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REFORMING OMAN'S COACH EDUCATION SYSTEM THROUGH PUBLIC-PRIVATE PARTNERSHIPS

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ABSTRACT

The coach education system is critical to sports development because it produces experienced, knowledgeable coaches who increase athlete performance and safety. International frameworks such as the ISCE, which are used in Canada, Australia, and South Africa, highlight the value of structured coach programs. However, Oman's coach education system is disorganized, informal, and heavily reliant on public financing, rendering it unsustainable. This emphasizes the importance of conducting research on privatization choices. In this paper, we have examined the constraints and opportunities within the coach education system in Oman, exploring privatization as a viable option for its transformation. Based on an analysis of 129 valid responses, the findings indicate that the Public-Private Partnership (PPP) model offers a viable pathway for strengthening coach education. Accordingly, a hybrid strategy incorporating PPPs, sponsorships, and private training is recommended to support long-term growth and stability in Oman's sports sector.

KEYWORDS: Sports Policy; Educational Reform; Coach Education; Stakeholder Analysis; Sustainable Development.

1. INTRODUCTION

Sports helps in bringing communities together, improves public health, and promotes national identity. Sports have evolved as a powerful tool for economic growth worldwide, expanding their horizon far beyond the traditional roles of entertainment and recreation. It acts as a platform for youth engagement, promoting local talent and providing pathways for career opportunities, thereby supporting broader social and economic development goals. The sports industry is playing an important role in boosting the economies by creating jobs, attracting tourism, and driving investments in infrastructure (Wu, 2024; Orunbayev, 2023). An important component in the thriving sports sector is the role of skilled coaches and the system through which they are developed. Coaches play an important role in nurturing talent and developing professional athletes. They are not just the trainers, but mentors, motivators and leaders who guide athletes and help them achieve excellence both on and off the field (Castro-García, and Calderón, 2025; García-Cazorla et al., 2025; Jones et al., 2020).

Over the past few decades, interest in the field of sports coaching has grown significantly (Maddeh and Desbiens, 2025; Levy et al., 2009). Researchers in the sports coaching domain have highlighted the importance of coaches in raising the standards of coaching practice and athlete development (Holmes et al., 2025; Mees et al., 2025; Ramos et al., 2023). Ferner (2021) examined how coaches gain knowledge and experience, and how these help them in shaping their coaching philosophies. Moen et al. (2021) studied the effect of a one-year coach education program by analyzing the responses of the participants and comparing their pre and post-program skills. They found significant improvements in the coaching skills of the participants, post completion of the program. These studies highlight the fact that effective coach education and training programs are essential for enhancing the skills and knowledge of the coaches.

In recent years, privatization has emerged as an effective approach across various sector like education and sports (Babaei and soheili, 2023; Kaky, 2023). In sports, privatization has been effective in providing world-class facilities and professional development (Ben-Num, 2023). The ability of the private sector to bring latest innovations, efficiency and investments, has helped tackle challenges of limited resources, governance, and skill gaps (Boya and Venter, 2023; Rashed and Shah, 2021). Countries like the United Kingdom, Australia, and Canada have developed comprehensive coach education

programs and successfully implemented them through privatization or hybrid models (Coaching Association of Canada, 2018; Sports Coach, U. K., 2012; Australian Sports Commission, 2016).

The sports sector in Oman remains is largely underdeveloped when compared to advanced economies. Coach education, which serves as the foundation for the sports sector, remains highly informal and lacks professional development. The coaching profession in Oman is often seen by the youths as a voluntary or part-time, with minimum support from private organizations (AL-Busafi, 2013). Even, the full-time positions are typically low paying (International Association of Athletics Federations, 2008; Zayed, 2006). Although privatization has proved to be efficient in the field of education and sports development, research focusing on the viability of privatization in the coach education domain and its potential for the long-term sustainability is missing. This situation highlights the urgent need for conducting research on whether privatization can address these challenges and help in building a sustainable and formalized coach education system in Oman. This study aims to explore the challenges and barriers within Oman's coach education system while examining stakeholder perceptions of reform through privatization approaches, such as public-private partnerships (PPP), hybrid models, and innovative revenue-generation strategies to ensure the system's long-term sustainability and development. The findings of this study will provide valuable insights to design a privatized coach education system, trusted by all the stakeholders, while also providing economic diversification, talent development and sustainability.

The paper is organized as follows: Section 2 presents the literature review. Section 3 outlines the research methodology. Section 5 describes the results. Finally, Section 6 concludes the paper

2. LITERATURE REVIEW

2.1. *Coach Education*

Coach education programs equip the coaches with the necessary tools, techniques and knowledge to effectively guide athletes, nurture them, and help in the overall professional development of sports. Over the last twenty years, there has been a surge in the coach education research, highlighting its significance (Webb and Leeder, 2021; Stodter and Cushion, 2019; AL-Busafi et al., 2013). Globally, significant research efforts have been made for the design and development of structured and formalized coach education programs. For instance,

the UK Coaching Framework (Sports Coach, U. K., 2012) and (ISCF), 2013, together provided the foundational concepts for designing coach education frameworks worldwide. These frameworks, inspired other nations such as Portugal, Japan, South Africa, and several international sports federations to design their own coach education frameworks tailored to their specific needs, based on the given template.

Several nations have effectively used privatization models in their coach education frameworks. For, instance, the Long-Term Coach Development Model designed by South Africa have efficiently used the private sector services for training, education and management (Kubayi et al., 2024; South African Sports Confederation and Olympic Committee SASCOC, 2012). Similarly, the European Sport Coaching Framework have effectively worked in collaboration with private sector to enhance sports training programs, knowledge development, certification and accreditation (European Sport Coaching Framework, 2017). Globally, privatization has helped to overcome certain issues in the coach education models like limited funding, inefficient management and the need for innovations and scalability (Evans and Davies, 2015).

On the other hand, coach education system in Oman is largely informal and underdeveloped. Coaching is generally considered as a part-time job with no formal system for training and accreditation. There are few full-time professional coaching positions available with low salary, and coaches are often expected to handle administrative tasks in addition to the coaching assignments (International Association of Athletics Federations, 2008; Zayed, 2006).

2.2. Challenges To Coach Education

The ESCF emerged from the CoachLearn project, a collaborative effort spanning from October 2014 to September 2017, co-funded by the Erasmus+ programme of the European Commission. The ESCF is a reference for coach development across all of the European Union's governmental agencies, sports organizations, universities, sports federations and associations. The ESCF recognizes five fundamental pillars that forms the foundation of all coaching systems. These includes athlete-centric approach, coaching expertise, coaching practice, coach development, certification and recognition, collectively shaping the coaching system. The ESCF places significant emphasis on the formulation of a coaching philosophy by every coach, rooted in strong values and ethical decision-making principles

aligned with Fair Play, Anti-Doping, and Integrity regulations to enhance athlete experiences.

