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Examination and Prioritization of Wrestling Problems in Mazandaran Province from the Perspective of Coaches and Sports Managers and the Factors Influencing Them

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ABSTRACT

Wrestling, as one of Iran's authentic and prestigious sports disciplines—especially in Mazandaran Province—faces numerous challenges that have constrained its development. This study was conducted with the aim of identifying and prioritizing the problems of wrestling in Mazandaran Province from the perspective of coaches and sports managers, to contribute to improving the status of this sport. The research employed a descriptive–survey design and was carried out in 2014. The statistical population included all wrestling coaches and managers in Mazandaran (estimated at 155 individuals), from which 120 participants were selected through multistage cluster sampling. Data collection was conducted using a researcher-made questionnaire with a 5-point Likert scale. The content validity of the instrument was confirmed, and its reliability was verified through Cronbach's alpha coefficient (0.72). Data were analyzed using descriptive statistics and a one-sample t-test in SPSS version 20. The findings revealed that all 12 hypotheses were confirmed. The most significant problems included the lack of long-term planning (mean = 4.45), budget shortages (mean = 4.32), lack of well-equipped halls (mean = 4.33), and lack of job security for wrestlers (mean = 4.38). Economic factors such as the financial poverty of wrestlers (mean = 4.00) and insufficient income for coaches (mean = 3.75) were also identified as key challenges. Managerial and economic problems were determined to be the main barriers to the development of wrestling in Mazandaran. Increasing budget allocation, implementing comprehensive planning, and improving infrastructure could help address these challenges. The findings have practical implications for the Wrestling Federation and provincial sports boards.

Keywords: Wrestling, Mazandaran, Managerial Problems, Budget Shortage, Sports Infrastructure, Strategic Planning

Introduction

Wrestling is one of the oldest and most prestigious sports in the world and holds a special cultural and historical significance in Iran. As a sport rooted deeply in the nation's identity, wrestling symbolizes strength, honor, and discipline. Throughout history, Iranian wrestlers have achieved remarkable success in both regional and international arenas, yet the sport faces multiple challenges related to management, infrastructure, training systems, and athlete

welfare (Goodarzi & Henari, 2007; Tunnemann, 2002). Despite its cultural prominence, the sustainability and modernization of wrestling depend heavily on scientific management, strategic planning, and the integration of new training methodologies (Rok et al., 2021; Tojari et al., 2021).

In recent decades, the development of wrestling has been examined from physiological, psychological, managerial, and technical perspectives. Classical studies emphasized physical conditioning and injury prevention as critical to the sport's advancement (Akbarnejad, 2000; Amirian et al., 2012). Modern investigations have further expanded this view, incorporating social, economic, and psychological dimensions. Scholars highlight that success in wrestling requires not only technical proficiency but also ethical behavior, mental resilience, and institutional support (Afroozeh, 2020; Molanorouzi, 2021; Ranjbar et al., 2023). The integration of these components into training and management frameworks ensures both athlete development and long-term performance sustainability.

The physiological and biomechanical demands of wrestling are among the most intense of all sports. Early research identified high rates of musculoskeletal and spinal injuries due to repetitive strain and improper training methods (Amirian et al., 2012; Yard & Comstock, 2008). The limited availability of modern equipment and medical support further exacerbates these issues (Akhlaghi, 2011; Heidarzadeh, 2012). This highlights the importance of preventive conditioning programs and scientific training monitoring systems (Klinzing & Karpowicz, 1983; Schultz, 1992). Furthermore, inadequate infrastructure, outdated facilities, and insufficient financial resources have been identified as key barriers to progress in several Iranian provinces (Akbarnejad, 2000; Heidarzadeh, 2012).

The role of management and leadership in wrestling development has been the subject of increasing attention. Studies indicate that weak organizational structures, short-term policies, and poor coordination among stakeholders hinder progress (Fahim Doin et al., 2010; Rastami et al., 2013). Moreover, a lack of strategic vision in provincial and national federations prevents the systematic identification and nurturing of athletic talent (Rok et al., 2021; Tojari et al., 2021). In contrast, effective governance models that promote data-driven decision-making, transparent budgeting, and continuous monitoring have been shown to enhance athlete satisfaction and performance outcomes (Ponomarov et al., 2024).

Recent research underscores the increasing need to combine traditional wrestling culture with modern sport science approaches. While historical frameworks focused on technical mastery and physical dominance (Stanov & Kostov, 1986; Starov et al., 1986), contemporary approaches integrate psychology, nutrition, and biomechanics to improve athletes' resilience and adaptability (Nagovitsyn, 2023; Şahin & Uzun, 2023). The adoption of technology in training—such as artificial intelligence systems for performance prediction—has further transformed coaching strategies and competition analysis (Nagovitsyn, 2023; Petrov et al., 1986). These innovations enable precise assessment of athletes' readiness, reduce injury risks, and enhance tactical planning.

