

Motivation analysis in rugby: A systematic review

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ABSTRACT

Rugby is a sport that requires a high combination of physical and mental abilities, so athletes' motivation is a key factor in improving performance and sustainability participation. This systematic review examines a range of studies that address motivation in rugby from both intrinsic and extrinsic perspectives, as well as how social and cultural contexts affect player motivation. The studies analysed included aspects of athlete leadership, social identity, inspiring communication, emotional intelligence training, and barriers and facilitators in the implementation of injury prevention programs. The findings show that strong motivation, effective leadership, team solidarity, and social environment support play a positive role in improving rugby athletes' long-term performance and engagement. Recommendations are given for the development of training programs and motivation management strategies that take into account psychological, social, and structural dimensions so that performance development can run sustainably.

Keywords: Athlete motivation, Rugby, Sports leadership, Social identity, Emotional intelligence.

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INTRODUCTION

Rugby is a sport that demands high physical and mental skills, so the players must have strong motivation (Mellalieu, 2017). Motivation is a key factor that greatly affects the performance and success of athletes in undergoing training and matches (Bandhu et al., 2024). Without sufficient motivation, it is difficult for players to reach their best potential and be consistent in training and competing (Sandars et al., 2022). In addition, motivation also plays an important role in shaping the attitude and work ethic of rugby players (Fioravanti et al., 2023). A good attitude and a spirit of hard work support the development of essential technical and tactical skills in this sport. With continued motivation, athletes can develop their abilities optimally and maintain their commitment so that they can compete at a higher level.

Motivation in rugby athletes can be understood through two main dimensions, namely intrinsic and extrinsic motivation (J. Pope & Wilson, 2012). Intrinsic motivation is related to the impulses that come from within the athlete himself, such as pleasure, personal satisfaction, and a sense of achievement that the athlete feels (Almagro et al., 2020). Intrinsically motivated athletes usually have a high passion for continuing to train and compete because they truly enjoy the processes and challenges that exist in the sport. On the other hand, extrinsic motivation comes from external factors that affect athletes, such as professional expectations, financial rewards, social support from family and friends, and the influence of coaches (Pelletier et al., 2016). These factors can provide an additional incentive for athletes to excel and maintain commitment in training and competition.

Coaches play a crucial role in shaping and increasing the motivation of rugby players (Malkin et al., 2025). Through the leadership style they apply as well as the approach used during training, coaches can influence the player's internal enthusiasm and drive to improve (Berg & Karlsen, 2020). An effective leadership style is able to create a supportive training environment, provide clear direction, and build player confidence, thus fostering intrinsic motivation that motivates players to practice and compete optimally (Baker et al., 2016). The relationship between a coach's leadership style and player motivation has a significant impact on performance on the field (Jin et al., 2022). High intrinsic motivation, influenced by the right leadership style, directly contributes to improved performance and match results (Xue et al., 2022). Therefore, an in-depth understanding and systematic study of how a coach's leadership style can improve player motivation is very important in the effort to achieve the best performance in rugby.

Social and cultural backgrounds play an important role in shaping the motivation of rugby athletes, especially at school and community level (Zainuddin et al., 2023). In a variety of contexts, the motivation to play rugby is not only driven by physical or competitive aspects, but also by inherent social values such as the desire to show courage (J. Pope & Wilson, 2012). Additionally, the identity aspect of masculinity is often a factor that influences one's passion and reasons for getting involved in the sport, as rugby is often seen as a symbol of strength and courage associated with a male image (Diamond, 2006). Furthermore, group solidarity is also an important element that motivates rugby athletes (Branchu, 2023). A sense of community and team spirit within the community or school creates a strong bond, thus encouraging athletes to keep participating and keep trying. A comprehensive and systematic method is needed to explore various internal elements such as self-confidence and personal goals, as well as external elements such as the influence of the social and cultural environment, so that athletes' motivations can be understood thoroughly and effectively.

