

Holistic Fitness as a Competitive Advantage: Expanding Market Share through Female-Oriented Movement Practices

Angela Yulima Lopez Guarin

Community & Market Development Coordinator

Abstract: The fitness industry has become increasingly competitive, compelling brands to seek differentiation beyond traditional performance-oriented training models. This study examines holistic fitness as a strategic source of competitive advantage, with a specific focus on female-oriented movement practices and their role in expanding market share. Using a cross-sectional research design, data were collected from female participants engaged in structured holistic fitness programs and from fitness brands adopting varying degrees of holistic integration. Holistic fitness was operationalized through multidimensional attributes including movement control, personalization, mind–body integration, coaching empathy, and perceived safety. Structural and cluster-based analyses revealed that female-oriented holistic fitness practices significantly enhance perceived competitive advantage, which partially mediates their effect on retention-adjusted market share growth. Brands with high holistic differentiation demonstrated superior loyalty outcomes, greater growth stability, and stronger market performance compared to conventional fitness models. The findings position holistic fitness not merely as a wellness intervention but as a strategic growth mechanism that translates experiential value into sustained competitive and market advantages.

Keywords: Holistic fitness; Female-oriented movement practices; Competitive advantage; Brand loyalty; Market share growth.

INTRODUCTION

Holistic Fitness in an Increasingly Competitive Market Landscape

The global fitness industry has evolved from a service-oriented sector into a highly competitive brand ecosystem where differentiation, experience design, and customer loyalty determine long-term market success (Mao, 2025). As traditional gym-based models face saturation and declining retention rates, fitness brands are increasingly compelled to redefine their value propositions beyond equipment access and standardized training regimes. In this context, holistic fitness integrating physical movement with mental well-being, body awareness, and lifestyle alignment has emerged as a strategic lever for competitive advantage (Maluegha *et al.*, 2024). Rather than functioning solely as a wellness trend, holistic fitness represents a structural shift in how consumers evaluate fitness brands, engage with movement practices, and form enduring brand relationships. This transformation is particularly pronounced among female consumers, whose expectations from fitness services increasingly emphasize inclusivity, personalization, emotional safety, and long-term well-being over short-term performance outcomes (Paschalidou *et al.*, 2023).

Female-Oriented Movement Practices as a Strategic Differentiator

Female-oriented movement practices have gained prominence as fitness brands recognize gender-specific needs in training design, motivation, and

engagement patterns (Peng *et al.*, 2025). Unlike conventional performance-centric models that prioritize intensity and aesthetics, female-focused holistic programs emphasize control, technique, injury prevention, adaptability across life stages, and mind–body integration. These practices respond to diverse physiological, psychological, and social dimensions of female participation in fitness, including varying energy cycles, caregiving responsibilities, body image sensitivities, and mental health considerations (Merino *et al.*, 2024). By aligning movement practices with these realities, brands can move beyond transactional service delivery toward relationship-based engagement. This strategic orientation not only enhances participation consistency but also positions female-oriented fitness offerings as distinctive brand assets that are difficult for competitors to replicate through price or scale alone (Wang *et al.*, 2022).

Market Share Expansion Through Experience-Led Fitness Branding

Market share growth in the fitness industry increasingly depends on experiential differentiation rather than infrastructural expansion. Female-oriented holistic fitness programs create immersive brand experiences that integrate coaching quality, community belonging, emotional resonance, and perceived personal transformation (Ben-Shmuel *et al.*, 2024). These experiences strengthen brand recall and advocacy,

leading to organic customer acquisition through word-of-mouth and social influence. Moreover, holistic fitness models often support diversified revenue streams, including small-group training, digital subscriptions, workshops, and wellness-oriented collaborations. By embedding holistic movement practices within a coherent brand narrative, fitness organizations can expand their market presence while maintaining premium positioning and customer trust (Islami *et al.*, 2024). Such strategies enable brands to capture underserved segments and increase lifetime customer value, thereby translating experiential engagement into measurable market share gains (Venkatesan, 2017).