At the same time, psychological and ethical factors are recognized as essential in shaping athletes' long-term motivation and moral conduct. Research on mental toughness and ethical components among wrestlers reveals that character development, self-control, and respect for opponents are equally vital to success as physical performance (Afroozeh, 2020; Molanorouzi, 2021; Ranjbar et al., 2023). Ethical principles also play an important role in reducing aggressive behaviors and fostering team cohesion, especially among younger wrestlers (Sudha & Sharma, 2024). The integration of moral training into athlete development programs promotes both competitive excellence and cultural continuity within the sport.

In addition to ethical and psychological factors, physiological adaptation and injury management remain critical research areas. Studies conducted in both Iran and abroad have shown that rapid weight loss practices—common among wrestlers—can cause muscle damage, oxidative stress, and metabolic imbalance (Bade et al., 2024; Kheirandish et al., 2024; Lukic-Sarkanovic et al., 2024). Such unhealthy practices, driven by competitive pressures and poor nutritional guidance, often result in diminished long-term health and reduced athletic potential. International standards increasingly recommend gradual conditioning and medical supervision to ensure both performance optimization and athlete well-being (Schultz, 1992; Yard & Comstock, 2008).

In the Iranian context, socio-economic barriers compound these physiological and managerial issues. Many wrestlers and coaches face limited financial stability, job insecurity, and insufficient institutional support (Akhlaghi, 2011;

Heidarzadeh, 2012). The lack of consistent funding and infrastructure in provincial wrestling organizations restricts access to modern facilities, scientific coaching, and talent identification programs (Goodarzi & Henari, 2007; Tunnemann, 2002). As a result, the long-term sustainability of wrestling as a professional career remains uncertain, pushing many skilled athletes toward early retirement or alternative occupations. Addressing these challenges requires comprehensive planning, cross-sector collaboration, and investment in human capital development (Ponomarov et al., 2024).

Furthermore, comparative analyses between Iranian and international wrestling systems reveal a gap in the integration of scientific research into practical coaching applications. While countries such as Russia, Bulgaria, and Japan have long incorporated computerized performance monitoring systems (Petrov et al., 1986; Skopintseva, 1982), similar infrastructures remain limited in Iranian wrestling. The absence of continuous research–practice feedback loops limits data-driven innovation in training and strategy. Conversely, studies on elite wrestlers worldwide demonstrate that dynamic monitoring of physical and psychological variables enhances adaptability and resilience during competition (Klinzing & Karpowicz, 1983; Starov et al., 1986).

Another significant dimension concerns gender, inclusivity, and the evolving social role of wrestling. Recent findings indicate increasing female participation in the sport, accompanied by unique psychological and physiological considerations. Comparative analyses on anxiety and stress responses between male and female wrestlers emphasize the necessity for gender-specific training and support programs (Sudha & Sharma, 2024). Such initiatives align with global efforts to promote equality and broaden the demographic base of wrestling as a sport accessible to all.

The modernization of wrestling also depends on enhancing educational opportunities for coaches and managers. Professional development and continuous education in sport management, biomechanics, and psychology are indispensable for fostering a new generation of scientifically oriented coaches (Fahim Doin et al., 2010; Rastami et al., 2013). Empirical research indicates that communication competence and conflict management skills among coaches directly influence athletes' motivation, satisfaction, and performance (Fahim Doin et al., 2010). Establishing structured certification programs and research–education linkages can substantially strengthen managerial and coaching effectiveness across provincial and national levels.

In this context, the present study aims to analyze and prioritize the key problems facing wrestling in Mazandaran Province—a region historically regarded as the heartland of Iranian wrestling. The province has produced numerous national and international champions, yet it continues to experience managerial and infrastructural deficiencies. Prior studies in other Iranian provinces have documented similar challenges, including lack of long-term planning, insufficient financial resources, outdated facilities, and inadequate job security for athletes (Akhlaghi, 2011; Heidarzadeh, 2012). Addressing these issues through systematic identification and prioritization provides a foundation for policy formulation and targeted interventions.

