

The Mediating Role of COVID-19 Risk Perception in the Relationship between Sports Club Innovativeness and Trust: A Case Study of Martial Arts Clubs

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Abstract

The perception of innovativeness within sports clubs can significantly impact consumer decision-making by reducing risk. This, in turn, can foster trust between martial arts clubs and their customers. This study seeks to investigate the role of COVID-19 risk perception in mediating the relationship between sports club innovativeness and trust in martial arts clubs, specifically during the COVID-19 pandemic. Data was gathered from 249 individuals who participate in sports clubs in Ankara, the capital city of Türkiye. The hypotheses were tested using mediation analysis with the help of the Process macro. Research has demonstrated a connection between the perception of COVID-19 risk, the innovativeness of sports clubs, and the level of trust among individuals. Researchers have found that sports clubs' innovative practices reduce the perceived risk of COVID-19 among their members, thereby boosting trust in martial arts clubs. The result of the study has important implications for sports club managers during times of crisis, such as the COVID-19 pandemic. It suggests that prioritising firm innovativeness can be a crucial strategy to influence sports consumers' trust in sports clubs.

Keywords: COVID-19 Pandemic, Sports Club Innovativeness, Trust, Martial Arts Clubs.

Introduction

Martial arts have gained immense popularity among the Turkish population and have become a significant part of Turkey's sports sector. As of the end of 2023 in Turkey, there are 4847 certified coaches in Taekwondo and 4845 certified coaches in Kickbox (Spor Hizmetleri Genel Müdürlüğü, n.d.). Additionally, there is a significant number of licensed Taekwondo practitioners, with almost 550,000 individuals and 300,000 individuals practicing Kickbox (Cağhyaner, 2020). The difficult circumstances brought about by the COVID-19 pandemic caused numerous martial artists to suspend or completely terminate their club memberships because of a lack of motivation and concerns about potential health risks. Despite the lack of reliable and accessible data on the financial losses faced by small-scale martial arts clubs in Turkey's sports industry, these clubs have been severely impacted by the challenges and restrictions brought about by the COVID-19 pandemic.

It is widely acknowledged that crises can have a detrimental impact on brands, as highlighted by Claeys et al. (2010). Past research has indicated that individuals experiencing psychological states like fear and anxiety tend to hold

pessimistic expectations and beliefs about the trustworthiness of others. This can lead to a decrease in trusting behaviour, as observed in emergency situations like a tsunami (Cassar et al., 2017). In this paper, we propose that heightened levels of fear and anxiety stemming from the COVID-19 risk, coupled with individuals' confidence in the effectiveness of regulatory measures and the adaptation of martial arts clubs to the "new normal," can result in a pessimistic outlook and a decline in trust among individuals when it comes to maintaining their membership in such clubs. Given the current situation, it is crucial for martial arts clubs to prioritise rebuilding trust and implementing effective strategies to mitigate the impact of the pandemic. During the COVID-19 pandemic, it is important to analyse the breach of trust that has occurred in martial arts clubs. These clubs often conduct activities indoors, in groups, and with close contact, making them a suitable research context. In this study, we propose that crises can present both opportunities and threats, as demonstrated by Snowden et al. (2021). Indeed, the COVID-19 pandemic may compel martial arts clubs in Turkey to reassess their operating models and enhance their physical conditions. These clubs appear to have fallen behind other emerging sports clubs and products in the market, and this crisis may serve as a catalyst for them

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to regain their competitive edge. To address the concerns of martial arts club members regarding the club's ability to adapt to new regulations and changing conditions during the pandemic, club managers should explore strategies that promote innovation. This can help restore trust and confidence among club members.

In general, the current marketing research does not give much consideration to how the risk of COVID-19 and the level of innovation in martial arts clubs affect consumers' trust in these clubs. Furthermore, there has been no specific research conducted on the role of COVID-19 risk perception in influencing the connection between firm innovativeness and consumer trust in the sports industry. Therefore, the aim of this study is to examine and gain understanding of how the risk posed by COVID-19 affects trust, and whether the level of innovation within martial art clubs can help alleviate the negative impact of COVID-19 risk on members and enhance trust in the clubs. This study aims to address the existing knowledge gap in the sports sector by investigating the correlation between COVID-19 risk, firm innovativeness, and trust during the pandemic. By focussing on this important niche market and employment area, this research will contribute valuable insights to the field.