2.2.1. Lack Of Formal Education System

A structured coach education framework is essential for the professional development of coaches. Ferner (2021) and Moen et al. (2021) studied the transformative impact of formal coach education programs on improving coaching practices. They highlighted that these programs enhance coaching effectiveness, improve skills and support professional development. However, in Oman, the biggest challenge is the lack of standardized and structured framework for coach education, skills development, certification and accreditation (AL-Busafi, 2013). It lacks a national pathway to promote and certify coaches from community coaching to elite-level. Existing degree programs, offered by Sultan Qaboos University (SQU), are designed for physical education teachers rather than sports coaches. This creates a significant gap between coaching knowledge and skill development. Further, the absence of a comprehensive coach education program has limited coaching in Oman to few sports, like football, athletics, and volleyball. Many coaches rely on personal experiences, outdated practices and informal methods to train athletes further degrading the professional development of sports in the country (AL-Busafi, 2012).

2.2.2. Limited Job Opportunities

Job opportunities for coaches are limited, particularly in countries where sports is not considered as a major contributor to the economy (North et al., 2018). This lack of recognition, results in lower incentives, job instability and contractual positions, which discourages talented young individuals from pursuing coaching as a long-term career option (Braňka 2016). These issues are also prevalent in Oman, where most of the positions in professional coaching are part-time or contractual, and lacks job security (International Association of Athletics Federations, 2008). Absence of structured career pathways and attractive financial incentives deters the youth from choosing it as a career option. However, in the developed economies like the United States and Australia, there exists a structured and formal coach education system, offering attractive career options with clear career pathways to attract and nurture young talent (United States Olympic Committee, 2017; Australian Sport Commission, 2016).

2.2.3. Financial Constraints

Financial constraints are one of the biggest challenges facing coach education programs in a number of countries. In most cases, the budget allocation for sports is limited, with governments prioritizing investments in infrastructure and mega events, over sports related activities like coach education and skill development programs (Zhang et al. 2018). Most of the aspiring and young coaches have financial constraints, which limits their access to professional and skill development programs in other countries. (Nelson et al., 2013; Cushion et al., 2010). Due to limited financial resources, coaches are unable to take specialized training courses and certifications, which further restricts their professional development. Over-reliance on government funding, without collaborations and partnerships with private organizations restricts the scalability of the coach education programs and limits the introduction of modern innovations and efficient management (AL-Busafi, 2011; Zayed, 2006).

2.2.4. Limited Access to Training Resources

Limited access to training resources and modern facilities is another critical barrier, particularly observed in developing nations with little budget and financial resources. Informal learning methods, such as self-study and peer interactions, is the primary source of professional development for coaches in these regions (Lara-Bercial and Bales, 2022). In Oman, coaches also lack exposure to advanced methodologies such as sports science, psychology, and analytics due to the unavailability of formal training programs (Zayed, 2004). Informal learning, such as peer discussions and self-directed study, remains the primary mode of acquiring knowledge. These gaps prevent Omani coaches from competing with their international counterparts, highlighting the need for significant investment in training resources. Lack of specialist resources, such as advance training tools, expert-led training sessions and seminars, deter the coaches to improve their skills (Baker et al., 2003). This creates a disparity between coaches in these regions and their counterparts in more developed countries. These issues highlight the need for better access to quality coaching education and resources, which is crucial for improving the coach education system.

2.2.5. Lack Of Government Regulation

The government plays key role in the funding and regulation of coach education programs worldwide through a variety of strategies related to public investments and partnerships with the private sector (Acquah-Sam, 2021). Government regulations and

accreditations are critical for ensuring quality and consistency in coach education. The United States, United Kingdom, and Canada have regulated coach education programs while meeting the demands of the sports sector. In the United States, the National Committee for Accreditation of Coaching Education (NCAACE) is the major authority on coach education. Similarly, Sports England in collaboration with the National Governing Bodies (NGBs) manages The UK Coaching framework (GÖK and Aslan, 2023). The Coaching Association of Canada (CAC) manages the National Coaching Certification Program (NCCP) (Kloos, 2021). However, the absence of regulatory bodies and government regulations in Oman leads to discrepancies in coaching policies and limits the professional development of coaches. The role of government in Oman in designing curriculum, accrediting courses, and defining standard regulations for coach education is limited, resulting in an inconsistent and underdeveloped coach education system (Zayed, 2004).

2.3. Coach Education Privatization

The privatization of coach education has gained significant global attention as a strategy for improving efficiency and increased participation in sports. The benefits of privatization include boost in productivity, increased investment, and innovations in sports (Babaei and Soheili, 2023; Vafaei Moghaddam et al., 2019). Privatization has also shown socio-economic benefits such as increased participation of the local population in sports, better quality service, and creation of new job opportunities (Balwel and Tayachi, 2021). In Canada and Australia, privatization has been instrumental in scaling and sustaining coach education programs. For instance, the Coaching Association of Canada (CAC) works in collaboration with both public and private stakeholders (Coaching Association of Canada, 2018). On the other hand, public funded sports systems frequently face restricted finance, operational inefficiencies, and insufficient resource utilization, resulting in decreased efficacy (Van den Hurk and Verhoest, 2017; Moharamzadeh and Ghayebzadeh, 2015).

Privatization models in coach education vary across different countries with varied levels of public and private sector involvement, reflecting their own policy and economic circumstances. For instance, the United States follows a primarily privatized approach, where course fees, membership charges, and sponsorships primarily fund the coach education, with limited government assistance (The USOPC QCF, 2020). China, on the other hand,

follows a public-driven approach, with the General Administration of Sport of China (GASC) in collaborations with regional sports bureaus manage the coach education, certification and accreditation. These initiatives are integrated into the national sports development framework and are mostly sponsored by government budgets, with little private sector involvement. The NCCCP in Canada adopts a hybrid approach, combining both public and private sector involvement in the coaching and certification process, with revenue generated from certification and course fees (Coaching Association of Canada, 2018). Similarly, The United Kingdom too uses a hybrid business model for coach education, where the public funding supports national priorities such as broad accessibility and workforce development, whereas revenue is generated through paid certifications, training courses and consultancy services (Sports Coach UK, 2012).

2.4. Study Rational and Gap Analysis

Sports are significant economic engines, fostering employment, tourism, and infrastructure, while also advancing public health, social cohesion, and national identity. A high-quality coach education system is the cornerstone of athletic development and a thriving sports economy. While the privatization and hybridization of coach education are well-documented in developed nations, their potential application within Oman's unique context constitutes a significant research gap. Extant literature (e.g., Ferner, 2021; Moen et al., 2021) demonstrates the transformative impact of these models elsewhere but offers little insight into their adaptability to Omani-specific challenges. These challenges include chronic underfunding, a lack of regulation, weak professional pathways, and insufficient training resources. Crucially, no study has yet developed a framework for implementing models such as Public-Private Partnerships (PPPs) or revenue-generation strategies within Oman's distinct socio-economic and policy environment. This gap impedes the professionalization of coaching and limits the sector's potential.