The findings of this study can contribute to developing evidence-based strategies for wrestling governance. By integrating international best practices and local contextual understanding, policymakers can formulate a coherent framework to strengthen infrastructure, enhance managerial capacity, and ensure the welfare of athletes and coaches (Goodarzi & Henari, 2007; Ponomarov et al., 2024). The incorporation of technology, ethics, and scientific research into wrestling management will not only elevate the sport's competitive standards but also safeguard its cultural and social significance in Iran's athletic landscape (Molanorouzi, 2021; Nagovitsyn, 2023; Tunnemann, 2002).

Ultimately, wrestling's future in Iran depends on aligning traditional values with modern managerial and scientific frameworks. By adopting a holistic approach—encompassing physical preparation, psychological resilience, ethical integrity, and sustainable governance—the sport can continue to thrive domestically and internationally. This study, therefore, seeks to identify and prioritize the major obstacles impeding the growth of wrestling in Mazandaran Province, offering a foundation for strategic reform and the revitalization of Iran's most historically cherished sport.

Methods and Materials

This study is descriptive-survey in nature, applied in purpose, and cross-sectional in design. The statistical population consisted of all wrestling coaches (with at least a level 2 coaching certificate) and heads of wrestling boards in Mazandaran Province, totaling 155 individuals (135 coaches and 20 board heads). The sample size was determined to be 113 based on the Morgan table; however, it was increased to 120 to ensure uniform distribution across the three regions (central, eastern, and western). Sampling was conducted using a multistage cluster method: first, the province was divided into three regions; then, four cities from each region were randomly selected, and from each city, two freestyle and Greco-Roman wrestling clubs were randomly chosen. Questionnaires were distributed among coaches across different shifts and among the heads of the boards.

The data collection instrument was a researcher-made questionnaire consisting of closed-ended questions designed according to the research hypotheses and conceptual model. Responses were scored using a five-point Likert scale (5 = very high, 4 = high, 3 = moderate, 2 = low, 1 = very low). The content validity of the questionnaire was confirmed by the supervisor and consulting experts. Reliability was evaluated through a pilot test on 30 participants, followed by the calculation of Cronbach's alpha coefficient (Table 1). The overall reliability coefficient was 0.72, indicating acceptable reliability.

Table 1. Reliability Coefficients of the Questionnaire and Subscales

Variable	Number of Items	Cronbach's Alpha
Insufficient income	2	0.67
Lack of scientific coaches	2	0.63
Lack of job stability	2	0.65
Frequent changes	1	–
Budget shortage	1	–
Lack of long-term, medium-term, and short-term planning	1	–
Lack of accurate monitoring and control	1	–
Lack of well-equipped halls	2	0.67
Social status of families	1	–
Financial poverty of wrestlers	2	0.71
Education level of wrestlers	3	0.62
Lack of job security for wrestlers	2	0.63
Total	20	0.72

This research was conducted in Mazandaran Province in 2014. Initially, the statistical population was identified through the provincial Department of Physical Education. Subsequently, cluster sampling was performed: the province was divided into three regions, and the cities and clubs were selected. Questionnaires were distributed and collected across various work shifts. The limitations included lack of precise population data, respondents' cautiousness in answering, and the geographical restriction to Mazandaran Province.

Data were analyzed using descriptive statistics (frequency distribution tables, percentages, means, and standard deviations) and inferential statistics (one-sample *t*-test to confirm or reject the hypotheses). All calculations were performed using SPSS software version 20.

Findings and Results

Table 2 shows that the mean age of the respondents was 33.46 years, with a standard deviation of 6.11. The respondents' educational levels were diverse, with the highest frequency belonging to those with a bachelor's degree (27.5%) and those with a master's degree or higher (25%). In terms of income distribution, 52.5% of the respondents had an income between 500,000 and 1,000,000 tomans. Regarding employment status, 51.7% of the respondents did

not have a permanent job, indicating an almost equal distribution between those with and without stable employment. These data demonstrate the demographic diversity of the sample.

Table 2. Summary of Mean and Distribution of Demographic Variables

Variable	Mean	Standard Deviation	Distribution (Frequency/Percentage)
Age	33.46	6.11	–
Education	–	–	Below diploma: 15 (12.5%); Diploma: 14 (11.7%); Associate: 26 (21.7%); Bachelor's: 33 (27.5%); Master's and above: 30 (25%); No response: 2 (1.7%)
Income (tomans)	–	–	Below 500,000: 8 (6.7%); 500,000–1,000,000: 63 (52.5%); 1,000,000–1,500,000: 27 (22.5%); 1,500,000–2,000,000: 20 (16.7%); Above 2,000,000: 2 (1.7%)
Permanent job	–	–	Having a stable job: 58 (48.3%); Not having: 62 (51.7%)

Table 3 shows that respondents mostly rated facilities, gyms, budgets, planning, and supervision within the “very low” to “moderate” categories. The lowest ratings were observed for budget (47.5% very low) and supervision (41.7% very low and low). The variable “frequent managerial changes” was the only one that received high (17.5%) and very high (20%) responses. This distribution reflects an overall dissatisfaction with infrastructure and management conditions.