Through a systematic review of the literature, this study aims to collect and analyse the existing evidence related to motivation in rugby in order to formulate a solid theoretical and practical framework. The results are expected to make a significant contribution to coaches, athletes, and sports policy developers in creating

a training environment that maximizes motivation. Thus, the development of performance and the sustainability of participation in rugby can be realized more effectively and sustainably.

METHODS

The preparation of this article was carried out through systematic analysis using the literature review method. A comprehensive strategy is designed to collect and evaluate research results related to motivation analysis in rugby. This approach ensures the identification of methodologically rigorous relevant sources, with a focus on the synthesis of the latest scientific findings. The literature search was conducted using a specific keyword combination: TITLE-ABS-KEY (Motivation AND Rugby). This strategy is applied to screen documents that explicitly address the target topic. The main database used is Scopus, chosen for its multidisciplinary scope and reputation in an index of high-quality scientific works. The inclusion criteria include articles that discuss motivation analysis in rugby as a core topic. In contrast, the exclusion criterion negates publications outside the last 10-year span (2016–2025). This time constraint ensures up-to-date evidence-based analysis, while maintaining the relevance of findings to the latest scientific context. The research limits the subject to three main areas: medicine, social sciences, health professions, psychology. Only English-language journal articles are included in the analysis, with document types limited to Articles (not books, reports, or non-standard materials). This filtering maintains the focus and consistency of the data source. The study follows PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines to ensure transparency and reproducibility. Each stage starts from searching, filtering, to detailed documentation synthesis to minimize bias and increase the validity of the final conclusion.

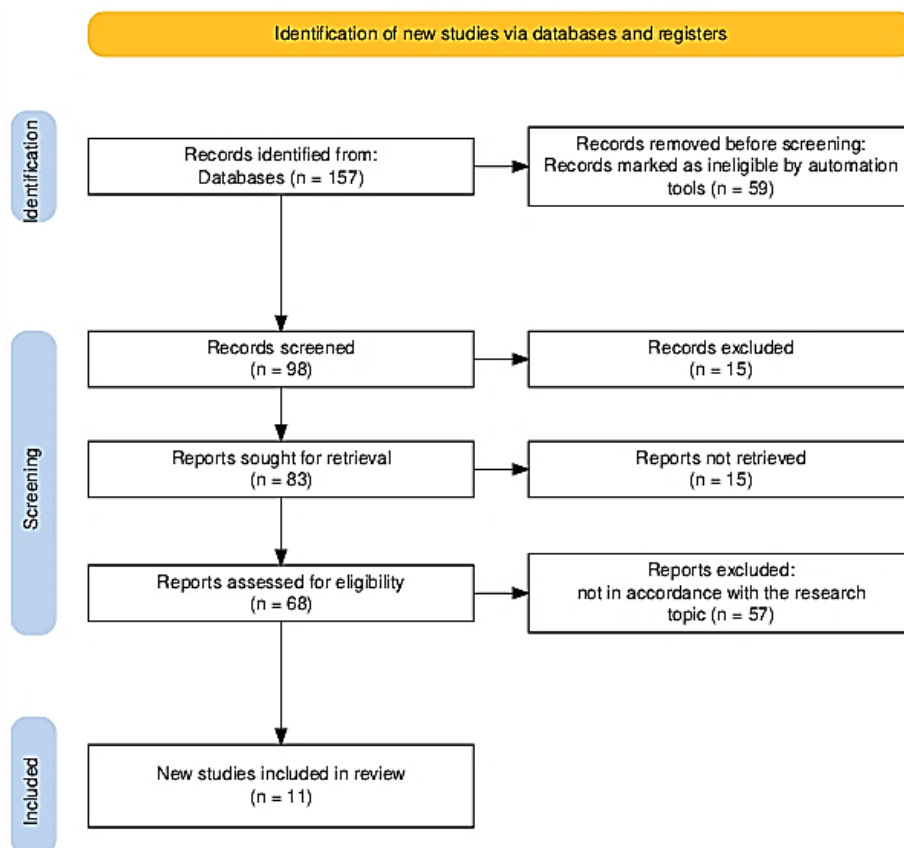


Figure 1. Prisma follow chart.