This study is motivated by the urgent need to transform Oman's coach education. By analyzing successful international privatization models, this research will provide policymakers and stakeholders with a framework to enhance coaching standards, incentivize participation, and secure the long-term health and economic benefits of a robust sports industry. By addressing these systemic deficiencies, the research aims to provide actionable strategies for professionalizing coaching, attracting new talent,

and ensuring the long-term sustainability of Omani sports.

This study aims to diagnose the systemic challenges within Oman's coach education system and evaluate the receptivity of key stakeholders towards privatization as a strategic solution. It is hypothesized that a hybrid privatization model—synthesizing PPPs, corporate sponsorships, and fee-based training—will be perceived by stakeholders as a viable framework for achieving a sustainable, effective, and professionalized coach education system. The successful implementation of such a model is further hypothesized to contribute to Oman's broader sports development and national economic diversification goals.

3. RESEARCH METHODOLOGY

This study has used a quantitative research method to achieve its research objective. Data was collected through an online survey targeting stakeholders in Oman. The statistical techniques such Kruskal-Wallis H test, and the Mann-Whitney U test were used in the analysis.

3.1. Research Design and Participants

This study employed a quantitative research design to examine stakeholder perspectives on privatization in Oman's coach education system. Data were collected through an online survey and analyzed using descriptive and inferential statistics. The target population included key stakeholders in Oman's sports ecosystem: coaches, administrators, physical education instructors, and athletes. Convenience sampling was used to recruit participants. Although convenience sampling restricts generalizability, it is suitable for exploratory studies seeking to understand diverse stakeholder perceptions across a heterogeneous group. All perception-based items were measured using a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). In total, 138 participants responded to the survey, and after data cleaning, 129 valid responses were retained for further analysis.

3.2. Comparative Scoring of Framework Relevance to Oman

The survey instrument was developed based on insights from the literature review to ensure content validity. It was prepared in both English and Arabic to reach a wider audience. The questionnaire comprised three sections: Demographics - role, experience, education, team level, and training funding. Privatization and Sustainability - perceptions of privatization benefits and models

(PPP, franchising, sponsorships). Learning and Development – use of formal, non-formal, reflective, and experiential learning methods. A pilot test was conducted to evaluate clarity, relevance, and alignment with the study's objectives. Feedback was incorporated into the final version. Reliability was supported through consistent question structures and use of established scales.

The survey was distributed online with informed consent obtained from all adult participants. Respondents were briefed on the study's objectives, procedures, and their rights, including voluntary participation and the option to withdraw at any stage. Anonymity and confidentiality were strictly maintained. Data collection took place between September 10 and November 15, 2024.

3.3. Analysis Plan

Data were analyzed using SPSS software. Descriptive statistics were applied to summarize demographic information and general response trends. For inferential testing: Kruskal–Wallis H test (Wall Emerson, 2023; Ostertagova et al., 2014) was used to compare stakeholder perceptions across

multiple groups regarding privatization, training preferences, and barriers in coach education. Mann–Whitney U test (MacFarland et al., 2016) was applied for pairwise comparisons of two independent groups to identify differences in perceptions of privatization models and revenue-generation strategies. Both tests were selected due to their suitability for non-parametric and non-normally distributed data.

The preliminary analysis of the survey responses provides a comprehensive overview of the data. The majorities of respondents were male (81%), while females represented only 19%. The roles of the respondents varied widely, with athletes constituting the largest group (73%), followed by physical education teachers (13.5%), sports officers or administrators (10.8%), and sports coaches (2.7%). The majority of coaches (64.9%) are volunteers, full-time coaches 32.4%, and part-time coaches 2.7%. The average salary is 403.56 OMR, with a high standard deviation of 147.95 OMR, showing notable income variability. In terms of educational qualifications, 60.5% of respondents lacking formal qualifications in physical education. Table 1 shows the descriptive analysis.

Table 1: Descriptive Analysis.

Gender	% of Total	Nationality	% of Total
Male	81.1%	Omani	83.8%
Female	18.9%	Other	16.2%
Current Role	% of Total	Work Type	% of Total
Athlete	73.0%	Volunteer	64.9%
Physical Education Teacher	13.5%	Full-time	32.4%
Sports Officer/ Administrator	10.8%	Part-time	02.7%
Sports Coach	2.7%		
Educational Qualification	% of Total	Experience	% of Total
No Qualification in PE	60.5%	< 3 years	64.9%
Bachelor in PE	21.1%	4-7 years	13.5%
Master in PE	10.5%	12-15 years	10.8%
General diploma	2.6%	8-11 years	8.1%
PhD in PE	2.6%	> 16 years	2.7%
Current Salary	% of Total	Formal Training Location	% of Total
< 350 OMR	68.3%	No formal training	65.8%
350-700 OMR	17.4%	Oman	18.4%
701- 1051 OMR	8.1%	Outside GCC	10.5%
> 1051 OMR	6.2%	GCC	5.3%

4. ANALYSIS AND FINDINGS

4.1. Barriers To Coach Education

The analysis revealed three key barriers to coach education in Oman as perceived by various roles in the sports ecosystem, including Physical Education Teachers, Sports Officers/Administrators, Sports Coaches, and Athletes. These barriers are the absence of a formal education system for coaches (perceived by 29-60% of stakeholders), limited job opportunities (perceived by 30-48% of stakeholders), and low salaries (perceived by 27-47% of stakeholders).

Among Physical education teachers, the absence of a formal education system was identified as the most significant barrier, with approximately 56% of respondents opting for it, followed by limited job opportunities (approximately 47% of respondents) and low salaries (approximately 27%). For Sports Officers/Administrators, limited job opportunities were the primary concern, noted by around 43% of respondents, while the absence of a formal education system and low salaries identified by approximately 29% of respondents. Sports Coaches reported the absence of a formal education system as their

primary concern (about 60%), followed by low salaries (48%) and limited job opportunities (45%). Athletes placed slightly greater emphasis on the absence of a formal education system and low

salaries (both at approximately 35%) compared to limited job opportunities (around 30%). Figure 1 visually represents the barriers to coach education as reported by different stakeholder groups.

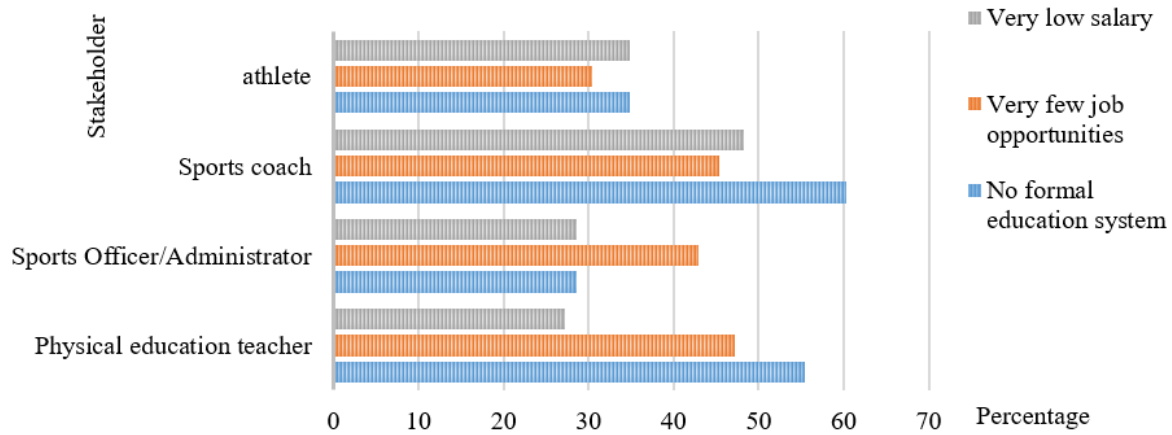


Figure 1: Recommendation To Improve Coach Education in Oman.

