer knowledge and its impact on purchasing decisions for sports products and to examine the influence of economic status categorized as high, medium, or low on both buyer knowledge and purchasing decisions within the sports product market.

Method

Participants

This study's participants were drawn from the general population of Padang City, West Sumatra, Indonesia, with a total sample size of 270 individuals. Although random sampling ensures broad representation, future research should consider adding demographic details such as age, gender, and experience in sports activities to provide a more segmented and nuanced analysis of consumer behaviors. These additional criteria help understand how specific population subsets engage with sports products, thereby allowing targeted marketing strategies.

Procedure

This study utilizes a mixed-methods approach, combining qualitative and quantitative research methods. For the qualitative component, we analyze the influence of buyer knowledge on purchasing decisions for sports products, the effect of economic level on buyer knowledge, and the impact of economic level on purchasing decisions for sports products. In the quantitative component, data were gathered through questionnaires using a 4-point Likert scale. Each questionnaire included distinct indicators for each variable.

Instrument

The research instrument was developed through a systematic process that began with defining the primary variables and then breaking these down into specific, measurable indicators. Survey items were then formulated to align with each indicator, and a collaborative pre-test was conducted to ensure coherence and reliability. Lastly, analyses for validity and reliability were completed to confirm the instrument's robustness.

Structural Equation Modeling (SEM)

The diagram below illustrates the relationships between indicators and variables and the correlations among variables, as outlined in the research hypotheses above. The variables are defined as follows: the buyer knowledge variable includes five indicators (product quality knowledge, brand knowledge, promotion knowledge, usage knowledge, and attribute knowledge); high economic level is represented by one indicator (high salary income); middle economic level by one indicator (middle salary income); and low economic level by one indicator (low salary income). The sports product purchasing decision variable comprises five indicators: product quality decision, brand decision, promotion decision, usage decision, and attribute decision.

Figure 1. Structural equation model
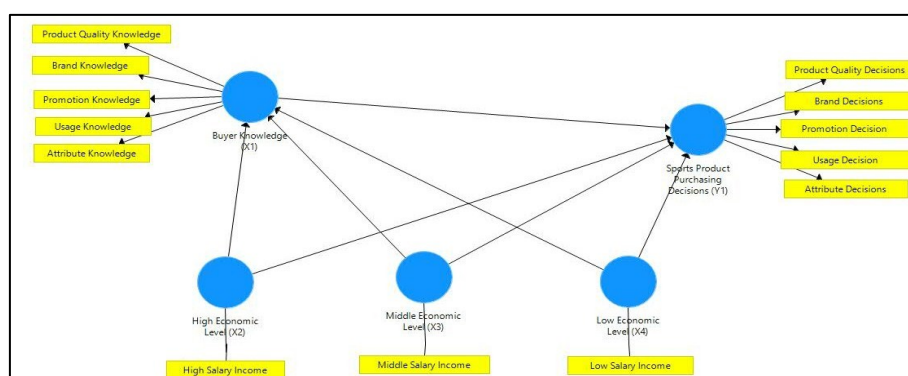
Data analysis

Data analysis was conducted using the Smart PLS-SEM application to examine the research data rigorously. This process started with assessing construct reliability and validity to establish internal consistency and measurement accuracy. Collinearity statistics (VIF) were then reviewed in the outer model

to identify potential multicollinearity issues. Structural equation modeling (SEM) evaluated the relationships among variables, while discriminant validity was assessed using the Heterotrait-Monotrait Ratio (HTMT) matrix to confirm construct distinctiveness. Hypothesis testing was the final step to validate the proposed research hypotheses.

Results

This analysis illustrates the relationships between indicators and variables and the relationships among the variables themselves. The threshold values for influence are as follows: a strong positive influence ranges from 0.5 to 1.0, while a strong negative influence spans from -0.5 to -1.0. A weak positive influence is between 0.0 and 0.5, and a weak negative influence is between 0.0 and -0.5. The findings indicate strong influences among variables and indicators related to buyer knowledge, specifically in product quality knowledge, brand knowledge, promotion knowledge, usage knowledge, and attribute knowledge. Buyer knowledge was positively influenced by product quality knowledge (0.723), brand knowledge (0.762), promotion knowledge (0.783), usage knowledge (0.797), and attribute knowledge (0.815). Buyer knowledge also strongly influences purchasing decisions for sports products (0.851), suggesting that effectively managed buyer knowledge positively impacts purchasing decisions.