Table 3. Frequency and Percentage Distribution of Key Variables

Variable	Very Low (%)	Low (%)	Moderate (%)	High (%)	Very High (%)
Adequacy of equipment and facilities	37.5	34.2	28.3	0	0
Gym equipment level	36.7	32.5	30.8	0	0
Adequacy of budget	47.5	45.0	7.5	0	0
Appropriateness of officials' planning	37.5	36.7	25.8	0	0
Frequent managerial changes	24.2	25.8	12.5	17.5	20.0
Supervision in program implementation	41.7	41.7	16.7	0	0

The one-sample *t*-test showed that the mean of all hypotheses was above the scale midpoint of 3 (ranging from 3.38 to 4.45), and with a significance level of 0.001, all hypotheses were confirmed. The highest means were related to lack of planning (4.45) and lack of job security (4.38). The lowest mean (3.38) belonged to wrestlers' education. The *t*-values (ranging from 5.789 to 38.07) indicated significant differences from the scale mean, confirming the influence of all examined factors on wrestling-related problems.

Table 4. Summary of One-Sample *t*-Test Results for Hypotheses

Hypothesis	Mean	Standard Deviation	<i>t</i>	df	Significance Level (<i>p</i>)
Insufficient income of coaches	3.75	0.65	12.280	114	0.001
Lack of scientific coaches	4.33	0.38	36.304	110	0.001
Lack of job stability among coaches	4.12	0.62	19.42	116	0.001
Frequent managerial changes	3.91	1.02	9.680	116	0.001
Budget shortage	4.32	0.82	17.292	116	0.001
Lack of long-term, medium-term, and short-term programs	4.45	0.57	27.108	116	0.001
Lack of accurate monitoring and control	4.21	0.89	14.466	113	0.001
Lack of well-equipped gyms	4.33	0.42	33.66	112	0.001
Social status of families	3.61	1.00	6.608	116	0.001
Financial poverty of wrestlers	4.00	0.66	16.268	116	0.001
Education level of wrestlers	3.38	0.71	5.789	116	0.001
Lack of job security for wrestlers	4.38	0.39	38.07	116	0.001