4.2. Coach Education Privatization

A detailed analysis was conducted to examine the perceived benefits of privatizing coach education, focusing on responses from key stakeholder. The Physical Education Teachers prioritized "Improved Quality of Training" (30.77%), while also placing equal importance on "Career Growth and Higher Salary" and "Additional Job Opportunities" (23.08%

each). Sports Officers/Administrators emphasized "Improved Quality of Training" (60%) and "Innovation in Education" (20%). Sports Coaches overwhelmingly valued "Improved Quality of Training" (100%). Athletes, on the other hand, focused on "Improved Quality of Training" (22.22%), "Career Growth and Higher Salary" (21.3%), and "Additional Job Opportunities" (19.44%). Figure 2 shows the benefits of coach education privatization.

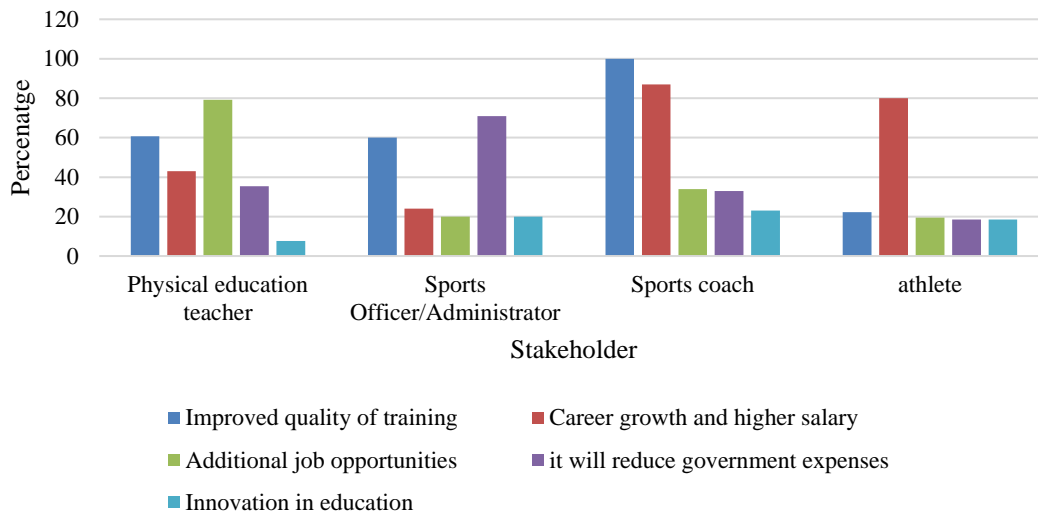


Figure 2: Benefits Of Coach Education Privatization.

Further, an in-depth analysis of perceptions of privatization across different roles in the coach education ecosystem was conducted which provided valuable insights into the varying levels of support among different stakeholder groups. The

privatization support across stakeholders varies. For instance, Sports Officers/Administrators have the highest mean perception score (M = 1.71, SD = 0.44), reflecting strong support for privatization with relatively consistent views. Sports Coaches (M = 1.52,

SD = 0.50) also display positive perceptions, though with slightly more variability. Athletes (M = 1.10, SD = 0.68) exhibit a mixed response, leaning towards neutrality but with higher variability compared to other roles. Finally, Physical Education Teachers have the lowest mean perception score (M = 0.80, SD = 0.58), indicating skepticism about privatization with diverse responses within the group.

The Kruskal–Wallis H-test shows that all stakeholders exhibit statistically significant differences in their perceptions of privatization. Athletes exhibit the highest test statistic ($\chi^2(1) = 9.81$, $p = 0.002$), suggesting their perceptions differ most

significantly from the collective views of other roles. Similarly, Physical Education Teachers ($\chi^2(1) = 8.46$, $p = 0.004$) and Sports Officers/Administrators ($\chi^2(1) = 7.53$, $p = 0.006$) also show notable differences in their priorities and perspectives on privatization. Sports Coaches ($\chi^2(1) = 5.64$, $p = 0.018$) exhibit more alignment with other roles but still demonstrate significant variability. These findings indicate that perceptions of privatization are not uniform and vary meaningfully across the coach education ecosystem, underscoring the importance of tailored approaches in policy development. Table 2 shows the Kruskal–Wallis H-test for coach education privatization.

Table 2: Kruskal–Wallis H-Test for Coach Education Privatization Across Roles.

Variables	Test statistic (χ^2)	Degree of freedom (df)	Significance level (p)	Effect size (ϵ^2)
Sports Officer/ Administrator	7.53	1	0.006	0.03
Sports Coach	5.64	1	0.018	0.02
Athlete	9.81	1	0.002	0.04
Physical Education Teacher	8.46	1	0.004	0.03

A detailed analysis of how perceptions of privatization differ between various roles in the coach education ecosystem using Mann-Whitney U Test was conducted. Each comparison evaluates whether the perception scores for one role differ significantly from another, with the U-statistic representing the test statistic and the p-value indicating the significance of the difference.

Significant differences were observed between Sports Officers/Administrators and Athletes ($p = .01$), as well as Sports Coaches ($p = .08$), and Physical Education Teachers ($p = .00$), indicating varied levels of support for privatization within these groups. Table 3 shows the pairwise comparisons using Mann-Whitney U Test.

Table 3: Pairwise Comparisons Using Mann-Whitney U Test.

Variables	Mann-Whitney U test	Significance level (p)
Sports Officer/ Administrator vs Sports coach	1474	0.08
Sports Officer/ Administrator vs athlete	1562	0.01
Sports Officer/ Administrator vs Physical education teacher	1834	0.00
Sports coach vs athlete	1340	0.50
Sports coach vs Physical education teacher	1608	0.01
athlete vs Physical education teacher	1514	0.05

4.3. Relationship Between Coach Education Privatization and Barriers

A Kruskal–Wallis H-test was conducted to evaluate whether perceptions of privatization by different stakeholders in coach education were influenced by barriers such as the absence of a formal education system, low salaries, and few job opportunities in the coach education sector. The analysis revealed no statistically significant differences in perceptions of privatization across most barriers. For instance, perceptions associated with the absence of a formal education system resulted in $\chi^2(2) = 3.21$, $p = 0.078$, and perceptions associated with low salary yielded $\chi^2(2) = 1.76$, $p = 0.185$. Similarly, perceptions tied to other barriers were not statistically significant, with $\chi^2(2) = 2.34$, $p = 0.128$. However, a significant difference was

observed for the barrier “Few job opportunities,” with $\chi^2(2) = 5.23$, $p = 0.018$, suggesting that stakeholders who perceive job scarcity as a major challenge are more likely to view privatization as a viable solution. To further investigate the differences, a Dwass–Steel–Critchlow–Fligner pairwise comparison was conducted. The results revealed significant differences between perceptions associated with “No formal education” and “Few job opportunities” ($W = -3.12$, $p = 0.002$), as well as marginal differences between “No formal education” and “Low salary” ($W = -2.10$, $p = 0.045$). Perceptions between “Low salary” and “Few job opportunities,” however, were not significantly different ($W = -1.89$, $p = 0.058$). Table 4 shows Kruskal–Wallis H-test for perceptions of privatization under across different barriers.