The SEM analysis reveals weaker influences among certain economic levels and buyer knowledge. Specifically, there is a weak positive influence of high economic status on buyer knowledge (0.102), high economic status on purchasing decisions for sports products (0.007), and middle economic status on purchasing decisions (0.025). Additionally, weak negative influences were observed between middle economic status and buyer knowledge (-0.140), low economic status and buyer knowledge (-0.131), and low economic status and purchasing decisions (-0.033).

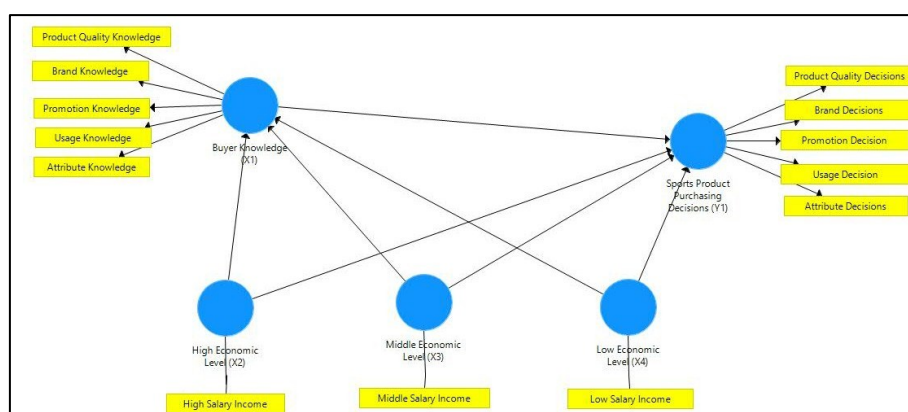Figure 2. Structural equation modeling results

Table 1. Construct reliability and validity for variables in the model

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Sports Product Purchase Decision (Y)	0.869	0.869	0.905	0.657
Buyer Knowledge (X1)	0.835	0.839	0.884	0.603
High Economic Level (X2)	1,000	1,000	1,000	1,000
Middle Economic Level (X3)	1,000	1,000	1,000	1,000
Low Economic Level (X4)	1,000	1,000	1,000	1,000

Note: Cronbach's Alpha and Composite Reliability values above 0.7 indicate good internal consistency; AVE values above 0.5 suggest adequate convergent validity; Economic Level variables show maximum reliability due to their categorical nature as dummy variables.

The assessment of reflective measurement models requires an evaluation of reliability and validity concerning the items associated with latent variables (29,30). The most critical aspect of this testing process is determining the reliability and validity of the data. According to (31,32), validity refers to the extent to which a test accurately measures what it intends to measure. Internal reliability and convergent validity are evaluated using two main coefficients: Composite Reliability (CR) and Average Variance Extracted (AVE). As previously mentioned, the measurement model in this study encompasses five main constructs, each represented by a total of twelve indicators. According to (27), assessing the reliability

of each indicator related to the latent variable necessitates calculations and comparisons against established thresholds. Specifically, the output for Composite Reliability must be greater than 0.7 to be considered acceptable (33). In our research, all Composite Reliability values exceed the recommended threshold of 0.70, with the lowest value being 0.884 and the highest 1.000.

Additionally, (34) asserts that an AVE value greater than 0.5 indicates that the indicators/items measuring the variables are valid and reliable. Furthermore, Cronbach's Alpha loading value should exceed 0.8, while rho A is used to evaluate construct reliability, requiring a threshold greater than 0.7 to ensure internal consistency. Based on the results of this study, it is evident that all variables exceed the 0.70 threshold. These findings demonstrate that the measurement model and reliability calculations are acceptable.