RESULTS

Table 1. Summary of review article.

No.	Author	Research objectives	Research methods	Research results
1.	(Fransen et al., 2017)	To examine the extent to which the perceived leadership qualities of athletes relate to the effectiveness of elite sports teams. It also aims to identify the leadership structure and the relationship between athlete leadership qualities and team effectiveness.	Design: Observational/correlation studies. Participants: Three professional rugby teams (N = 135) in Australia. Data Collection: An online survey asked players and coaching staff to assess the leadership qualities of players in four roles (task, motivation, social, external). Leadership quality is calculated using social network analysis (SNA) based on the indegree centrality of the top three leaders in each role. Participants also rated their team's performance and functioning. Data Analysis: Statistical analysis for the relationship between leadership quality and team effectiveness indicators.	The team with the highest quality athlete leadership excels in all indicators of team effectiveness. Athletes on these teams have a stronger sense of team purpose, are more committed to team goals, and have greater confidence in their team's abilities. The team also exhibits a more task-oriented climate (players support each other to thrive) and a less ego-oriented climate (less conflict). The team performed well in measures of performance reported by players, coaches, and objectives. High-quality athlete leadership is positively related to team effectiveness. This study highlights the need for well-planned and empirical leader development programs.
2.	(Cheng et al., 2016)	To explore the involvement of older male amateur rugby players in Taiwan, why they continue to play, how they view their experiences, and how the sport evolved to sustain their interests. The goal is to implement the concept of "serious leisure".	Design: A qualitative research approach using semi-structured interviews. Participants: The sample was aimed at 15 male amateur rugby players aged 54 to 83 years from a "golden oldie" rugby club in Taiwan. Data Collection: Semi-structured qualitative interviews in 2013, audio recorded and verbatim transcribed. Data Analysis: Thematic analysis uses a six-phase approach.	The main motivations to keep playing are: a sense of nostalgia and pride, a lifelong friendship and sense of belonging, as well as pure joy and passion. Secondary motivations include: staying mentally and physically active, involvement in "true men's sports", maintaining self-identity, and responsibility/commitment to sport. Long-term engagement is consistent with the concept of "serious leisure". A strong sense of responsibility, commitment and identification with rugby are key motivators for continued participation and a desire to promote the game to the younger generation.
3.	(Campo et al., n.d.)	To test the influence of identity mechanisms (personal identity vs. social identity) on the assessment process, in particular whether the level of self-abstraction leads to group-based emotions and influences performance in team sports. It is also to examine the influence of individual emotions and emotions that refer to the team on performance after controlling the identity process.	Design: Experimental design Participants: 30 elite male rugby players (Mage = 19.06 years) from the same U21 team, randomly divided into two teams. Procedure: A 30-minute competitive rugby union match is held to reproduce the official match conditions. Data Collection: Individual and team-level emotions felt (10-cm VAS scale) and performance were measured 17 times during the match. Performance is judged by elite coaches who watch video footage. Data Analysis: Chi-square test for emotion frequency, Linear Mixed Effects (LME) model for emotion intensity and performance.	High levels of self-abstraction (social identity conditions) lead to individual emotions and emotions that refer to more positive and intense teams, as well as less frequent negative emotions. After controlling self-abstraction, only positive emotions refer to the team that positively affect the performance of the individual and the team. Individual emotions have no significant effect on performance. The group of social identity conditions performed better and won 17-0. Individual performance in the personal identity condition decreases over time, while in the social identity condition it increases smoothly. This study suggests that social identity and its relationship to emotions that refer to teams can be a key dimension of the emotional-performance relationship in team sports. Coaches are advised to build a team identity to avoid negative emotions and facilitate positive emotions that refer to the team to improve performance.
4.	(Kerr, 2015)	To examine the motivational nature of participation to start and continue playing rugby among Canada's elite women's rugby union players. The secondary goal is to highlight their experience in full-contact sports that has historically been unavailable to women.	Design: The qualitative research methodology uses inductive thematic analysis, interpreted through reversal theory. Participants: Snowball samples from 10 Canadian international level elite women's rugby players. Data Collection: Semi-structured interviews are open (8 face-to-face, 2 phone). The interview is audio recorded and transcribed verbatim. Data Analysis: Inductive thematic analysis, followed by interpretation through reversal theory.	The motivation for participation is multifaceted, with motives changing and evolving over time, especially as players reach elite levels. Four main participation motivational themes and seven sub-themes were identified: Getting a good start with rugby; Physical aspects (physical and aggression; physical challenges); Achievements and successes (learning a new sport; a sport that suits my body type); and Player interaction on and off the field (team-mates/team environment; friendship and rugby community; being non-conformist). Pleasure from the physical and aggressive aspects are the main motives, but achievement, skill mastery, and achievement/survival at the elite level are also strong motives. These findings can inform sports psychologists and administrators (e.g., developing a positive team climate, promoting women's rugby with a focus on various aspects of interest).