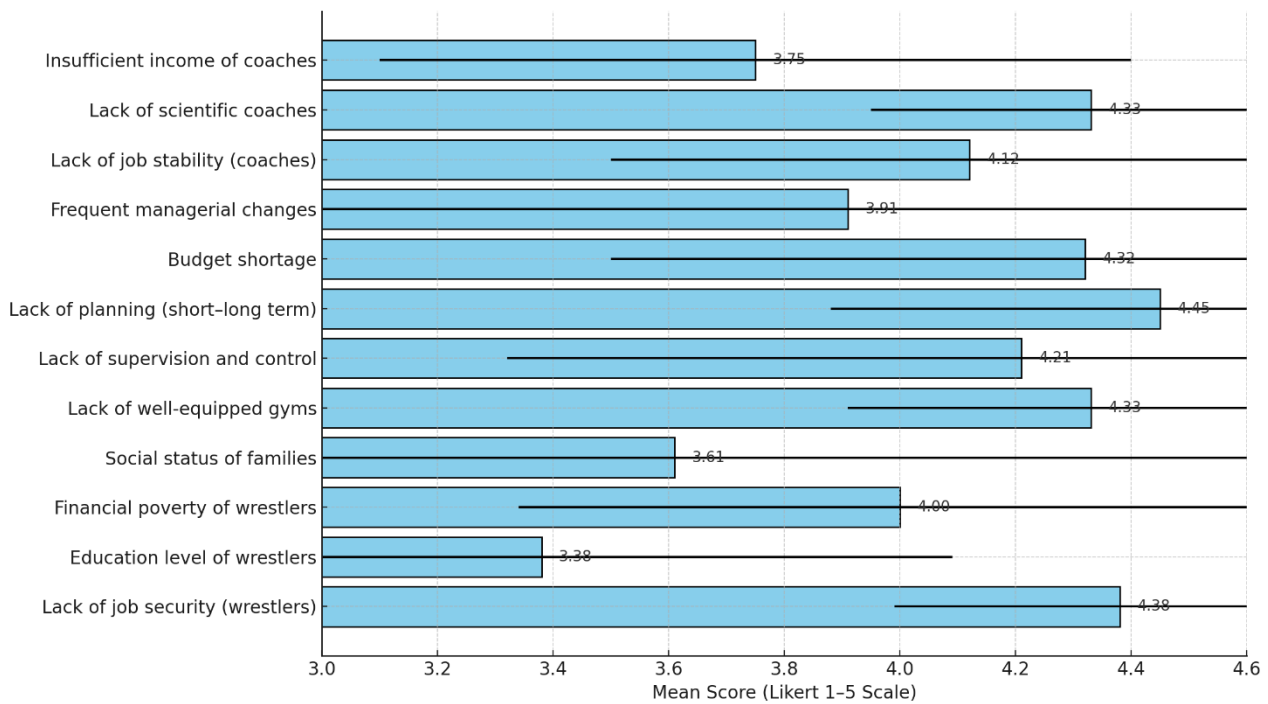


Figure 1. Results Of One-Sample T-Test On Wrestling Development Challenges In Mazandaran Province

Discussion and Conclusion

The findings of the present study revealed that the most critical challenges facing wrestling in Mazandaran Province include the absence of long-term and systematic planning, insufficient financial resources, lack of well-equipped training facilities, and job insecurity among wrestlers and coaches. These findings demonstrate that the sport, despite its cultural and historical significance in the province, suffers from structural, managerial, and economic deficiencies that directly hinder its development and sustainability. The confirmation of all research hypotheses indicates that the identified problems are not isolated phenomena but rather interconnected issues rooted in the administrative, infrastructural, and social frameworks of the wrestling system.

The lack of comprehensive and long-term planning (mean 4.45) emerged as the highest-ranked problem in this study, aligning with the conclusions of earlier works emphasizing that the absence of strategic direction and consistent policymaking has weakened wrestling's organizational coherence (Goodarzi & Henari, 2007; Heidarzadeh, 2012). In many provinces, decision-making processes are reactive rather than proactive, often dependent on short-term political or managerial cycles rather than evidence-based strategies. According to (Tunnemann, 2002), countries that have achieved stable success in wrestling—such as Russia, Bulgaria, and the United States—invest heavily in multi-year athlete development programs, integrating scientific research, performance analysis, and educational components. The Iranian context, as this study suggests, still lacks such institutionalized structures, which limits talent identification and athlete retention.

Another critical issue highlighted in this research concerns financial shortages and the lack of sufficient budget allocation for wrestling programs. The respondents identified inadequate funding (mean 4.32) as a key barrier, consistent with prior studies emphasizing that sustainable development in sports depends on stable financial investment (Akhlaghi, 2011; Heidarzadeh, 2012). The scarcity of resources impacts nearly every dimension of the sport—from facility maintenance and equipment purchase to athlete compensation and participation in international tournaments. Research by (Goodarzi & Henari, 2007) noted that Iran's wrestling infrastructure is highly dependent on sporadic governmental funding, often lacking private sector engagement or sponsorship initiatives. This aligns with global findings that successful wrestling federations integrate corporate sponsorships, grassroots fundraising, and community-based partnerships to ensure economic resilience (Ponomarov et al., 2024).

The shortage of modern and well-equipped facilities, as confirmed by the participants (mean 4.33), mirrors a long-standing infrastructural deficit in Iranian wrestling. (Akbarnejad, 2000) reported that inadequate facilities not only increase the risk of physical injuries but also decrease training efficiency and athlete motivation. This finding is also supported by (Amirian et al., 2012), who observed that outdated training environments exacerbate musculoskeletal and spinal injuries among professional wrestlers. Furthermore, (Yard & Comstock, 2008) found similar trends in international contexts, noting that injury prevalence correlates strongly with insufficient safety standards and poor equipment quality. The combination of limited physical resources and the lack of medical and biomechanical support contributes to a cycle of diminished performance, low morale, and premature career termination.

The absence of job security for wrestlers and coaches (mean 4.38) was another major concern. The study results indicate that instability in employment and income negatively affects professional commitment and mental health. According to (Akhlaghi, 2011), job insecurity reduces motivation and undermines the long-term engagement of athletes with their federations. Moreover, research on mental toughness and ethical components in wrestling underscores that psychological safety and stable livelihoods are essential to maintaining discipline and competitive focus (Afroozeh, 2020; Molanorouzi, 2021; Ranjbar et al., 2023). This aligns with the findings of (Sudha & Sharma, 2024), who emphasized that occupational instability and financial stress increase anxiety levels, particularly among younger wrestlers transitioning to higher competition levels. Therefore, policies ensuring contractual continuity, health insurance, and retirement benefits for athletes and coaches are necessary for the sport's institutional maturity.