It is worth noting that Professor Máire Connolly, who is leading the EU-funded PANDEM-2 project, stated in the European Union Research & Innovation magazine that the next pandemic will likely be triggered by a novel strain or virus of influenza (Smith, 2021). Given these and similar predictions, the findings of this study will offer valuable insights to martial arts club managers on strategies for improving member offers during the COVID-19 pandemic. Additionally, it will contribute important information to the sports marketing literature and provide academics and managers of similar sports clubs with a better understanding of how sports consumers' behaviour may change during future pandemics. The study is organised into different sections, including an introduction, a literature review that summarises related works, a conceptual framework, a methodology, results, a discussion, and a conclusion. The conclusion addresses the theoretical and practical implications, limitations, and future directions of the study.

Literature Review

Innovation is an important factor for businesses as it can generate additional revenue through the introduction of new products (Zawawi et al., 2016). It encompasses various new practices for a business, such as procedures, policies, projects, equipment, and products (Lin, 2019). According

to Zawawi et al. (2016), managers employ firm innovations, such as novel market offerings, new product attributes, and overall creativity, to address business problems and challenges. This helps ensure the survival and success of the firm both in the present and future. Innovations contribute to business performance and competitiveness (Tsai & Yang, 2013) regardless of market turbulence (Hult et al., 2004).

However, innovativeness is defined as a firm's ability to develop new solutions over time rather than just achieving a single success. The literature (Crawford & Benedetto, 2015; Hurley & Hult, 1998; Im & Workman Jr, 2004) views this characteristic as a long-lasting quality. Innovativeness is often described as "the consumer's perception of an enduring firm capability that results in novel, creative, and impactful ideas and solutions for the market" (Kunz et al., 2011). Having a strong ability to innovate is essential for businesses of all sizes, whether they are large or small. This allows them to attract new customers and keep existing ones in a market that is constantly evolving, ensuring they stay ahead of their competition (Kunz et al., 2011). Research has demonstrated the noteworthy influence of firm and brand innovativeness on business performance and stock returns (Mizik & Jacobson, 2008). Additionally, they have found that it affects market position, financial position, and firm value (Sorescu & Spanjol, 2008; Srinivasan & Hanssens, 2009). An investigation was conducted to examine the connection between firm innovativeness and performance in both small (Nijssen et al., 2006) and large markets (Menguc & Auh, 2006). Research has shown that the level of innovation within a company is crucial in building trust among consumers across various industries, such as e-retailing (Kunz et al., 2011; O'Cass & Carlson, 2012) and the sharing economy (Geng et al., 2022).

Trust, which is another key factor in this study, is defined as "a cognitive evaluation of the actions of a relational partner" (Fullerton, 2011), confidence in the reliability and honesty of an exchange partner (Morgan & Hunt, 1994), and "the perceived credibility and benevolence" (Doney & Cannon, 1997). Trust is considered a crucial element in building commitment and loyalty in relationship marketing. Various studies have emphasised the significance of trust in establishing long-lasting and stable relationships. Without trust, it is impossible to maintain a sustainable relationship (Gurvitz & Korchia, 2003). Research has demonstrated that trust plays a significant role in enhancing the overall experience of users in sports services. By improving aspects such as perceived quality, value, and satisfaction with the service, trust has a positive impact on the subjective well-being of users (Pascual et al., 2016). Additionally, trust is an

important factor for individuals participating in adventure tourism, as it encourages them to engage in adventurous activities (Cater, 2006). According to research findings, consumers' trust in a restaurant plays a significant role in determining their willingness to visit restaurants during the COVID-19 pandemic (Hakim et al., 2021). Research has shown that various factors, such as natural disasters, unexpected events, and conflicts, can significantly impact how people perceive and place trust in others. The COVID-19 pandemic's impact on trust and belief in others' trustworthiness was the focus of a recent study in China (Li et al., 2021).