Table 2. Collinearity statistics (VIF

Variables	VIF
Attribute Decisions	1,694
Product Quality Decisions	2,669
Brand Decisions	2,728
Usage Decision	2,104
Promotion Decision	1,965
Attribute Knowledge	2,041
Product Quality Knowledge	1,554
Brand Knowledge	1,618
Usage Knowledge	1,966
Promotion Knowledge	1,770
Middle Salary Income	1,000
Low Salary Income	1,000
High Salary Income	1,000

Note: Variance inflation factor (VIF) values indicate multicollinearity; VIF values above 5 suggest high collinearity; income levels show VIF values of 1.000 due to serving as reference variables; lower VIF values indicate minimal multicollinearity concerns.
To assess collinearity, we utilized the Variance Inflation Factor (VIF). As shown in Table 2, the VIF values in our study are significantly below the threshold of 5, indicating that collinearity is not problematic (35).

Table 3. Discriminant validity

	Sports Product Purchase Decision (Y1)	Buyer Knowledge (X1)	Middle Economic Level (X3)	Low Economic Level (X4)	High Economic Level (X2)
Sports Product Purchase Decision (Y1)	0.811				
Buyer Knowledge (X1)	0.852	0.777			
Middle Economic Level (X3)	-0.083	-0.130	1,000		
Low Economic Level (X4)	-0.132	-0.115	-0.073	1,000	
High Economic Level (X2)	0.085	0.094	0.006	0.059	1,000

Note: Values are displayed with decimal points; diagonal values represent the square root of the average variance extracted (AVE); off-diagonal values are correlation coefficients between constructs; values on the diagonal should exceed those in their respective rows and columns for discriminant validity.

This study primarily focuses on discriminant validity among the variables. According to Prof. Dipak C. Jain, in his 2019 book *Mastering Partial Least Squares Structural Equation Modeling (PLS-SEM) with Smart-PLS in 38 Hours*, there are two methods to assess discriminant validity: The Fornell-Larcker Criterion and the Heterotrait-Monotrait Ratio (HTMT). The Fornell-Larcker Criterion, proposed by Fornel and Larcker (1981), states that discriminant validity is established when the square root of the Average Variance Extracted (AVE) for each latent variable exceeds the correlation coefficients between those variables and other latent variables. To evaluate this, a table displaying the square root of the AVE was created through manual calculations, with the values placed on the table's diagonal. For example, the AVE value is 0.603 for the Buyer Knowledge variable, resulting in a square root 0.775. This value is greater than the correlation coefficients for Buyer Knowledge with the other variables, which are -0.130, -0.115, and 0.094, respectively. The same procedure was applied to each latent variable except for the Sports Product Purchase Decision variable. As illustrated in Table 3, the Sports Product Purchase Decision variable exhibited a lower discriminant validity value than the Buyer Knowledge variable.
We evaluate the data presented in this study, indicating that the green colour strongly influences latent variables. To assess the data mentioned above, we refer to the section on p-values. The results from the P-values indicate whether the independent and dependent variables exert a significant influence on statistical calculations. If the P-values are lower than the significance threshold (0.05), it can be concluded

that the observed influence is statistically significant. Our study reveals that most data exhibit a significant influence, with the lowest P-value at 0.000 and the highest at 0.048. Conversely, the results indicate that certain P-values do not demonstrate significant influence, with the highest being 0.149 and the lowest at 0.112. We conclude that individuals with middle and high economic levels must enhance buyer knowledge to inform purchasing decisions for sports products. The data above are presented to explore the influence of indicators related to variables and to examine the relationships between various variables.