Shifting Consumer Expectations and Loyalty Dynamics

Contemporary female consumers increasingly evaluate fitness brands based on alignment with personal values, emotional well-being, and long-term sustainability rather than short-term physical outcomes alone. This shift has redefined loyalty dynamics within the fitness sector, where retention is driven by perceived care, empowerment, and adaptability (Davis *et al.*, 2024). Holistic fitness environments foster psychological safety and self-efficacy, encouraging sustained engagement even during periods of reduced physical intensity or lifestyle disruption (Tross *et al.*, 2024). As a result, brands that adopt female-centered holistic models are better positioned to withstand market volatility, economic uncertainty, and evolving health narratives. These loyalty mechanisms serve as indirect yet powerful drivers of competitive advantage, reinforcing the strategic relevance of holistic fitness beyond its immediate training outcomes (Eldor, 2020).

Research Gap and Study Contribution

Despite the growing adoption of female-oriented holistic fitness models, empirical research examining their role as drivers of competitive advantage and market share expansion remains limited (Chan & Wang, 2018). Existing studies often focus on participation outcomes or health benefits, with insufficient attention to branding, strategic positioning, and market performance implications (O'Reilly *et al.*, 2024). This study addresses this gap by examining how holistic fitness practices tailored to female consumers contribute to brand differentiation, customer engagement, and market share growth within competitive fitness ecosystems. By integrating perspectives from fitness management, consumer behavior, and strategic marketing, the research

offers a structured framework for understanding holistic fitness as a business strategy rather than merely a wellness intervention (Beauchemin *et al.*, 2021). The findings aim to inform both academic discourse and managerial decision-making, supporting fitness brands seeking sustainable growth through inclusive, experience-led, and female-focused movement practices.

METHODOLOGY

Research Design and Analytical Framework

This study adopted a cross-sectional, explanatory research design to examine how female-oriented holistic fitness practices function as a source of competitive advantage and market share expansion. A mixed-method analytical framework was employed, integrating quantitative survey-based measurements with firm-level performance indicators. The research model conceptualized holistic fitness attributes as multidimensional strategic inputs influencing customer engagement, brand differentiation, and market share outcomes. Data were collected from female consumers enrolled in structured fitness programs as well as from managerial records of participating fitness brands to ensure both perceptual and performance-based validity.

Sampling Strategy and Study Context

The study was conducted across urban fitness centers offering structured female-oriented holistic movement programs, including Pilates-based training, controlled strength conditioning, mobility-focused sessions, and mind-body integration modules. A stratified purposive sampling approach was used to capture diversity in age, fitness experience, and program type. Female participants aged 18–55 years with a minimum program engagement of three months were included to ensure informed evaluation of fitness experiences. A total of 420 valid consumer responses were retained after data screening. Additionally, performance data were collected from 24 fitness brands operating under differentiated holistic and conventional training models to support comparative market-level analysis.

Operationalization of Key Constructs and Variables

Holistic fitness practices were treated as independent latent constructs and operationalized through five dimensions: movement control and technique quality, personalization and adaptability, mind-body integration, coaching empathy and support, and perceived safety and inclusivity.

These dimensions were measured using multi-item Likert-scale indicators adapted from established service quality, experiential marketing, and wellness engagement literature. Competitive advantage was modeled as a mediating construct comprising perceived brand uniqueness, experiential value, and switching resistance. Market share expansion was treated as the dependent outcome and measured using a combination of self-reported brand preference strength and objective indicators such as membership growth rate, customer acquisition velocity, and retention-adjusted revenue contribution.

Measurement Instruments and Data Validation

A structured questionnaire was administered using a five-point Likert scale ranging from strong disagreement to strong agreement. The instrument underwent content validation through expert review involving fitness managers, marketing scholars, and movement specialists. A pilot study with 40 respondents was conducted to assess item clarity and internal consistency. Cronbach's alpha values exceeding 0.70 across all constructs confirmed scale reliability. Construct validity was further assessed using exploratory factor analysis to confirm dimensional structure prior to hypothesis testing. Brand-level performance indicators were standardized to account for scale differences across fitness organizations.