As evident in academic research, trust plays a crucial role in fostering a strong bond between customers and firms. Additionally, the innovative nature of a firm has a significant positive impact on consumer trust. Despite extensive research on the relationship between firm innovativeness and trust in various contexts, there is a noticeable gap in the literature regarding how firm innovativeness can foster customer trust by mitigating COVID-19 risk perceptions in the sports club industry, particularly during the ongoing pandemic. Nevertheless, companies that wish to uphold their competitive edge must adjust their resources and abilities to meet the demands of the evolving business landscape (Teece, 2007; Tsai et al., 2013). This is particularly pertinent for sports clubs navigating the challenging circumstances brought about by COVID-19.

Conceptual Framework: Mediating Role of Covid-19 Risk Perception in the Relationship between Sports Club Innovativeness and Trust

Undoubtedly, the COVID-19 pandemic has undeniably had a detrimental impact on the daily lives of a significant portion of the global population, resulting in fatalities. This paper posits that the COVID-19 pandemic may erode trust in martial arts clubs, similar to other sectors. This erosion of trust can result in a violation of consumers' trust in the products and brands offered by martial arts clubs, due to their perceptions of COVID-19 risks. Research has demonstrated a significant negative relationship between trust and perceived risk in both business-to-business relationships (Doney et al., 1997) and business-to-customer relationships in e-commerce (Pavlou, 2003). Trust is a non-linear process that takes time to develop but can be quickly broken (Ambler, 1997). During the pandemic, higher perceptions of COVID-19 risk may lead to a decrease in customer trust.

Previous research has shown that firm innovativeness plays a significant role in enhancing consumer trust across various product and service categories (Kunz et al., 2011). Ashley and Leonard (2009) argue that consumers can trust a brand based on their positive beliefs about the organisation's

behaviour and product performance. Furthermore, according to Spence (1974) signaling theory, a firm's innovativeness can act as a signal to consumers about the firm's attributes and its products. This can assist consumers in making consumption decisions by reducing uncertainty and risk, ultimately fostering trust between sports clubs and their current and potential customers. Thus, this study proposes that a firm's innovativeness, specifically in the context of sports clubs, can serve as a significant strategy for mitigating the negative effects of members' COVID-19 risk perception on their trust levels within the club, using martial arts clubs as an example.

The COVID-19 pandemic poses a significant risk to customers at sports clubs. According to Thakur and Srivastava (2015), consumer innovativeness can reduce risk perceptions for customers who make physical product purchases through the internet. Lee and Huddleston (2006) argue that innovators are more inclined to embrace new ideas and are better equipped to handle the financial risk and uncertainty associated with adopting a new product. Trust plays a vital role in uncertain situations and should be strengthened (Pavlou, 2003). Literature frequently discusses the relationship between trust and risk, but there is limited consensus on this matter (Das & Teng, 2004). Trust can be established through initial risk-taking (Cook et al., 2005). The relationship between risk and trust may vary depending on cultural factors. According to Cook et al. (2005), Americans consider taking risks to be crucial for building trust in social relationships, while the Japanese assign less importance to risk-taking. Cook et al. (2005) suggest that this outcome may be attributed to variations in the level of uncertainty avoidance among different countries. It is anticipated that a Turkish sample will prioritise risk aversion in establishing trust due to Turkey's high level of uncertainty avoidance, similar to Japan (Hofstede Insights, 2023). The argument is that sports club innovativeness can differentiate the customer value proposition from competing clubs by reducing perceptions of COVID-19 risk. This can positively impact trust, similar to how firm innovativeness affects purchasing behaviour in the mobile phone industry (Kim et al., 2015). Therefore, we propose following hypothesis:

H1: COVID-19 risk perception mediates the relationship between firm innovativeness and trust: The innovativeness of the martial arts clubs mitigates the negative impact of members' perceptions of COVID-19 risk, thereby increasing trust in the clubs.