Another noteworthy finding is the lack of scientific and qualified coaches, which the respondents rated as a major barrier (mean 4.33). This finding confirms the arguments of (Fahim Doin et al., 2010) and (Rastami et al., 2013), who asserted that the quality of coaching and communication skills among sports managers are crucial predictors of athlete performance and satisfaction. Studies also demonstrate that coaches trained in biomechanics, sports psychology, and data analysis can significantly enhance athlete readiness and reduce injury risk (Klinzing & Karpowicz, 1983; Schultz, 1992). The present results suggest that many coaches in Mazandaran rely on traditional, experience-based methods rather than scientific models of performance management, which limits innovation in training practices. This discrepancy between empirical knowledge and applied science hinders athlete progression to elite levels.

The study also identified frequent managerial changes as a destabilizing factor in wrestling organizations. This finding, with a mean of 3.91, indicates that unstable leadership cycles disrupt consistency in decision-making and strategic execution. Research by (Tojari et al., 2021) on ambush marketing and governance issues in Iranian sports supports this observation, showing that inconsistent management weakens policy implementation and resource allocation. Similarly, (Ponomarov et al., 2024) argued that in high-performing wrestling systems, leadership continuity and evidence-based monitoring are key components of organizational success. The constant replacement of managers not only interrupts long-term projects but also erodes trust among coaches, athletes, and stakeholders.

In terms of social and educational dimensions, this study found relatively lower but still significant effects for the educational level of wrestlers (mean 3.38) and family social status (mean 3.61). These results are consistent with prior findings indicating that socio-economic background influences access to training resources and career opportunities (Akhlaghi, 2011; Heidarzadeh, 2012). According to (Rok et al., 2021), systematic talent identification programs must integrate educational and psychological assessments to ensure balanced athlete development. Moreover, (Ponomarov et al., 2024) emphasized that fostering a "winner's mindset" in wrestling requires both educational reinforcement and family engagement in the athlete's developmental process. Thus, education-oriented initiatives, such as academic support for young athletes and awareness programs for parents, could serve as vital components of holistic talent development.

From an international perspective, the results correspond with trends observed in global wrestling literature. For instance, (Petrov et al., 1986) and (Skopintseva, 1982) emphasized the importance of technological and tactical analysis systems in optimizing performance. Similarly, (Nagovitsyn, 2023) demonstrated the efficiency of artificial intelligence programs in predicting athlete outcomes and preventing performance decline. The present study reinforces that Iranian wrestling must move toward integrating such advanced methodologies to remain competitive. However, this transition

requires managerial competence, financial investment, and inter-institutional cooperation—areas where the current study identifies significant gaps.

Another dimension of the findings relates to the ethical and cultural foundations of wrestling. The sport's moral philosophy—anchored in humility, respect, and perseverance—remains central to its cultural identity. Studies by (Afroozeh, 2020) and (Molanorouzi, 2021) have shown that integrating ethical training within wrestling programs enhances sportsmanship, reduces conflicts, and fosters greater athlete satisfaction. The participants' perception of inadequate oversight and control (mean 4.21) may thus reflect both managerial shortcomings and the need for cultural revitalization. The findings support (Goodarzi & Henari, 2007), who argued that wrestling in Iran must preserve its moral roots while simultaneously adapting to modern governance principles.

Physiological aspects also emerge as significant contextual factors. Several international studies confirm that rapid weight loss and overtraining contribute to fatigue, oxidative stress, and injury risk among wrestlers (Bade et al., 2024; Kheirandish et al., 2024; Lukic-Sarkanovic et al., 2024). Although not directly measured in this study, respondents' dissatisfaction with budget and facilities implies a lack of access to professional nutritionists and recovery programs. This observation aligns with (Şahin & Uzun, 2023), who found that structured preparatory training reduces physiological strain and optimizes metabolic balance. Thus, the current findings underscore the necessity of institutionalizing medical and nutritional supervision within provincial wrestling programs.

Overall, the results of this study converge with previous research showing that wrestling in Iran is constrained by intertwined structural, managerial, and socio-economic barriers (Akhlaghi, 2011; Heidarzadeh, 2012; Tojari et al., 2021). Addressing these issues requires a systemic approach that encompasses financial reform, human resource development, and scientific modernization. The high means and significant *t*-values across all hypotheses confirm the severity of these challenges, reinforcing the urgency for coordinated policy responses. In summary, the problems identified—ranging from inadequate infrastructure to unstable leadership—represent interconnected weaknesses that collectively limit the sport's potential in one of its most prominent provinces.