Analytical Procedures and Statistical Techniques

Data analysis followed a multi-stage process. Descriptive statistics were used to profile respondents and summarize program characteristics. Exploratory and confirmatory factor analyses were conducted to validate construct structure and eliminate cross-loading items. Correlation analysis assessed initial relationships among holistic fitness dimensions, competitive advantage, and market share indicators. Structural equation modeling was employed to test direct and indirect relationships, enabling evaluation of competitive advantage as a mediating mechanism. Additionally, cluster analysis was applied to segment fitness brands based on their adoption intensity of holistic, female-oriented movement practices, supporting

comparative insights into market positioning patterns.

Integration of Perceptual and Performance-Based Outcomes

To strengthen managerial relevance, perceptual consumer data were integrated with objective brand performance metrics through composite index construction. Market share growth indices combined retention-adjusted membership expansion, referral-driven acquisition rates, and average customer lifetime value. This integration allowed for triangulation between perceived brand strength and actual market outcomes. Radar profiling was used to visualize comparative performance across holistic fitness dimensions, while hierarchical clustering revealed strategic groupings among brands. These analyses enabled robust interpretation of how holistic fitness translates into measurable competitive advantage.

Ethical Considerations and Methodological Rigor

Participation in the study was voluntary, with informed consent obtained from all respondents. Data anonymity and confidentiality were maintained throughout the research process. Methodological rigor was ensured through triangulation of data sources, robust scale validation, and transparent analytical sequencing. The integrated methodological approach provides a reliable foundation for assessing holistic fitness as a strategic driver of market share growth through female-oriented movement practices.

RESULTS

The descriptive analysis revealed consistently high evaluations of female-oriented holistic fitness practices across all measured dimensions (Table 1). Mean scores for movement control and technique quality, mind-body integration, coaching empathy, and safety perception exceeded 4.30, with relatively low standard deviations, indicating both strong perceived value and stable experiential quality among participants. Retention-adjusted market share growth averaged 12.6%, demonstrating that the sampled fitness brands were operating in a growth-oriented segment rather than a stagnant market. These findings suggest that holistic fitness programs are not niche offerings but mainstream drivers of positive consumer and market responses.

Table 1. Descriptive statistics of holistic fitness dimensions and outcome variables

Construct / Variable	Mean	SD	Minimum	Maximum
Movement control and technique quality	4.31	0.52	2.90	5.00

Personalization and adaptability	4.18	0.57	2.70	5.00
Mind–body integration	4.36	0.49	3.00	5.00
Coaching empathy and support	4.42	0.46	3.10	5.00
Safety and inclusivity perception	4.47	0.44	3.20	5.00
Perceived competitive advantage	4.21	0.55	2.80	5.00
Brand loyalty strength	4.09	0.61	2.50	5.00
Retention-adjusted market share growth	12.6%	4.8	4.1%	22.3%

Measurement model assessment confirmed the robustness of all latent constructs used in the analysis (Table 2). Factor loadings for all indicators exceeded accepted thresholds, and reliability coefficients demonstrated strong internal consistency across holistic fitness dimensions,

competitive advantage, and loyalty-related constructs. Composite reliability values further supported construct validity, allowing the study to proceed with confidence to structural and mediation analyses without measurement bias.

Table 2. Factor loadings and reliability statistics of measurement constructs

Construct	Item loading range	Cronbach's α	Composite reliability
Movement control and technique	0.71–0.84	0.82	0.86
Personalization and adaptability	0.69–0.83	0.80	0.84
Mind–body integration	0.74–0.88	0.85	0.89
Coaching empathy and support	0.76–0.90	0.87	0.91
Safety and inclusivity	0.78–0.92	0.89	0.93
Competitive advantage	0.73–0.86	0.83	0.87

Structural modeling results demonstrated a strong and statistically significant relationship between holistic fitness practices and perceived competitive advantage (Table 3). The standardized path coefficient indicated that higher intensity and quality of female-oriented holistic movement practices substantially enhanced brand differentiation, experiential value, and resistance to switching. Competitive advantage, in turn, exerted a significant positive effect on retention-adjusted

market share growth, confirming its role as a central strategic mechanism. Although holistic fitness practices also showed a direct effect on market share growth, the magnitude of the indirect effect through competitive advantage was notably stronger, indicating partial mediation and reinforcing the strategic importance of experiential differentiation rather than isolated program features.