5.	(Koutrou & Downward, 2016)	To explore the potential utilization of volunteering activities in a variety of contexts as a result of previous sports club volunteering experiences and to establish what determines the decision to volunteer and continue to volunteer. Addressing three key issues: identifying the effects of different factors on voluntary decision-making, examining whether involvement in one sport volunteering context stimulates further volunteering, and commenting on actions for governments/NGBs in realizing " <i>Big Society</i> " through sport volunteering.	Design: Survey-based study, using regression analysis. A case study of women's rugby union in England. Participants: 168 volunteers involved in women's rugby in England completed a web-based survey. The sample size for regression analysis was 131. Data Collection: Web-based survey prior to the 2010 Women's Rugby World Cup (WRWC). Post-event audits identify actual WRWC volunteers. Variables included socio-demographic characteristics, previous sports involvement, motivation, and satisfaction with volunteering. Data Analysis: Factor analysis to summarize volunteer satisfaction. Regression analysis (logistics and OLS) to identify impacts on actual WRWC volunteering and future volunteering intentions.	Supporting the transfer of volunteer efforts between activities. Factors influencing actual WRWC volunteering: Satisfaction with volunteer roles, communication within the club, being playing rugby, meeting the needs of others (altruism), having free time, British white ethnicity, and higher education. Full-time employment and student status reduce the possibilities. Poor satisfaction with the club's experience is a common determinant of volunteering at the WRWC or other rugby/sporting events, indicating the substitution of effort. The study highlights the potential of sports governing bodies to recruit existing club volunteers for events, and for the transfer of activities between sports. It supports the " <i>Big Society</i> " agenda.
6.	(Koutrou & Downward, 2016)	To explore the potential utilization of volunteer activities in a variety of contexts as a result of previous single sporting event experiences, and to determine what factors influence future volunteer decisions.	Design: Women's Rugby World Cup (WRWC) 2010 case study. Longitudinal survey studies (pre-event and post-event). Participants: 70 WRWC 2010 volunteers completed an online survey. Data Collection: Online survey (pre-event: socio-demographic profile, sport/volunteer experience, motivation; post-event: satisfaction, future intention to volunteer). Data Analysis: Analysis of factors for motivation and satisfaction. Regression analysis (OLS) to identify factors that influence future voluntary intentions.	Ensure multi-dimensional motivation of volunteers (8 factors: Career Orientation, Patriotism & community values, Interpersonal Contact, Recreation, Extrinsic Rewards, Expression of Values, Personal Growth, Love of Rugby). The highest motivation is the Expression of Values and Love of Rugby. Four satisfaction-related factors emerged: Tournament Facilities, Event Organization, Athlete Attitude, and Support to Volunteers. Volunteers report higher satisfaction with Tournament Facilities and Support to Volunteers. Future Volunteer Intentions: Higher education and satisfaction with event experience increase the likelihood of volunteering for similar sporting events in the future. Satisfaction with the WRWC experience increases the intention to volunteer at rugby and other sporting events but can hinder club volunteering. Highlight the potential of voluntary legacy and cross-contextual transfer efforts, emphasizing the role of support networks.