This research, while comprehensive in scope, is limited by its geographical and demographic constraints. The study was conducted exclusively in Mazandaran Province, which, although a major wrestling hub, may not fully represent the diversity of challenges across other regions in Iran. The data were gathered through self-report questionnaires, which are subject to respondent bias, social desirability effects, and limited depth of qualitative insight. Additionally, the cross-sectional design precludes causal inference, and the absence of longitudinal data restricts the ability to examine temporal dynamics or policy impacts. Furthermore, external factors such as political changes, economic fluctuations, and post-pandemic recovery conditions may have influenced the participants' responses.

Future studies should adopt mixed-methods approaches, integrating quantitative surveys with qualitative interviews and focus groups to capture a more nuanced understanding of managerial and socio-cultural factors. Longitudinal research could trace the effectiveness of specific interventions, such as infrastructure investments or training reforms, on athlete outcomes. Comparative analyses between different provinces, and between Iranian and international wrestling systems, would also offer valuable benchmarks for reform. Incorporating biomechanical, psychological, and economic modeling could help identify causal relationships between management quality and athlete performance. Furthermore, future research should explore the impact of technological adoption—such as AI-based analytics, digital monitoring, and e-learning platforms—on coaching efficiency and organizational decision-making.

Practically, wrestling federations and provincial authorities should prioritize strategic planning and long-term budgeting to ensure stability and sustainability. Establishing continuous education and certification programs for coaches, managers, and referees can bridge the gap between traditional practices and scientific methodologies. Investment in modern facilities, recovery centers, and medical supervision must be increased to promote athlete safety and performance longevity. Policy frameworks should incorporate welfare guarantees—such as job security, pensions, and insurance—for wrestlers and coaches. Finally, integrating ethical education and family participation into athlete development programs can strengthen the moral and social foundations of wrestling, ensuring that this national sport continues to thrive as both a cultural heritage and a professional discipline.

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Authors' Contributions

All authors equally contributed to this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants. Written consent was obtained from all participants in the study.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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References

- Afrozeh, M. S. A. D. (2020). Identifying the Ethical Components of Iranian Wrestlers. *Research in Educational Sports*, 8(19), 141-162.
- Akbarnejad, A. (2000). A Study of the Prevalence and Causes of Physical Injuries in National-Level Wrestlers. *Harekat*, 9, 121-135.
- Akhlaghi, H. (2011). *Identifying and Comparing the Satisfaction Levels of Freestyle and Greco-Roman Wrestlers with Clubs in Khuzestan Province by Providing Solutions to Improve the Current Situation* Shahid Chamran University of Ahvaz]. Ahvaz.
- Amirian, S., Mirzaei, B., & Hosseini, S. H. (2012). A Comparative Study of Spinal Alignment and Trunk Injuries in Freestyle and Greco-Roman Wrestlers. *Sports medicine*, 4(8), 35-47.
- Bade, S., Bade, S., Sharma, G., Bhurtel, N., Singh, Y., Paudel, S., Magar, F. P., & Chapagain, K. (2024). Transformative Weight Loss With Dulaglutide: A Case Report of Success in a Challenging Patient Profile of an Ex-sumo Wrestler. *Clinical Case Reports*, 12(9). <https://doi.org/10.1002/ccr3.9403>
- Fahim Doin, H., Peymanizad, H., Mohammadpour, J., & Joorabchi Bokharaei, S. (2010). The Relationship Between Communication Skills and Conflict Management Strategies, and a Comparison of These Variables Among Managers and Coaches in North Khorasan Wrestling. *Research in Sports Biosciences*, 1(1), 45-54.
- Goodarzi, M., & Henari, H. (2007). Designing and Formulating a Comprehensive Wrestling System for Iran. *Research in Sports Sciences*, 5(14), 33-54.
- Heidarzadeh, B. (2012). *Identifying and Prioritizing Obstacles to the Development of Freestyle and Greco-Roman Wrestling in Ilam Province* Razi University]. Ilam.
- Kheirandish, R., Rahmani, A., Gorzi, A., Ezdini, E. S., & Sadeghi, A. (2024). Effects of Additional Exercise Volume on Weight Loss, Oxidative Stress, and Inflammation in Young Wrestling Athletes. *International Journal of Sport Studies for Health*, 7(1), 65-73.
- Klinzing, J. E., & Karpowicz, W. (1983). A Test to Measure the Performance Capabilities of National Wrestlers. *Journal of Strength and Conditioning*, 5(4). [https://doi.org/10.1519/0744-0049\(1983\)005<0040:ATTMTP>2.3.CO;2](https://doi.org/10.1519/0744-0049(1983)005<0040:ATTMTP>2.3.CO;2)
- Lukic-Sarkanovic, M., Roklicer, R., Trivic, T., Manojlovic, M., Gilic, B., Milovancev, A., Rossi, C., Bianco, A., Carraro, A., & Cvjeticanin, M. (2024). Acute muscle damage as a metabolic response to rapid weight loss in wrestlers. *Biomedical Human Kinetics*, 16(1), 99-105.
- Molanorouzi, K. (2021). Identifying and prioritizing ethical criteria in professional wrestling. *Olympic Socio-Cultural Studies*, 2(6), 109-136. <https://www.sid.ir/fa/Journal/ViewPaper.aspx?ID=581515>
- Nagovitsyn, R. S. (2023). Artificial Intelligence Program for Predicting Wrestlers' Sports Performances. *Sports*, 11(10), 196. <https://doi.org/10.3390/sports11100196>
- Petrov, P., Todrou, K., & Hinkov, M. (1986). A Complex Computerized System for Studying the Technical and Tactical Components in Wrestling. *Vaprosi na Fiziceskata Kultura*(9).
- Ponomarov, V., Korchagin, M., & Kostenko, Y. (2024). Improvements in Training Settings and Recommendations for the Formation of a Winner's Mindset in the Training Process of Wrestlers. *Scientific Journal of National Pedagogical Dragomanov University Series 15*