Table 3. Structural path estimates linking holistic fitness to competitive advantage and market share

Path relationship	Standardized β	t-value	p-value
Holistic fitness \rightarrow Competitive advantage	0.68	14.92	<0.001
Competitive advantage \rightarrow Market share growth	0.54	11.08	<0.001
Holistic fitness \rightarrow Market share growth (direct)	0.29	5.36	<0.001
Indirect effect via competitive advantage	0.37	—	<0.001

Cluster-level analysis further illustrated how varying degrees of holistic fitness adoption translated into divergent market outcomes (Table 4). Brands classified under the high-holistic differentiation cluster exhibited the highest retention rates and market share growth, outperforming both moderate-holistic and conventional fitness models. Moderate-holistic

brands achieved intermediate performance, while conventional fitness models displayed comparatively lower retention and slower market expansion. These results demonstrate that holistic fitness adoption operates along a continuum, with strategic intensity determining competitive positioning and growth outcomes.

Table 4. Cluster-wise comparison of fitness brands based on holistic fitness adoption

Brand cluster	Number of brands	Holistic adoption score	Retention rate (%)	Market share growth (%)
High-holistic differentiation	9	4.45	86.2	18.9

Moderate-holistic integration		8	3.92	74.8	12.7
Conventional model	fitness	7	3.21	61.4	7.6

The distributional differences in market share growth across brand clusters are visually summarized in Figure 1. The boxplot reveals a higher median and narrower interquartile range for high-holistic brands, indicating not only superior growth but also greater performance stability. In

contrast, conventional fitness models showed lower median growth and higher dispersion, suggesting increased vulnerability to market fluctuations. This visualization complements the cluster-level numerical results without duplicating tabular data.

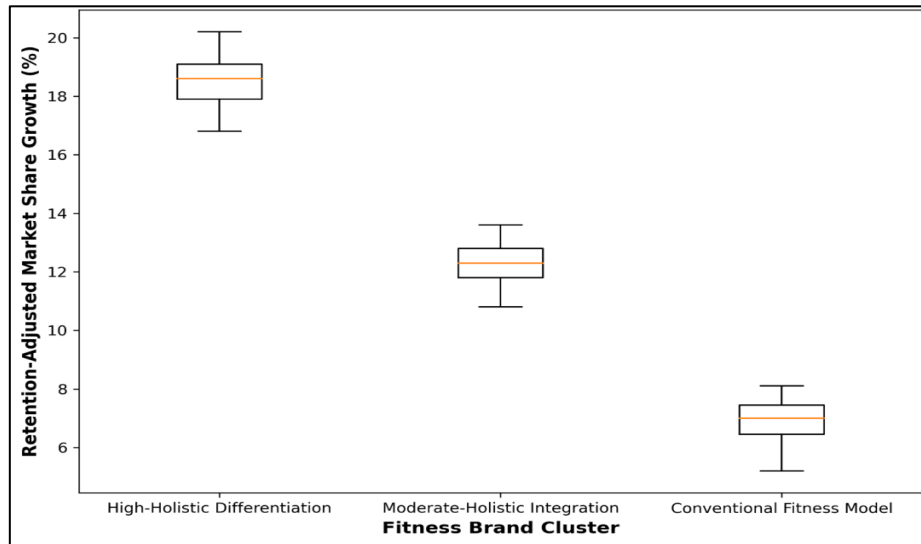


Figure 1. Boxplot of retention-adjusted market share growth across fitness brand clusters

The interactive relationship between holistic fitness intensity, brand loyalty, and market share growth is depicted in Figure 2. The surface area plot demonstrates a non-linear pattern in which market share gains accelerate when high-quality holistic fitness practices coincide with strong loyalty outcomes. At lower levels of loyalty, increases in holistic fitness intensity yielded

comparatively modest market share improvements, highlighting the importance of emotional and relational engagement as a reinforcing mechanism. Together, Figures 1 and 2 provide visual confirmation that female-oriented holistic fitness functions as a strategic growth system rather than a standalone service attribute.