7.	(Chapron & Morgan, 2020)	To investigate how Welsh regional rugby academy head coaches can leverage collaborative action research (CAR) to influence collaboration, learning and pedagogical change within coaching groups.	Design: Collaborative Action Research (CAR) is practical. The process of planning cycles, data collection, analysis, reflection, and change. Participants: The principal investigator (Head Coach of the Welsh regional rugby academy) collaborated with two other professional rugby coaches and two sports science support staff. Data Collection: Reflective logs (lead researchers and other trainers), video observations of training sessions, and team meetings. Data Analysis: Systematic data analysis: organizing/subtracting data, familiarizing oneself, coding into first/high level themes, looking for evidence to corroborate claims.	The coaching team made significant progress in their collaboration, learning, and pedagogical practice. Collaboration: Initially a lack of involvement in joint planning, but increased engagement through a drive to reflect and discuss during meetings. Coach Learning & Pedagogical Practice: Identifies the need to change coaching approaches to improve player understanding and decision-making. An initial pedagogical lack of knowledge among trainers was identified, prompting head coaches to educate them on different strategies (e.g., Problem-Based Learning – PBL). The application of a more " <i>player-centred</i> " approach and PBL significantly improves the understanding of the player's game. CAR provides opportunities for coaching teams to develop their motivation, pedagogical knowledge, coaching practice, and reflective abilities. Action research is an effective way to develop expert knowledge and is an ongoing process that trainers should consider.
8.	(Smith et al., 2018)	To examine how leader communication inspires athletes in the context of team sports. In particular, to understand how leaders communicate in an inspiring way, learn from authentic recordings of elite leaders, and provide more detailed information about aspects of communication that affect player perception.	Design: Embedded mixed method design (especially qualitative with initial quantitative data). Participants: 20 men's club standard team sports players (10 rugby, 10 other team sports; Mage = 22.45 years). Stimulus Material: Authentic footage of an elite rugby coach and athlete leader (British and Irish Lions rugby union team, 1997 tour DVD) delivering a speech. Data Collection: Participants watched the clip, identifying moments of inspiration using a 7-point (quantitative) inspiration scale. A follow-up semi-structured interview is conducted, replaying inspiring segments, asking the " <i>why</i> " question. Data Analysis: Thematic content analysis for qualitative data, Mann-Whitney U test for quantitative inspiration scores between groups.	Six key dimensions of inspiring communication content emerge: Stating the challenges and rewards of success; Creating and increasing confidence; Embrace and strengthen underdog status; Showing how the team can be successful; Empowering athletes to take personal responsibility; Creating pride and unity within the team. Effective delivery features include: tone of voice, fluency in speech, use of pauses, repetition, and emphasis, building intensity on key points. Participants respond more positively when leaders promote a sense of group identity (e.g., using " <i>unity</i> ", " <i>chain</i> ", " <i>badge</i> "). It is recommended that someone with the highest inspirational qualities should deliver a speech, regardless of their formal leadership role.