Method

Participants and Procedures

A total of 249 participants (56.6% men, 43.4% women), aged 18-40 ($M = 22.83$, $SD = 6.16$), who were members of martial

arts clubs in Ankara, Turkey, participated voluntarily in this correlational, cross-sectional quantitative study. The study included participants who were practitioners of Taekwondo (42.98%), Kickbox (36.54%), and Karate (20.48%) sports. Participants' membership periods range from 1–12 months (73.5%) to 13 months and over (26.5%). The Ethics Committee (01.03.2022; No: E35853172-900-00002065036) approved the online collection of the study's data. Given the COVID-19 pandemic, researchers opted for convenience sampling and online surveys to facilitate participant recruitment. Participants were presented with informed consent which expresses the aim of the research, and the possibility to withdraw from the study at any time, and all participants ticked the voluntary participation option.

The data analyses involved assessing the structural validity and reliability of the factors using confirmatory factor analysis (CFA) with IBM Amos 23. The measurement model (mediation) was then tested using the PROCESS macro v3.4. The contemporary approach in mediation analysis determines the presence of a mediation relationship by examining the 90% confidence interval (CI) values obtained from the bootstrap test on the indirect relationship (Hayes & Rockwood, 2017).

Measures

The online survey aimed to gather demographic data using both multiple choice and open-ended questions. It also sought to assess participants' perception of COVID-19 risk, their level of trust in their martial arts club during the pandemic, and their perception of the club's innovativeness. A Likert-type scale with five points was utilised to measure the dependent, independent, and mediator variables. The scale ranged from 1, indicating "strongly disagree," to 5, indicating "strongly agree." In some items, the scale ranged from 1, representing "very low," to 5, representing "very high." The scales used in this study were translated from English to Turkish and backtranslated to ensure language equivalence. The participants' perceived risk level of COVID-19 was assessed using the scale developed by Dryhurst et al. (2022). The scale consists of six items (e.g. *My level of concern about COVID-19*). The perceived trust level of participants was measured by using Boo and Gu (2010) scale. The scale consists of 4 items (e.g. *I trust the staff of this club*). Sports club innovativeness was measured by adapting Lin (2019) firm innovation scale. The scale consists of 3 items (e.g. *In generally, this club provides innovative services*).

Results

Preliminary Analysis

Preliminary analysis was conducted on the data before the

main analyses. The data did not contain any missing values. Additionally, all skewness and kurtosis values were less than 3.29 in absolute terms (Tabachnick & Fidell, 1996), suggesting that the data followed a normal distribution. Regarding the CFA analysis, several statistical measures were obtained: $\chi^2 = 235.050$, $df = .62$, $p < .001$, $\chi^2/df = 3,791$, SRMR = .06, GFI = .87, TLI = .89, NFI = .89, CFI = .91, and RMSEA = .10. In the analysis, one item from the "COVID-19 risks scale" was excluded due to its low factor loading of .041. Additionally, we dropped one item from the "trust scale" due to its strong correlation ($r = .64.32$) with firm innovativeness. The revised three-factor measurement model exhibited a satisfactory fit to the data ($\chi^2 = 114.205$, $df = .41$; $p < .001$; $\chi^2/df = 2.785$; SRMR = .04; GFI = .92, TLI = .94, NFI = .93, and CFI = .95; RMSEA = .08). All item loadings for the scales were statistically significant ($p < .001$) and exceeded .50 (Hair Jr et al., 2017). Additionally, all items demonstrated acceptable internal consistency with Cronbach's alpha values above .70 (Nunnally, 1978), as presented in Table 1. The constructs demonstrated convergent validity as evidenced by the average variance extracted (AVE) and composite reliability (CR) being above .50 and .70, respectively (Fornell & Larcker, 1981; Nunnally, 1978). The study provided evidence for discriminant validity, as the squared correlations between constructs were found to be lower than the average variance extracted (AVE) of the factors (Fornell et al., 1981). Table 2 presents the means, standard deviations, correlations between the factors, and the AVE and CR scores.