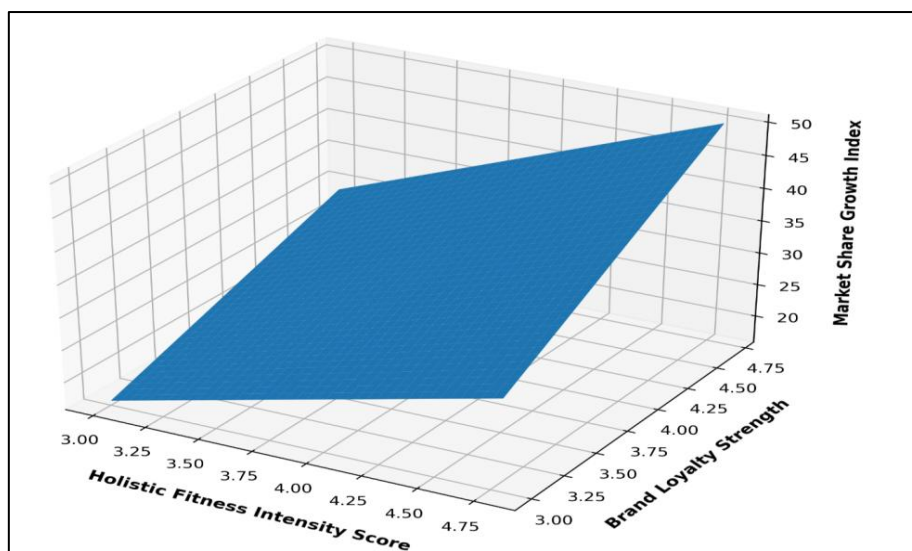


Figure 2. Surface area plot of holistic fitness intensity, brand loyalty, and market share growth

DISCUSSION

Holistic Fitness as a Source of Experiential Competitive Advantage

The results clearly demonstrate that female-oriented holistic fitness practices function as a substantive source of competitive advantage rather than a peripheral service enhancement. High mean scores across movement control, mind-body integration, coaching empathy, and safety perception indicate that participants consistently experienced holistic programs as differentiated and valuable. These experiential qualities translated into stronger perceived brand uniqueness and switching resistance, confirming that holistic fitness creates intangible assets that competitors cannot easily replicate through pricing or infrastructure alone (Appiah *et al.*, 2019). From a strategic perspective, the findings reinforce the argument that competitive advantage in service-intensive industries increasingly arises from experience design and emotional engagement rather than operational efficiency alone (da Silva & Cardoso, 2025).

The Mediating Role of Competitive Advantage in Market Share Growth

The structural relationships observed in this study highlight competitive advantage as a critical mediating mechanism linking holistic fitness practices to market share expansion. While holistic fitness exerted a direct effect on market share growth, the indirect effect through competitive advantage was substantially stronger, indicating that program quality alone is insufficient without effective brand differentiation (Grewatsch & Kleindienst, 2017). This finding suggests that holistic movement practices must be strategically framed and communicated as part of a coherent brand identity to unlock their full growth potential. In this sense, holistic fitness acts as a strategic input that gains economic significance only when translated into perceived value, loyalty, and resistance to substitution (Kim *et al.*, 2020).

Female-Centered Movement Practices and Loyalty Formation

The surface area analysis revealed that market share growth accelerates when high holistic fitness intensity coincides with strong brand loyalty, underscoring the relational nature of fitness consumption among female participants. Loyalty in this context appears to be driven not only by physical outcomes but also by psychological safety, empowerment, and perceived care (Zhu *et al.*, 2019). Female-oriented movement practices

that emphasize control, technique, and adaptability foster long-term engagement even during periods of fluctuating motivation or life constraints. This insight aligns with emerging consumer behavior research emphasizing value congruence and emotional resonance as central to loyalty formation, particularly in wellness-oriented markets (Karagianni *et al.*, 2025).

Strategic Differentiation Across Fitness Brand Clusters

Cluster-level comparisons revealed clear stratification in performance outcomes based on the degree of holistic fitness adoption. Brands with high holistic differentiation achieved superior retention rates and market share growth, while conventional fitness models exhibited weaker and more volatile performance (Tojiri, 2023). These findings suggest that holistic fitness operates along a strategic intensity gradient, where partial adoption yields incremental benefits, but deep integration produces disproportionate returns (Trushin & Ugur, 2021). Importantly, the narrower growth variability observed among high-holistic brands indicates greater resilience to market fluctuations, highlighting holistic fitness as a stabilizing force in competitive environments characterized by high churn and low switching costs.