- Scientific and Pedagogical Problems of Physical Culture (Physical Culture and Sports)*(7(180)), 137-142. [https://doi.org/10.31392/udu-nc.series15.2024.7\(180\).28](https://doi.org/10.31392/udu-nc.series15.2024.7(180).28)
- Ranjbar, S., Akbarnejad, A., Alizadeh, A., & Fadakar, A. (2023). Is Mental Toughness Related With Motor Learning in Wrestling? *International Journal of Sport Studies for Health*, 5(2). <https://doi.org/10.5812/intjssh-133845>
- Rastami, R., Nazemzadegan, G. H., & Jabari, S. (2013). The Effect of Motivational Music on the Recall of Motor Skill Sequences in Selected Wrestling Skills. *Journal of Motor and Sports Learning and Development*, 11, 77-93.
- Rok, M., Shah Mansouri, E., & Foroughi Pour, H. (2021). Designing a National Model for Sports Talent Identification with a Focus on Medal-Winning Disciplines (Case Study: Wrestling). *Sports Management Journal*, 13(3), 817-832. <https://www.sid.ir/fa/journal/ViewPaper.aspx?id=578755>
- Şahin, M., & Uzun, M. E. (2023). The effect of 8 weeks preparatory training program on body composition and blood parameters in elite wrestlers. *Journal of Education and Recreation Patterns*, 4(2), 641-652.
- Schultz, J. (1992). Pre-season and Post-season Testing, Are Your Wrestlers Improving? *Wrestling USA*, 27(7), 15.
- Skopintseva, I. N. (1982). One Method of Objective Evaluation of Wrestling Skill. *Fizika Kultura*, 36(2).
- Stanov, S., & Kostov, K. (1986). Rational Usage of Technique in Wrestling. *Treniorska Missal*.
- Starov, I., Histov, P., Berberov, N., & Todorov, K. (1986). Objectivities of Some Indexes for Evaluation of Sport Skill in Greco-Roman Wrestling. *Vaprosi na Fiziceskata Kultura*(7).
- Sudha, S., & Sharma, A. (2024). A comparative study of general anxiety disorder in male and female wrestlers. *International Journal of Physiology, Exercise and Physical Education*, 6(1), 18-21. <https://doi.org/10.33545/26647249.2024.v6.i1a.86>
- Tojari, F., Nikaeen, Z., Shirahmad, M., & Mirani, K. (2021). Investigating the State of Ambush Marketing in Football and Wrestling. *European Journal of Physical Education and Sport Science*, 6(11). <https://doi.org/10.46827/ejpe.v6i11.3690>
- Tunneemann, H. (2002). *Analysis of World and Olympic Wrestling Competitions*. Wrestling Institute of the Islamic Republic of Iran.
- Yard, E. E., & Comstock, R. D. (2008). A Comparison of Pediatric Freestyle and Greco-Roman Wrestling Injuries Sustained During a 2006 US National Tournament. *Scandinavian Journal of Medicine and Science in Sports*, 491-497. <https://doi.org/10.1111/j.1600-0838.2007.00716.x>