Table 4. Linear regression hypothesis test

	Original Sample (O)	(M)	(SD)	t	p
Buyer Knowledge (X1) -> Sports Product Purchase Decision (Y1)	0.851	0.853	0.022	39,283	.000
Middle Economic Level (X3) -> Sports Product Purchase Decision (Y1)	-0.094	-0.093	0.065	1,445	.149
Middle Economic Level (X3) -> Buyer Knowledge (X1)	-0.140	-0.138	0.068	2,047	.041
Low Economic Level (X4) -> Sports Product Purchase Decision (Y1)	-0.145	-0.147	0.065	2,222	.026
Low Economic Level (X4) -> Buyer Knowledge (X1)	-0.131	-0.134	0.066	1,978	.048
High Economic Level (X2) -> Sports Product Purchase Decision (Y1)	0.095	0.094	0.060	1,589	.112
High Economic Level (X2) -> Buyer Knowledge (X1)	0.102	0.101	0.066	1,542	.123

Note: Values are displayed with decimal points; p-values smaller than .001 are shown as .000; the arrow symbol (→) represents the direction of the regression hypothesis; p-values below .05 indicate statistical significance.

Discussion

According to the results obtained from structural equation modeling (SEM), linear regression, and statistical analyses, several dependent and independent variables demonstrate significant and insignificant effects. In some cases, the insignificant effects between indicators and independent and dependent variables are illustrated in Table 4, which has been previously explained, where the p-value is not greater than 0.05. Economic level contributes to determining the decision to purchase sports products; however, our findings indicate that a high economic level does not significantly affect the decision to purchase these products.

Our findings align with previous research emphasizing the importance of product knowledge in purchasing decisions. For example, Steven et al. (2021) highlighted that product quality and brand image significantly influence consumer choices. This study builds upon their findings by confirming the critical role of buyer knowledge, specifically in terms of promotion and usage knowledge, in shaping purchasing decisions. Furthermore, our research extends the work of Hossein et al. (2022) and Chaerudin and Syafarudin (2021), who noted that perceived quality discrepancies and discomfort due to unmet expectations play a pivotal role in consumer disappointment. Similar trends were also evident in buyers of all economic classes who value quality and functionality, adding to the imperative for companies to reconcile pricing strategies with the perceived value of products to reduce their dissatisfaction.

This study indicates that the economic level of buyers has a complex influence on their purchasing decisions regarding sports products, with knowledge of buyers being a discriminating variable. First, this finding confirms that buyer knowledge significantly influences purchasing decisions for sports products, as buyers who better understand these products can make more informed choices. This complements the argument by Pratama et al. (2022) that safety and comfort attributes are crucial for consumer satisfaction and can lead to loyalty when effectively communicated to buyers. At lower economic levels, buyer knowledge and purchasing decisions for sports products are significantly impacted despite economic limitations. Conversely, at a middle economic level, a positive impact exists in terms of buyer knowledge, but it has only a limited effect on buyer purchasing decisions because their priority is spending their money in a way that matters more to their life, such as family needs and so forth. Interestingly, the results demonstrate that at the highest economic level, buyers of sports products' knowledge and purchasing decisions are not influenced by economic conditions, suggesting that buyers at this level may be insensitive to sports activities even with great purchasing power. These findings also extend the discussion of Terason (2021) on high-income consumers, who often evaluate sports products as long-term investments. While our study acknowledges this, it also highlights the potential disconnect between economic capability and actual engagement in sports purchasing decisions, which requires further investigation. During the research process, we reviewed findings relevant to the research gap identified by Steven et al. (2021). Their results demonstrate that product quality, brand image, and price percep-

tion all positively and significantly affect purchasing decisions. Our research complements their independent variables by adding promotion, usage, and attribute variables. However, our study is the first to examine the economic levels of sports product buyers across three groups: low, middle, and high. The interplay between economic status and buyer knowledge highlights a nuanced understanding of consumer behaviour, particularly the emphasis on value alignment for low- and middle-income buyers, as Jones et al. (2020) suggested.

This study is limited by its focus on respondents from the Padang city area, with a sample size 278. Therefore, the results may not be generalizable to populations in rural areas, where economic factors and buyer knowledge regarding sports products may differ. Second, this study employs a questionnaire as its data collection method, which can introduce bias, especially if respondents do not fully understand questions related to sports product knowledge. The economic classification is further limited by only the low, medium and high levels, consisting of five variables and twelve indicators. Based on these limitations, the results from this study should be interpreted with that in mind, and we propose further research with a larger sample size and more diverse data collection methods. Future research could also explore how the dynamics of buyer knowledge and economic levels interact with brand reputation, as emphasized by Chung and Welty Peachey (2022), and how this impacts long-term consumer loyalty.