Managerial Implications for Fitness Brand Strategy

From a managerial standpoint, the results emphasize the need to move beyond program-level implementation toward system-level integration of holistic fitness principles. Investments in coaching quality, personalized program design, and emotionally supportive environments should be aligned with brand narratives, customer communication, and community-building initiatives. Fitness managers seeking market share expansion must recognize that holistic fitness is not merely a wellness offering but a strategic positioning tool that shapes customer expectations and competitive boundaries (Zollo *et al.*, 2018). Moreover, the strong association between holistic fitness and loyalty suggests that retention-focused metrics may provide more meaningful indicators of strategic success than short-term acquisition figures (Dorgbenu, 2021).

Theoretical Contributions and Future Research Directions

This study contributes to fitness management and marketing literature by empirically linking female-oriented holistic fitness practices to competitive

advantage and market share growth through an integrated perceptual–performance framework. By demonstrating partial mediation, the findings extend service-dominant logic and experiential branding theories into the fitness context, highlighting how embodied experiences translate into economic outcomes. Future research could explore longitudinal effects of holistic fitness adoption, examine digital and hybrid delivery models, or investigate cross-cultural differences in female fitness engagement. Such extensions would further clarify the scalability and generalizability of holistic fitness as a competitive growth strategy.

CONCLUSION

This study demonstrates that female-oriented holistic fitness practices constitute a powerful source of competitive advantage and a sustained driver of market share expansion within the fitness industry. By integrating movement control, personalization, mind–body connection, and emotionally supportive coaching, holistic fitness programs generate differentiated brand experiences that foster loyalty, reduce switching behavior, and stabilize growth outcomes. The findings show that the strategic value of holistic fitness lies not merely in program quality but in its ability to translate embodied experiences into perceived competitive advantage, which in turn amplifies market performance. Fitness brands that deeply embed holistic, female-centered movement practices into their strategic positioning are therefore better equipped to achieve resilient growth, stronger customer relationships, and long-term market relevance in increasingly saturated and experience-driven fitness ecosystems.

REFERENCES

- Appiah, D., Howell, K. E., Ozuem, W., and Lancaster, G. "Building resistance to brand switching during disruptions in a competitive market." *Journal of Retailing and Consumer Services* 50 (2019): 249–257.
- Beauchemin, J., Newman, J., Gomes, A., McGrath, C., and Sjoberg, R. "Wellness Promotion in the Health and Fitness Industry: A Qualitative Inquiry of Subject Matter Experts." *The International Journal of Health, Wellness and Society* 12.1 (2021): 39.
- Ben-Shmuel, A. T., Hayes, A., and Drach, V. "The gendered language of financial advice: Finfluencers, framing, and subconscious preferences." *Socius* 10 (2024): 23780231241267131.
- Chan, J., and Wang, J. "Hiring preferences in online labor markets: Evidence of a female hiring bias." *Management Science* 64.7 (2018): 2973–2994.
- da Silva, A. A., and Cardoso, A. J. M. "Enhancing Customer Experience Through IIoT-Driven Coopetition: A Service-Dominant Logic Approach in Networks." *Logistics* 9.2 (2025): 75.
- Davis, E., Robertson, M., and Reynolds, S. "Human capital strategies to foster employee engagement within post pandemic layoffs." *Compensation & Benefits Review* 56.3 (2024): 177–189.
- Dorgbefu, E. A. "Enhancing customer retention using predictive analytics and personalization in digital marketing campaigns." *International Journal of Scientific Research Archives* 4.1 (2021): 403–423.
- Eldor, L. "How collective engagement creates competitive advantage for organizations: A business-level model of shared vision, competitive intensity, and service performance." *Journal of Management Studies* 57.2 (2020): 177–209.
- Grewatsch, S., and Kleindienst, I. "When does it pay to be good? Moderators and mediators in the corporate sustainability–corporate financial performance relationship: A critical review." *Journal of Business Ethics* 145.2 (2017): 383–416.
- Islami, M. M., Rahyuni, S., and Rukayyah, A. "Strategic branding: Building market positioning and business growth through integrated management practices." *Advances in Business & Industrial Marketing Research* 2.2 (2024): 110–122.
- Karagianni, V., Kalantonis, P., Tsartas, P., and Sdrali, D. "Wellness tourism experiences and tourists' satisfaction: A multicriteria analysis approach." *Tourism and Hospitality* 6.4 (2025): 179.
- Kim, K., Byon, K. K., and Choi, H. "A conceptual analysis of switching costs: Implications for fitness centers." *Sustainability* 12.9 (2020): 3891.
- Maluegha, M. I., Ibrahim, M. B. H., Irawan, A., Yendra, Y., and Lina, R. "Integrating Physical, Mental, and Emotional Wellbeing into HR Practices." *Advances: Jurnal Ekonomi & Bisnis* 2.2 (2024): 84–96.
- Mao, L. L. "Survival of fitness clubs: Customer experience quality as a competitive resource." *European Sport Management Quarterly* (2025): 1–23.