Table 4: Kruskal-Wallis H-Test for Perceptions of Privatization Under Various Barriers.

Variables	Test statistic (χ^2)	Degree of freedom (df)	Significance level (p)	Effect size (ϵ^2)
No formal education	3.21	2	0.078	0.028
Low salary	1.76	2	0.185	0.015
Few job opportunities	5.23	2	0.018	0.046
Other	2.34	2	0.128	0.020

The Mann-Whitney U test was conducted to evaluate whether perceptions of privatization differed significantly across barriers in the coach education ecosystem, including "No formal education," "Low salary," "Few job opportunities," and "Other." Pairwise comparisons were performed

between each pair of barriers to determine whether stakeholders viewed privatization as a solution to these challenges differently. No statistically significant differences were observed across the comparisons. Table 5 shows the pairwise comparisons using Mann-Whitney U Test.

Table 5: Kruskal Pairwise Comparisons Using Mann-Whitney U Test.

Variables	Mann-Whitney U test	Significance level (p)
No formal education vs Low salary	1200.5	0.71
No formal education vs Few job opportunities	1205.5	0.75
No formal education vs Other	1168	0.54
Low salary vs Few job opportunities	1244.5	0.97
Low salary vs Other	1211.5	0.77
Few job opportunities vs Other	1224.5	0.85
No formal education vs Low salary	1200.5	0.71

4.4. Privatization Models for Coach Education and Revenue Generations

Several privatization models were investigated for their effectiveness in the coach education. The analysis reveals that The PPP model emerged as the most favored option across all groups, with significant support from Physical Education Teachers (50%) and Sports Officers/Administrators (48%). Corporate Sponsorship is strongly favored by Athletes (45%) for its role in funding specialized training and creating career opportunities, with moderate support from Sports

Officers/Administrators and Physical Education Teachers, recognizing its potential to attract investments. Private Sector Training, preferred by Sports Officers/Administrators (20%) and Athletes (25%), reflects a demand for flexible, high-quality academies tailored to individual needs. Franchise Models receive moderate backing from Sports Coaches (15%) and Sports Officers/Administrators (10%), highlighting interest in standardized, licensed systems. The Non-Profit Model, with limited support except from Athletes (30%), is valued for enhancing accessibility but raises concerns about sustainability. Figure 3 shows the effective privatization models as perceived by the stakeholders.

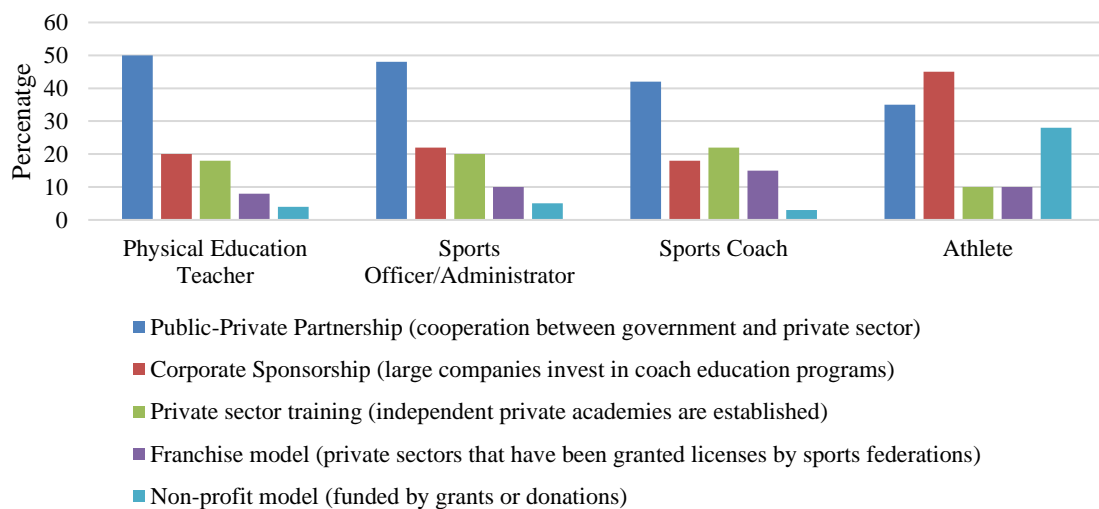


Figure 3: Effective Privatization Models for Coach Education.

The Kruskal-Wallis H-test was also conducted to analyze whether significant differences exist in stakeholder preferences for privatization models across four roles: Physical Education Teachers, Sports Officers/Administrators, Sports Coaches, and Athletes. Only Private Sector Training ($\chi^2(3) = 8.63$

$p=0.04$) and Non-Profit Model ($\chi^2(3) = 9.42$ $p=0.03$) are found to be statistically significant, while the others are not statistically significant. Table 6 shows the Kruskal-Wallis H-Test on stakeholder preference for privatization models.

Table 6: Kruskal-Wallis H-Test on Stakeholder Preference for Privatization Models.

Variables	Test statistic (χ^2)	Degree of freedom (df)	Significance level (p)	Effect size (ϵ^2)
Public-Private Partnership (PPP)	5.23	3	0.16	0.034
Corporate Sponsorship	7.49	3	0.06	0.048
Private Sector Training	8.63	3	0.04	0.054
Franchise Model	4.42	3	0.22	0.029
Non-Profit Model	9.42	3	0.03	0.050

In addition to identifying effective privatization models, stakeholders emphasized various mechanisms through which the government can generate revenue to support a sustainable privatization framework. The analysis revealed that Licensing and Relicensing Fees emerged as the most preferred revenue generation strategy among stakeholders (25%), reflecting its importance as a reliable and enforceable mechanism to maintain regulatory compliance and governance in coach education. The next preferred strategy was Certification and Accreditation Fees (22%), which stakeholders valued for ensuring quality standards

and professional credibility within the system. Registration Fees for Workshops and Seminars ranked third (21%), highlighting its role in supporting ongoing professional development and training programs. Meanwhile, Franchise Fees from Private Training Institutions (17%) and Revenues from Digital Education Platforms (16%) were identified as additional revenue streams, highlighting the potential for private sector involvement and the importance of leveraging innovative and technology-driven solutions. Figure 4 shows the revenue generation mechanisms through coach education for government.