Based on the findings of this study, we suggest that future research on economic levels expand its sample to include rural areas to understand the dynamics of purchasing behavior better. The behavior of high-income buyers is critical in identifying their attitudes toward sports product knowledge. High-income buyers tend to be very loyal to reputable brands known for high quality and product innovation. Furthermore, when targeting middle-income buyers, the sports industry should consider offering more flexible payment options, such as interest-free or instalment plans, to make sports products more accessible for this demographic without compromising their financial stability.

Conclusions

In this study, we consider three main hypotheses that require detailed explanation by the researcher. The first hypothesis pertains to the significant influence between indicators and research variables. The first variable, Buyer Knowledge (which includes product quality, brand, promotion, usage, and attributes), indicates that higher buyer knowledge correlates with better indicator value results. After conducting a trial using Smart-PLS software, we confirmed this relationship; all threshold values of the buyer knowledge variable were above 0.5, with the highest value at 0.815 and the lowest at 0.723. Additionally, the economic level in this study is categorized into three variables: high, medium, and low economic levels. The data from our trial regarding the influence of indicators on variables yielded a value of 1.00, indicating a very significant influence.

The second hypothesis concerns the positive influence between dependent and independent variables. The knowledge possessed by the buyer exhibits a higher loading value when considering its impact on the decision to purchase sports products. This hypothesis can be accepted if the threshold value is below 0.05, except for the influences of high and medium economic levels on the decision to purchase sports products, which were 0.112 and 0.149, respectively, and the influence of high economic levels on buyer knowledge, which was 0.123. The third hypothesis addresses the regression between dependent and independent variables. As explained in the previous section, the results of the statistical data processing through linear regression reveal significant values between several dependent and independent variables and the significance of the correlation among these variables. The following explanation outlines the significant results obtained from linear regression, where the threshold value is 0.05. Notably, the significant values include 0.000 between buyer knowledge and the decision to purchase sports products, 0.041 between the middle economic level and the decision to purchase sports products, 0.026 between the low economic level and the decision to purchase sports products, and 0.048 between the low economic level and buyer knowledge.

Additionally, several findings exhibited insignificant linear regression results, such as 0.149 between the middle economic level and the decision to purchase sports products, 0.112 between the high economic level and the decision to purchase sports products, and 0.123 between the high economic level and buyer knowledge. These findings indicate the need for enhanced linear regression analysis. (Liu,

2024) notes that "economic factors play an important role in influencing consumer behaviour towards product purchasing decisions." This research provides important insights for stakeholders, particularly in the sports industry, regarding developing more effective strategies to influence purchasing decisions across different economic segments. Our findings reveal that buyer knowledge significantly impacts purchasing decisions for sports products. The sports industry should focus on product promotion to reach buyers across all economic levels. Implementing discount programs and maintaining high-quality sports products over the long term presents a valuable opportunity to attract buyers in the low and medium-economic segments. Conversely, products from reputable brands can be integrated into marketing strategies aimed at consumers at a high economic level.

Acknowledgements

Financing

References

Acquah-Sam, E. (2021). Developing Sports for Economic Growth and Development in Developing Countries. *European Scientific Journal ESJ*, *17*(15), 172–216. https://doi.org/10.19044/esj.2021.v17n15p172

Chaerudin, S. M., & Syafarudin, A. (2021). Ilomata International Journal of Tax & Accounting (IJTC) The Effect Of Product Quality, Service Quality, Price On Product Purchasing Decisions On Consumer Satisfaction. *Ilomata International Journal of Tax & Accounting*, *2*(1), 61–70. Retrieved from https://www.ilomata.org/index.php/ijtc

Chen, S., Liu, T., & Su, Y. (2022). Evaluation of Factors Affecting the Decision-Making Process of Sneaker Purchase among Chinese Post 90s Consumers, (May), 1–72. Retrieved from https://www.diva-portal.org/smash/record.jsf?pid=diva2:1666226%0Ahttps://www.diva-portal.org/smash/get/diva2:1666226/FULLTEXT01.pdf