Hypotheses Testing

The mediation test results were presented in Table 2 and Figure 1. The results in Table 3 indicate that the independent variable, sports club innovativeness in "Model 3", had a significant and positive impact on the dependent variable, trust level ($b = .52$, $t = 10.79$, $p < .001$) (total effect-Path c). The study found that in "Model 1", firm innovativeness had a significant and negative direct effect on COVID-19 risk ($b = -.12$, $t = -1.87$, $p < .10$) (Path a), which serves as the mediator variable. The study evaluated the impact of sports club innovativeness and COVID-19 risk on trust in "Model 2". The impact of COVID-19 risk on trust was found to be significant and negative ($b = -0.08$, $t = -1.67$, $p < 0.10$) (Path b), whereas the influence of firm innovativeness on trust was significant and positive ($b = 0.51$, $t = 10.56$, $p > 0.001$) (Path c'). The study examined the confidence intervals (CIs) obtained through the bootstrap technique to determine if COVID-19 risk could act as a mediator variable in the relationship between sports club innovativeness and trust level. The "Bootstrapping results for the indirect effect" section in Table 3 indicates that the indirect effect is statistically significant, as the confidence intervals (CIs) for the lower and upper bounds do not

include zero. The obtained result provides support for hypothesis H1.

Table 1

Factor Analysis Results, Reliability, Convergent and Discriminant Validity, Ccorrelations

Factors/Items	$\alpha \geq .70$	M/SD	Correlations	1	2	AVE $\geq .50$	CR $\geq .70$	ML $\beta \geq .50$	Z
<i>Covid-19 risks</i>								.683**	9,180
Covid-19 risk 1								.624**	12,196
Covid-19 risk 2	.90	4.21/1.00	1.0	-		.65	.90	.852**	12,763
Covid-19 risk 3								.899**	12,922
Covid-19 risk 4								.915**	
Covid-19 risk 5								.704**	
Covid-19 risk 6								.938**	13,276
<i>Sports Club innovativeness</i>								.878**	12,965
Innovativeness 1	.87	3.90/1.05	-.09 (.008)	1.0		.72	.88	.803**	14,794
Innovativeness 2								.863**	14,892
Innovativeness 3								.869**	
<i>Trust</i>									
Trust 1	.88	4.20/.92	-.16* (.026)	.62** (.38)		.72	.89		
Trust 2									
Trust 3									
Trust 4									

^aFactor loadings were fixed to the value of 1,0; α = Cronbach’s alpha; M/SD= mean/standard deviation; AVE= average variance extracted; CR= composite reliability; ML β = Maximum likelihood estimation, standardized regression weights; * = $P < .05$; ** = $P < .001$. The values in parentheses are squared correlations; italic items were dropped in factor analysis.

Table 2

Results of Mediation Analysis

	Bootstrapped CI 90%					
	B	SE	T	LL	UL	R ²
<i>Model 1</i>						
Sports club innovativeness	-.12*	.063	-1.87	-.22	-.014	.014*
<i>Model 2</i>						
Sports club innovativeness	.51***	.048	10.56	.43	.59	.33***
Covid-19 risk perception	-.08*	.049	-1.67	-.16	-.0008	.60
<i>Model 3</i>						
Sports club innovativeness (total effect)	.52***	.048	10,79	-.16	.44	.60
<i>Bootstrapping results for the indirect effect</i>	.0010	.007		.0002	.0245	

B = Unstandardized regression coefficients; CI = Confidence interval; LL = Lower level; UL = Upper level; Bootstrap sample size = 5,000. *** = $p < .001$; * = $p < .10$