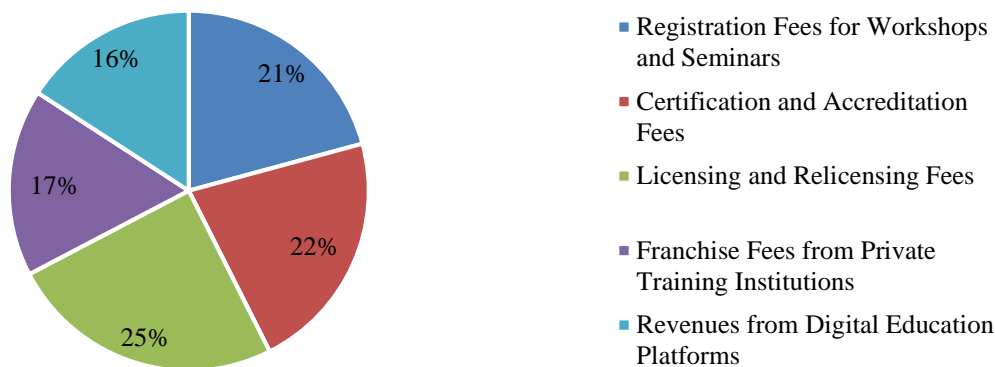


Figure 4: Revenue Generation Methods for Sustainable Coach Education.

5. RESULTS AND DISCUSSION

The analysis of data reflects the need of professionalizing coaching, creating full-time positions, and providing organized training to advance the coaching profession in Oman. The compensation distribution for coaches in Oman reveals notable economic disparities. Most coaches (68.3%) earn under 350 OMR per month with an average monthly income of 403.56 OMR and a significant salary range (S.D = 147.95 OMR), this highlights the urgent need for a more structured

salary system. The gap in compensation underscores the importance of improving financial stability within the profession to make coaching a more attractive and sustainable career.

Coaches in Oman face various structural impediments to professional progress, including a lack of formal coaching education, limited work prospects, and low pay. Different stakeholders see these difficulties differently, as evidenced by Kruskal-Wallis H- tests. Physical education instructors identified the lack of formal education as the most essential issue ($\chi^2(2) = 3.21$, $p = 0.078$), while

sports officers/administrators were most concerned about limited work prospects ($\chi^2(2) = 5.23, p = 0.018$). These differing perspectives underscore the need of addressing the specific issues of various parties within the coaching ecosystem. The Mann-Whitney U test found substantial disparities in stakeholders' priorities, with some prioritizing job prospects over educational gaps ($U = 1205.5, p = 0.002$). According to the data, the most major hurdle for Physical Education Teachers is a lack of formal coaching education, whereas Sports Officers/Administrators are most concerned with restricted work prospects. Athletes and sports coaches viewed a lack of education, restricted employment opportunities, and low pay as equally major factors.

There is significant dissatisfaction with the current system, as 73% of respondents find it ineffective due to poor structure and limited training access, while only 27% consider it effective, signalling a need for urgent reforms. Regarding privatization, 75.7% support transitioning to a privatized system, with 13.5% somewhat in favour and just 10.8% opposed. This support reflects the belief that privatization could improve quality, accessibility, and professional development opportunities, while reduce government costs and fostering innovation in coach education. Statistical analysis revealed significant differences in perceptions across roles, as sports officers/administrators showed the highest mean support ($M = 1.71, SD = 0.44$), followed by sports coaches ($M = 1.52, SD = 0.50$), while athletes displayed mixed perceptions ($M = 1.10, SD = 0.68$), and physical education teachers expressed scepticism ($M = 0.80, SD = 0.58$). Kruskal-Wallis H-tests confirmed these variations, with athletes demonstrating the highest variability in responses ($\chi^2(1) = 9.81, p = 0.002$). These findings suggest that while privatization is largely supported, a balanced framework is needed to address specific stakeholder concerns, particularly those of educators who fear job insecurity.

Stakeholders also identified several key benefits of privatizing coach education. Improved quality of training emerged as the most valued benefit across all groups, followed by career growth, additional job opportunities, and innovation in education. Statistical tests revealed significant differences in how different stakeholders perceive these benefits. Physical education teachers and sports officers/administrators emphasized improved training quality and career growth, while athletes valued job opportunities and career advancement. Sports coaches almost exclusively focused on

improved training quality. For instance, the Kruskal-Wallis test showed significant differences for innovation in education across groups ($\chi^2(3) = 9.42, p = 0.03$), highlighting the diverse expectations among stakeholders. Mann-Whitney U tests also revealed disparities, such as those between physical education teachers and sports coaches regarding career growth ($U = 1834, p = 0.008$). These findings stress the importance of tailoring privatization efforts to align with stakeholder-specific priorities.

Among the privatization models, the PPP model was the most preferred, especially by physical education teachers and sports officers/administrators. This preference reflects confidence in PPPs as a mechanism to combine government oversight with private sector efficiency and innovation. Athletes showed a strong preference for corporate sponsorship, emphasizing its potential to fund specialized training. Private sector training and franchise models received moderate support, while the non-profit model appealed to some stakeholders for its focus on accessibility, albeit with concerns regarding sustainability. These findings underline the importance of a hybrid privatization framework that leverages the strengths of multiple models to meet diverse stakeholder expectations.

However, the high prices of privatized coach education and CPD programs continue to be a substantial impediment, especially in low- and middle-income nations. Another difficulty is the fragmentation of curricula and accreditation standards in privatized systems. Many CPD programs do not use comprehensive frameworks like those presented by Côté and Gilbert (2009), which prioritize professional, interpersonal, and intrapersonal knowledge. Coaches frequently indicate resistance to content that is not relevant to their individual situations, thereby reducing the effectiveness of such programs (Stodter and Cushion, 2017). Furthermore, the lack of formal mentorship opportunities, which are necessary for meaningful learning, limits the potential usefulness of privatized coach education. To address these gaps, researchers advocate for context-specific CPD programs that prioritize practical knowledge and skills relevant to the diverse roles coaches play (Vella et al., 2013). Cultural and institutional opposition to privatization exacerbates these issues. In many areas, coaching is not commonly acknowledged as a genuine profession, resulting in low demand for formal training programs (Trudel and Gilbert, 2024). Structural inefficiencies, such as unclear legal frameworks and inconsistent government policies, continue to hinder the effective integration of private

sector involvement in sports development (Nasseh, 2013). Additionally, some stakeholders view privatized education as a model prioritizing profit over broader developmental goals, raising concerns about equity and inclusivity (Cushion *et al.*, 2010). Successful implementation requires coordination among governments, corporate entities, and international organizations to boost policies, provide incentives, and provide equitable access to education and resources. Revenue generation models for long-term privatization of coach education prioritize licensing and relicensing fees, followed by certification, accreditation, and workshop registration costs. These fees help to maintain high standards while also funding educational services. National coaching groups frequently charge such fees to cover expenses and assure program viability. Governments also collaborate with commercial organizations to provide specialized training, thereby improving the financial viability and quality of coach education programs. Franchise fees and revenue from digital education platforms are important sources of finance for privatized coach education, as are strategic relationships with businesses for events and certification programs. National and international coaching competitions generate cash through ticket sales and sponsorships. Collaborations with educational institutions and non-governmental organizations (NGOs) promote continual professional growth. Athletes favor digital platforms for convenience, whereas physical education teachers prioritize certification fees for credibility. A broad revenue strategy is critical for supporting private coach education in Oman.