Chiu, W. H., Shih, Y. S., Chu, L. S., & Chen, S. L. (2022). Merger and Acquisitions Integration, Implementation as Innovative Approach Toward Sustainable Competitive Advantage: A Case Analysis From Chinese Sports Brands. *Frontiers in Psychology*, *13*(April). https://doi.org/10.3389/fpsyg.2022.869836

Chung, M. R., & Welty Peachey, J. (2022). The influence of brand experience on satisfaction, uncertainty and brand loyalty: a focus on the golf club industry. *Sport, Business and Management: An International Journal*, *12*(2), 154–170. https://doi.org/10.1108/SBM-11-2020-0115

Dai, J., & Menhas, R. (2020). Sustainable development goals, sports and physical activity: The localization of health-related sustainable development goals through sports in China: A narrative review. *Risk Management and Healthcare Policy*, *13*, 1419–1430. https://doi.org/10.2147/RMHP.S257844

Day, D. (2022). *Products, training and technology*. In *A cultural history of sport: In the age of industry* (pp. 77–98). Bloomsbury Academic. https://doi.org/10.5040/9781350183032.ch-003

Elite, S. (2023). The critical hotel attraction factors of lower.

Fuchs, M., & Hovemann, G. (2022). Consumer preferences for circular outdoor sporting goods: An Adaptive Choice-Based Conjoint analysis among residents of European outdoor markets. *Cleaner Engineering and Technology*, *11*(May), 100556. https://doi.org/10.1016/j.clet.2022.100556

Hossein, A., Zahra, S., Mirzazadeh, S., Sadat, M., & Shahri, A. (2022). Effect of price transparency on the perception of fair price and satisfaction with the purchase of sports products. *Journal of Revenue and Pricing Management*. https://doi.org/10.1057/s41272-022-00391-w

Jones, P., Ratten, V., & Hayduk, T. (2020). Sport, fitness, and lifestyle entrepreneurship. *International Entrepreneurship and Management Journal*, *16*(3), 783–793. https://doi.org/10.1007/s11365-020-00666-x

Lee, J. H. (2021). Effect of Sports Psychology on Enhancing Consumer Purchase Intention for Retailers of Sports Shops: Literature Content Analysis. *Journal of Distribution Science*, *19*(4), 5–13. https://doi.org/10.15722/jds.19.4.202104.5

Liu, Z. (2024). Analysis of Key Economic Factors in Consumer Behavior and Purchase Decisions in Online Markets. *Advances in Economics, Management and Political Sciences*, *77*(1), 26–32. https://doi.org/10.54254/2754-1169/77/20241776

Meijer, R., & Buitelaar, E. (2023). What drives developers? Understanding vertical (dis)integration strategies in the land development process. *Land Use Policy*, *131*(May), 106718. https://doi.org/10.1016/j.landusepol.2023.106718

Munjal, N. (2020). Influence of celebrity endorsement on consumers' impulse buying decision of Fast Moving Consumer Goods in Delhi/NCR. *International Journal of Research and Analytical Reviews (IJRAR)*, *7*(1), 771–786.

Nico Gerard Doan, A., & Ali, H. (2021). Repurchase Model Through Purchase Decision: Analysis of Product and Price Effect on Dulux Paint Consumers in DKI Jakarta and Tangerang Area. *Dinasti International Journal of Economics, Finance & Accounting*, *2*(1), 85–99. https://doi.org/10.38035/dijefa.v2i1.730

Pandey, R., Reddy, L. S., Chaudary, V., Widyawati, V. T., Sin, L. G., Bin Mohd Ghazali, M. K. A., … Binti Mohamed, N. A. (2021). Analysis the Effect of Product Quality and Price on Purchase Decision (Case Study of Adidas India, Indonesia, and Malaysia). *International Journal of Accounting & Finance in Asia Pasific*, *4*(1), 71–85. https://doi.org/10.32535/ijafap.v4i1.1034