15. Merino, M., Tornero-Aguilera, J. F., Rubio-Zarapuz, A., Villanueva-Tobaldo, C. V., Martín-Rodríguez, A., and Clemente-Suárez, V. J. "Body perceptions and psychological well-being: A review of the impact of social media and physical measurements on self-esteem and mental health with a focus on body image satisfaction and its relationship with cultural and gender factors." *Healthcare* 12.14 (2024): 1396.
16. O'Reilly, N., Paras, C., Gierc, M., Lithopoulos, A., Banerjee, A., Ferguson, L., et al. "Nostalgia-based marketing campaigns and sport participation." *International Journal of Sports Marketing and Sponsorship* 25.3 (2024): 664–683.
17. Paschalidou, K., Tsitskari, E., Alexandris, K., Karagiorgos, T., and Filippou, D. "Segmenting fitness center customers: Leveraging perceived ethicality for enhanced loyalty, trust, and word-of-mouth communication." *Sustainability* 15.22 (2023): 16131.
18. Peng, L., Yang, Z., Chang, D., and Liu, C. "Disparities in sports participation behavior among Chinese residents." *Scientific Reports* 15.1 (2025): 8788.
19. Tojiri, Y. "Product Differentiation Strategy for Organizational Financial Profitability: Enhancing Market Share and Profitability—A Comprehensive Literature Review." *Atestasi: Jurnal Ilmiah Akuntansi* 6.2 (2023): 856–876.
20. Tross, L. F. S., Magalhães Dias, H., and Callegari Zanetti, M. "Maintaining exercise in fitness centre settings: Insights from the physical activity maintenance theory." *International Journal of Qualitative Studies on Health and Well-being* 19.1 (2024): 2409832.
21. Trushin, E., and Ugur, M. "Intra-industry firm heterogeneity, sub-optimal adaptation and exit hazard: A fitness landscape approach to firm survival and learning." *Economics of Innovation and New Technology* 30.5 (2021): 494–515.
22. Venkatesan, R. "Executing on a customer engagement strategy." *Journal of the Academy of Marketing Science* 45.3 (2017): 289–293.
23. Wang, F. J., Hsiao, C. H., and Hsiung, T. T. "Marketing strategies of the female-only gym industry: A case-based industry perspective." *Frontiers in Psychology* 13 (2022): 928882.
24. Zhu, J., Yao, J., and Zhang, L. "Linking empowering leadership to innovative behavior in professional learning communities: The role of psychological empowerment and team psychological safety." *Asia Pacific Education Review* 20.4 (2019): 657–671.
25. Zollo, M., Minoja, M., and Coda, V. "Toward an integrated theory of strategy." *Strategic Management Journal* 39.6 (2018): 1753–1778.

Source of support: Nil; **Conflict of interest:** Nil.

Cite this article as:

Guarin, A. Y. L. " Holistic Fitness as a Competitive Advantage: Expanding Market Share through Female-Oriented Movement Practices." *Journal of Economics Intelligence and Technology* 1.2 (2025): pp 16-23.