6. CONCLUSION

This study reveals significant gaps in Oman's coach education system, which hinder the broader development of sports in the country. Survey data indicate that 65.8% of respondents lack formal coaching training, with only 18.4% trained locally. Over 60% have limited education in physical education, and nearly two-thirds possess less than three years of experience, highlighting restricted institutional pathways and an emerging professional

landscape. Analysis using the Kruskal-Wallis H-test demonstrates strong stakeholder support for privatization, particularly through Public-Private Partnerships (PPPs), as a means to address these structural deficiencies. A hybrid privatization model, combining PPPs, corporate sponsorships, and private training institutes, offers a scalable and contextually appropriate solution. Sustainable revenue mechanisms, including licensing, accreditation, and digital content fees, can ensure long-term viability and system resilience.

The study makes both theoretical and practical contributions by providing a comprehensive, stakeholder-informed assessment of coach education in Oman. It identifies key barriers, including the absence of formal structures, limited job opportunities, financial constraints, and inadequate training and accreditation frameworks. By positioning privatization—through PPPs, sponsorship, and international collaboration—as a viable strategy, the research highlights how private sector involvement can enhance investment, professional training, and national accreditation systems. Drawing on successful international examples, the findings advocate for a coordinated, public-private approach, informed by stakeholder input and global best practices, to strengthen Oman's coach education infrastructure and contribute to sustainable growth in the country's sports economy.

Based on these findings, the authors recommend three practical steps that can strengthen the implementation of coach education reforms in Oman. First, a phased introduction of Public-Private Partnerships (PPPs), beginning with pilot initiatives in selected sports, can support the gradual formalization of coach education. Second, the establishment of a national accreditation and licensing framework, jointly managed by public authorities and international accreditation agencies, can help address the lack of standardized training and certification pathways. Finally, to address the financial barriers highlighted by the study, cost-control strategies, such as tiered certification fees and sponsorship-supported entry-level programs for coaches, should be introduced to enhance participation along with financial sustainability.

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REFERENCES

- Acquah-Sam, E. (2021) Developing sports for economic growth and development in developing countries. *European Scientific Journal*, Vol. 17(15), 172–216.
- AL-Busafi, M. (2011) Investigating issues related to developing coach education in Oman. PhD thesis, University of Birmingham.
- AL-Busafi, M. (2013) Coach education in Oman. *Journal of Coaching Education*, Vol. 6(1), 43–60.
- AL-Busafi, M., Larion, A. and Dearing, J. (2013) Coach education: A developing international discipline of knowledge. *International Journal of Sport Studies*, Vol. 3(1), 1–19.
- AL-Busafi, M., Ramadan, W. M. and Kilani, H. A. S. H. E. M. (2012) Analysis of selected international and national coach education programmes. *Ovidius University Annals, Series Physical Education and Sport*, Vol. XII.
- Australian Sport Commission (2016) Coaching and officiating framework toolkit: A guide for the development of coach and official frameworks. Available at: https://www.ausport.gov.au/_data/assets/pdf_file/0005/653855/CoachingOfficiating_Framework_Toolkit-Final.pdf
- Babaei, M. and Soheili, B. (2023) The role of privatization in the development of public sports participation. *Journal of New Studies in Sport Management*, Vol. 4(2), 778–788.
- Baker, J., Horton, S., Robertson-Wilson, J. and Wall, M. (2003) Nurturing sport expertise: Factors influencing the development of elite athletes. *Journal of Sports Science and Medicine*, Vol. 2(1), 1–9.
- Balwel, M. and Tayachi, T. (2021) The impact of privatization on Saudi clubs according to 2030 vision. *PalArch's Journal of Archaeology of Egypt/Egyptology*, Vol. 18(13), 580–586.
- Ben-Nun, G. (2023) Saudi Arabia's Public Investment Fund as a tool for economic diversification and sports diplomacy. Master thesis, Leipzig University.
- Boya, K. S. and Venter, P. (2023) Strategic planning in Gauteng grassroots football clubs. *South African Journal for Research in Sport, Physical Education and Recreation*, Vol. 45(1), 11–27.
- Braňka, J. (2016) Understanding the potential impact of skills recognition systems on labour markets. ILO research report. Available at: <https://www.ilo.org/>
- Castro-García, M. and Calderón, A. (2025) Teaching and learning about teaching physical education: Exploring one way of translating conflicting theories into transformative practice. *Physical Education and Sport Pedagogy*, 1–19.
- Coaching Association of Canada (2018) National Coach Certification Program (NCCP). Available at: <https://coach.ca/national-coaching-certification-program>
- Côté, J. and Gilbert, W. (2009) An integrative definition of coaching effectiveness and expertise. *International Journal of Sports Science and Coaching*, Vol. 4(3), 307–323.
- Cushion, C., Nelson, L., Armour, K., Lyle, J., Jones, R., Sandford, R. and O'Callaghan, C. (2010) Coach learning and development: A review of literature. Leeds, Sports Coach UK.
- European Sport Coaching Framework (2017) Eds.: Lara-Bercial, S., North, J., Härmäläinen, K., Oltmanns, K., Minkhorst, J. and Petrovic, L. Champaign, Illinois, Human Kinetics.
- Evans, J. and Davies, B. (2015) Physical education, privatisation and social justice. *Sport, Education and Society*, Vol. 20(1), 1–9.
- Ferner, K. (2021) The link between coach education and coach philosophy utilization. Southern Illinois University at Edwardsville.
- García-Cazorla, J., Abós, Á., Haerens, L., De Cocker, K., Burgueño, R. and García-González, L. (2025) Does it matter whether physical education teachers combine structure with autonomy support rather than control? Differences in motivation for teaching and work-related outcomes. *Physical Education and Sport Pedagogy*, 1–18.
- GÖK, Y. and Aslan, M. (2023) The comparison of the coaching education systems between countries: Germany, Belgium, the United Kingdom, Estonia, France, Finland, Spain, Switzerland, Italy, Portugal and Türkiye. *Mediterranean Journal of Sport Science (MJSS)*, Vol. 6(2).
- Holmes, P., Light, R. L. and Sparkes, A. C. (2025) "Everything plays a part doesn't it?" A contemporary model of lifelong coach development in elite sport. *Education Sciences*, Vol. 15(7), 932.
- International Association of Athletics Federations (2008) New studies in athletics. *New Studies in Athletics*, Vol. 23(2), 14–19.
- International Sport Coaching Framework version 1.2 (2013) International Council for Coaching Excellence, the Association of Summer Olympic International Federations and Leeds Metropolitan University.