Pratama, G. B., Widyanti, A., Nurfitrisari, N., & Salma, S. A. (2022). Ergonomic Product Design: An Empirical Study on The Influencing Factors to Use and to Buy. *Strategic Design Research Journal*, *15*(3), 248–261. https://doi.org/10.4013/sdrj.2022.153.03

Purcell, R., Pilkington, V., Carberry, S., Reid, D., Gwyther, K., Hall, K., … Rice, S. (2022). An Evidence-Informed Framework to Promote Mental Wellbeing in Elite Sport. *Frontiers in Psychology*, *13*(February), 1–13. https://doi.org/10.3389/fpsyg.2022.780359

Rai, J. S., Yousaf, A., Itani, M. N., & Singh, A. (2021). Sports celebrity personality and purchase intention: the role of endorser-brand congruence, brand credibility and brand image transfer. *Sport, Business and Management: An International Journal*, *11*(3), 340–361. https://doi.org/10.1108/SBM-06-2020-0062

Roy, G., Debnath, R., Mitra, P. S., & Shrivastava, A. K. (2021). Analytical study of low-income consumers' purchase behaviour for developing marketing strategy. *International Journal of System Assurance Engineering and Management*, *12*(5), 895–909. https://doi.org/10.1007/s13198-021-01143-6

Sepehrian, A. H., Mirzazadeh, Z. S., & Aghaei Shahri, M. S. (2023). Effect of price transparency on the perception of fair price and satisfaction with the purchase of sports products. *Journal of Revenue and Pricing Management*, *22*(5), 327–337. https://doi.org/10.1057/s41272-022-00391-w

Shahul Hameed, S., Madhavan, S., & Arumugam, T. (2020). Is consumer behaviour varying towards low and high involvement products even sports celebrity endorsed? *International Journal of Scientific and Technology Research*, *9*(3), 4848–4852.

Shirodkar, V., & Deshpande, A. (2021). The Advertising Power Of Sports Personality-Impact On Sports Brand (Adidas). *Volatiles & Essent. Oils*, *8*(4), 10646–10652.

Steven, W., Purba, J. T., Budiono, S., & Adirinekso, G. P. (2021). How product quality, brand image and price perception impact on purchase decision of running shoes? *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 1289–1297. https://doi.org/10.46254/sa02.20210562

Su Guiyu, & Prin Laksitamas. (2022). A Strategic Model to Strengthen The Brand of Senior Sports. *Integrated Journal for Research in Arts and Humanities*, *2*(4), 100–108. https://doi.org/10.55544/ijrah.2.4.60

Sun, J. J., Bellezza, S., & Paharia, N. (2021). Buy Less, Buy Luxury: Understanding and Overcoming Product Durability Neglect for Sustainable Consumption. *Journal of Marketing*, *85*(3), 28–43. https://doi.org/10.1177/0022242921993172

Terason, S. (2021). Characterizing and categorizing the essence of sport consumption behavior: A thematic analysis. *Qualitative Report*, *26*(9), 2882–2890. https://doi.org/10.46743/2160-3715/2021.4864

Wang, Q., Yang, L., Kanagal, B., Sanghai, S., Sivakumar, D., Shu, B., … Elsas, J. (2020). Learning to Extract Attribute Value from Product via Question Answering: A Multi-task Approach. *Proceedings of the ACM SIGKDD International Conference on Knowledge Discovery and Data Mining*, 47–55. https://doi.org/10.1145/3394486.3403047

Wijanarko, P. A., Wisnu, D., & Praharjo, A. (2023). The Influence of Product Quality, Perceived Price and Brand Image Regarding the Purchase Decision of Specs Soccer Shoes. *Jamanika (Jurnal Manajemen Bisnis Dan Kewirausahaan)*, *3*(01), 89–97. https://doi.org/10.22219/jamanika.v3i01.25452

Authors and translators' details:

Ilham Ilham	ilhamf@fik.unp.ac.id	Author
Raihan Alfarobi	raihanalfarobi103@gmail.com	Author
Bekir Erhan Orhan	bekirerhanorhan@aydin.edu.tr	Author/Translator
Vlad Adrian Geantă	vladu.geanta@gmail.com	Author