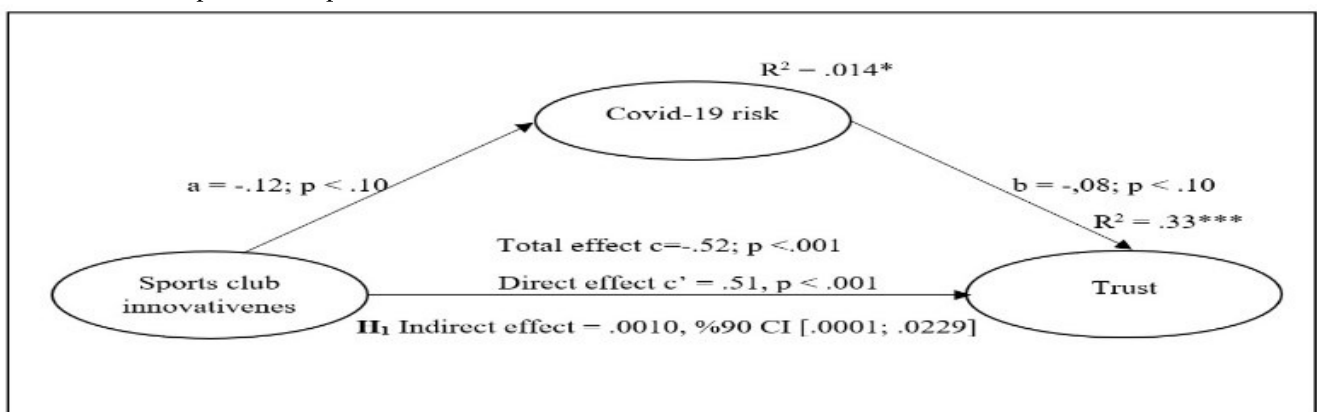


Figure 1: Hypothesized Model and Results of Mediation Analysis.

Discussion of Findings

In this paper, we discussed the potential impact of heightened fear and anxiety caused by the COVID-19 pandemic on individuals' trust and belief in martial arts clubs. We proposed

that implementing innovative strategies could help mitigate the negative effects of members' risk perception on their trust levels within the club. The results confirmed our hypothesis that the perception of COVID-19 risk plays a role in the connection between a company's innovativeness and trust.

The ingenuity of the martial arts clubs helps alleviate the adverse effects of members' concerns about COVID-19 risk, thus fostering greater confidence in the clubs. It was discovered that as the sports club becomes more innovative, the perception of COVID-19 risk decreases, leading to an improvement in trust towards martial arts clubs. On the other hand, if the level of innovation in sports club's decreases, it can lead to an increase in the perception of COVID-19 risk among members of martial art clubs. This, in turn, may result in a decrease in trust. Furthermore, it is proposed that the perception of sports club innovativeness, influenced by the signalling theory (Spence, 1974), can have a significant impact on consumer decision-making. This perception can help reduce risk and foster trust between martial arts clubs and their customers, ultimately outweighing any potential risks involved. It appears that the lack of innovation within firms and the heightened concern over COVID-19 among members of martial arts clubs pose significant risks to the erosion of trust.

In line with the findings of Lee et al. (2006) research, which suggests that innovators are more adept at handling risk and uncertainty, our study discovered that the innovativeness of sports clubs reduces the perception of Covid-19 risk among members of martial arts clubs. This finding aligns with previous research conducted by Geng et al. (2022); Kunz et al. (2011), and O'Cass et al. (2012), which all concluded that trust was enhanced by innovativeness. In addition, our research aligns with the study conducted by Pavlou (2003), which discovered a negative correlation between consumer trust in e-commerce and their perception of risk.

Conclusion

This study aimed to explore the relationship between COVID-19 risk, trust, and the innovativeness of martial art clubs. The findings revealed that when martial art clubs demonstrated high levels of innovativeness, the negative impact of COVID-19 risk on trust was mitigated. This suggests that developing innovativeness in sports clubs is crucial for maintaining trust among club members, especially during the COVID-19 pandemic. The study's findings indicate that during times of potential crises, such as the COVID-19 pandemic, prioritising firm innovativeness becomes a crucial strategy for sports club managers to build trust among sports consumers. This study has important implications for both theory and practice, as well as some limitations and suggestions for future research.

Theoretical Contributions

This study, which highlights the role of COVID-19 risk perception in shaping consumer trust in the sports

industry, addresses a significant gap in the existing sports literature. By focussing on this niche market and employment area, it contributes to a better understanding of the dynamics at play in the sports sector. This research not only offered valuable insights into the positive impact of sports club innovation on the long-term viability of martial arts clubs during the COVID-19 pandemic, but also made significant contributions to the field of sports marketing by enhancing our understanding of and ability to manage shifts in sports consumer behaviour during similar crises that may arise in the future.