- Champaign, Illinois, Human Kinetics. Available at: <https://edupact.eu/partners-and-sponsors/international-council-for-coaching-excellence/>
- Jones, L., Tones, S. and Foulkes, G. (2020) Associate teachers' learning networks: A figurational analysis of initial teacher education. *International Journal of Mentoring and Coaching in Education*, Vol. 9(2), 205–218.
- Kaky, S. M. S. (2023) Sustainable privatization of education in light of knowledge management processes. *International Journal of Contemporary Humanities and Educational Science (IJCHES)*, Vol. 2(2), 86–97.
- Kloos, K. (2021) Understanding the impressions of national coaching certification program evaluations by master coach developers in Canada. PhD thesis, University of New Brunswick.
- KPMG (2016) The business of sports. Available at: <https://assets.kpmg.com/content/dam/kpmg/in/pdf/2016/10/The-business-sports.pdf>
- Kubayi, A., Vardhan, D., Chalukulu, J. and Morris-Eyton, H. (2024) Coach development in Africa. In *The Routledge Handbook of Coach Development in Sport*, 112–120. London, Routledge.
- Lara-Bercial, S. and Bales, J. (2022) The challenge of doing coach education and development in the 21st century: Past, present, and future trends. In *Education in Sport and Physical Activity*, 10–23. London, Routledge.
- Levy, A., Nicholls, A., Marchant, D., and Polman, R. (2009). Organisational stressors, coping, and coping effectiveness: A longitudinal study with an elite coach. *International Journal of Sports Science and Coaching*, 4(1), 31-45.
- MacFarland, T. W., Yates, J. M., MacFarland, T. W., & Yates, J. M. (2016). Mann-whitney u test. *Introduction to nonparametric statistics for the biological sciences using R*, 103-132.
- Maddeh, T., & Desbiens, J. F. (2025). The positive impact of an in-service training program in the prevention and management of indiscipline in secondary school physical education in the Maghreb region. *Physical Education and Sport Pedagogy*, 1-17.
- Mees, A., Collins, D., & Collins, L. (2025). Developing Coaches Through a Cognitive Apprenticeship Approach: A Case Study from Adventure Sports. *Education Sciences*, 15(3), 288.
- Moen, F., Olsen, M., and Bjørkøy, J. A. (2021). Investigating possible effects from a one-year coach-education program. *Sports*, 9(1), 3.
- Moharamzadeh, M., and ghayebzadeh, S. (2015). Investigating the administrative challenges of privatization of sport facilities in city sports. *Contemporary Studies On Sport Management*, 5(10), 73-84.
- Nasseh, M. (2013). Evaluation of privatization in sports with the approach of assessing the strengths and weaknesses. *European journal of experimental biology*, 3(1), 631-636.
- NCACE (2016) National Committee for Accreditation of Coaching Education. Retrieved January 9, 2025, from <https://qualitycoachingeducation.org/>
- Nelson, L., Cushion, C., and Potrac, P. (2013). Enhancing the provision of coach education: The recommendations of UK coaching practitioners. *Physical Education and Sport Pedagogy*, 18(2), 204–218.
- North, J., Piggott, D., Lara-Bercial, S., Abraham, A., and Muir, B. (2018). The professionalisation of sport coaching. In *Professional advances in sports coaching* (pp. 3-21). Routledge.
- Orunbayev, A. (2023). Globalization and sports industry. *American Journal Of Social Sciences And Humanity Research*, 3(11), 164-182.
- Ostertagova, E., Ostertag, O., & Kováč, J. (2014). Methodology and application of the Kruskal-Wallis test. *Applied mechanics and materials*, 611, 115-120.
- Ramos, A. G., Valério, C., & Mesquita, I. (2023). The head coach as a coach developer: a coach education case study inside a world champion futsal team. *Education sciences*, 13(12), 1229.
- Rashed, A. H., and Shah, A. (2021). The role of private sector in the implementation of sustainable development goals. *Environment, Development and Sustainability*, 23(3), 2931-2948.
- South African Sports Confederation and Olympic Committee (2012). Long-Term Coach Development. Eds. D. Vardhan, I. Balyi and P. Duffy. Melrose, South Africa. <https://sasca-pb.co.za/wp-content/uploads/2020/04/SA-Long-Term-Coach-Development.pdf>
- Sports Coach, U. K. (2012). The UK coaching framework: Embedding excellent coaching practice. Leeds: Sports Coach UK. Retrieved January 9, 2025, from <https://viewer.joomag.com/uk-coaching-framework-2012/0642357001381936050>
- Stodter, A., and Cushion, C. J. (2017). What works in coach learning, how, and for whom? A grounded process of soccer coaches' professional learning. *Qualitative research in sport, exercise and health*, 9(3), 321-338.
- Stodter, A., and Cushion, C. J. (2019). Layers of learning in coach developers' practice: Theories, preparation,

- and delivery. *International Sport Coaching Journal*, 6(3), 307–316. <https://doi.org/10.1123/iscj.2018-0067>
- The USOPC QCF. (2020). *Quality Coaching Framework*. Retrieved January 9, 2025, from <https://www.usopc.org/quality-coaching-framework>
- Trudel, P., and Gilbert, W. (2024). Foundations and evolution of coach development. In *The Routledge Handbook of Coach Development in Sport* (pp. 3-21). Routledge.
- UK Coaching. (2012.). *Governance*. Retrieved January 9, 2025, from <https://www.ukcoaching.org/about/about-us/governance>
- United States Olympic Committee (2017). *Quality Coaching Framework*. Human Kinetics, Champaign, Illinois, United States.
- Vafaei Moghaddam, A., Farzan, F., Razavi, S. M. H., and Afshari, M. (2019). Serving the development causes of sport for all based on Grounded Theory. *Sport management studies*, 10(52), 43-72
- Van den Hurk, M., and Verhoest, K. (2017). On the fast track? Using standard contracts in public-private partnerships for sports facilities: A case study. *Sport Management Review*, 20(2), 226-239.
- Wall Emerson, R. (2023). Mann-Whitney U test and t-test. *Journal of Visual Impairment and Blindness*, 117(1), 99–100
- Webb, K., and Leeder, T. M. (2021). Dispositions and coaching theories: Understanding the impact of coach education on novice coaches' learning. *Sport, Education and Society*, 27(5), 618–631.
- Wu, C. (2025). The impact of sports industry output on economic growth: evidence from China. *Journal of the Knowledge Economy*, 16(2), 8420-8440.
- Zayed, K. (2004). The role of physical education and sport in developing sport in developing society. *Proceedings from Sultan Qaboos University, Muscat, Oman*.
- Zayed, K. (2006). Suggested strategy to develop physical education and sport in Oman.
- Zhang, J. J., Kim, E., Mastromartino, B., Qian, T. Y., and Nauright, J. (2018). The sport industry in growing economies: critical issues and challenges. *International Journal of Sports Marketing and Sponsorship*, 19(2), 110-126.