Practical Implications

The results of the study also have significant implications for managers. The effectiveness of sports club innovativeness in mitigating the negative impact of COVID-19 risk perception on trust perception during the pandemic highlights the significance of prioritising sports club innovativeness as a strategy to shape the perceptions and attitudes of martial arts consumers towards sports clubs. Creativity is crucial for martial arts clubs to keep their members engaged and prevent them from ending their membership. This is especially important now due to the ongoing COVID-19 risk, which has posed challenges for all sports clubs. Hence, it is crucial for managers of martial arts clubs to devise creative approaches that ensure the attraction of new customers and the loyalty of existing ones, even in the midst of a crisis like the COVID-19 pandemic. This is essential to prevent any erosion of consumer confidence, which could lead to a decline in consumer dedication and jeopardise the club's competitive edge and financial stability.

So, what are some ways that martial arts clubs can be seen as innovative by their current and potential customers? Considering the importance of resources, time, and capacity constraints in fostering innovation (Ratten & Ferreira, 2017), it is worth noting that the practices aimed at making martial arts clubs appear innovative can vary in terms of their facilities or potential. The method or choice of innovation for club managers can be quite diverse. Introducing new ideas and solutions can bring fresh perspectives to the club or market. This can involve making improvements to the club's structure, equipment, products, and services, as well as implementing new processes and policies to address challenges. For instance, in the realm of martial arts clubs, there is room for innovation in the way products, services, and equipment are delivered. This can involve focussing more on less technical or individual forms like Kata, Poomsae, footwork exercises, and training equipment such as punch bags, rather than practices that heavily rely on partner sparring or group workouts. Alternatively, one could explore reducing the duration and frequency of training sessions, as well as limiting the number

of participants in group workouts. Additionally, incorporating alternative exercises like weightlifting and bodyweight routines may be worth considering. Regarding technological innovations, the strategies for digitising martial arts education and training practices can be seen as a significant development. This is particularly relevant in light of potential future restrictions or bans, similar to those imposed during COVID-19. Many fitness clubs and related platforms have already embraced this innovation in their applications. Utilising YouTube tutorials or other online teaching methods, martial arts clubs can offer live group workouts or individual coaching. They can also regularly post tips and workout videos on their social media pages and club blogs to help members stay active. These technological innovations can be highly effective for academic clubs. When it comes to managerial innovations, there are numerous examples of practices that managers of martial arts clubs can choose from. These practices encompass processes and general business policies that can be implemented to enhance the club's operations. To enhance the safety of the facility for members in light of the current situation, it is important to prioritise thorough disinfection of equipment and areas. Additionally, providing members with easy access to disinfectant wipes can further promote cleanliness and hygiene. Signage outlining the recommended steps for preventing infection, as advised by WHO, can be placed throughout the club for the convenience of our members. Members can have the option to freeze their membership during closing periods, ensuring convenience and flexibility. Staff can follow social distancing practices in line with WHO guidelines, prioritising the safety of everyone. Additionally, employees can regularly switch their protective gear, including gloves and masks, while on duty to maintain a high level of safety. It is evident that

certain hygienic measures and technological advancements brought about by COVID-19 will become the standard for sports clubs and martial arts clubs and will remain in place permanently. Thus, this study presents significant examples of managerial innovation for martial arts club managers to utilise both now and in the future.

Limitations and directions for future research

There are a few limitations in the current research that should be considered in future research endeavours. Due to the COVID-19 pandemic environment, the convenience sampling method was utilised for this study. However, it is important to note that the results may be limited in their applicability due to the specific focus on Taekwondo, Karate, and Kickbox practitioners among various other martial arts sports. However, it is worth noting that no academic studies have been conducted on these variables during the COVID-19 pandemic. The focus of this paper is limited to a specific group of martial arts sports consumers in Turkey. In future studies, the proposed model can be tested in various countries and other martial arts sports such as Aikido, Judo, and Mixed Martial Arts. The study suggests that further investigation into the impact of different dimensions of innovativeness, such as product, market, process, behavioural, and strategic innovativeness, on consumer trust, firm value, and re-membership behaviour intention in the sports context would provide a more comprehensive understanding of the role of innovativeness. Future studies should consider examining these dimensions individually to gain more detailed insights. (Wang & Ahmed, 2004) Future studies can explore variables such as involvement and motives (e.g., hedonic, utilitarian) to gain a deeper understanding of the subject across various consumer demographics.

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