9.	(Campo et al., 2019)	To test the effectiveness of Emotional Intelligence (EI) training interventions in sport to improve EI at trait levels, particularly in participants who were not previously motivated to do so.	Design: Intervention study with experimental group and control group. Participants: 67 players from professional rugby clubs. Professional team (N = 31) as the intervention group, U23 team (N = 36) as the control group (non-random). Data Collection: A trait EI questionnaire (TEIQue, French version) is filled out on pre- and post-tests. Intervention: Four face-to-face sessions over five months, with homework and follow-up procedures. The control group attended a video match analysis session. Data Analysis: MANOVA repeated measurements, with age as a covariate.	EI training is partially successful in improving EI at the trait level, particularly in subscales such as social competence, emotion perception, and emotion management, but not global EI of a nature. Adding age as a covariate reduces the size of the effect of EI training. Age is positively correlated with EI traits. It is possible to increase EI even in participants without pre-existing motivation. The results highlight encouraging developments in EI research.
10.	(Barden et al., 2022)	To assess the barriers and facilitators for coaches in implementing the Activate injury prevention training program in English men's school rugby.	Design: The qualitative study uses a framework approach, with four a priori themes (awareness, motivational determinants, volitional determinants, socio-environmental factors). Participants: The target sample was 10 boys' school rugby coaches from schools across the UK. Data Collection: Semi-structured, one-on-one interviews (50-70 minutes each) conducted through Microsoft TEAMS. Data Analysis: Thematic coding using NVivo, combining code into sub-themes in a priori theme.	Trainers generally have a positive perception of Activate, demonstrating a good knowledge of the effectiveness of the program. However, no trainer implemented Activate as per the original purpose; They highly adapt the delivery to fit their context, often for a variety of sports or by choosing a specific exercise. Barriers identified: Lack of coaches' awareness of poor Activate/dissemination of RFUs, time constraints, lack of player involvement, use of non-rugby-oriented teaching staff. Identified facilitators: Knowledge of Activate effectiveness and injury prevention, granting players autonomy to warm up, RFU resources, staff support. Players are often the agents of program delivery, although dissemination and training resources are directed to coaches. Requiring Activate training as part of a coaching qualification can increase self-awareness and efficacy.
11.	(Sly et al., 2022)	To analyse knowledge and perceptions of injury prevention and IPEP among staff, parents and players in youth rugby union, and to explore facilitators and barriers to IPEP implementation, in order to create tailored implementation strategies.	Design: Cross-sectional online survey. Participants: Community rugby union players aged 14–18, their parents, and staff (coaches, doctors, physiotherapists, S&C staff, team managers) in Australia. The survey was completed by 18 staff, 72 parents, and 56 players. Data Collection: An online survey with sections on demographics, competition logistics/resources, injury/prevention knowledge/perception, and rugby-specific IPEP knowledge/perception. Includes multiple-choice questions and free text. Data Analysis: Descriptive statistics for multiple choice, thematic analysis for free text responses.	Staff, parents and players generally believe that the risk of injury in youth rugby union is high and that injury prevention is important. Concussion and knee ligament injuries are considered 'serious' by most respondents. Strength and conditioning/fitness coaches and physiotherapists are considered the most appropriate people to manage an injury prevention program, followed by coaches. Identified barriers to IPEP completion: Poor attitude or motivation of players and staff, time constraints, lack of program awareness, untimely or poor player attendance. Identified facilitators: Leadership (strong leadership, value-conscious coach), use of role models (peers, professional players), structure and routine (part of a normal routine, incorporated into the schedule, consistency). Highlight the need for practical solutions, education, and consider the role of relevant health staff in facilitating IPEP.

Table 1 summarizes various studies related to sport, particularly rugby and leadership in the context of elite sports teams. The research covers aspects of athlete leadership quality and its impact on team effectiveness (Fransen et al., 2017), the ongoing motivation of elderly amateur rugby players based on the concept of "serious leisure" (Cheng et al., 2016), as well as the influence of social identity on emotions and performance in team sport (Campo et al., n.d.). Another study explored the motivation of Canada's elite women's rugby players in the context of full-contact sport (Kerr, 2015), volunteer support and motivation in women's rugby and the transfer of volunteer activities between contexts (Koutrou & Downward, 2016), as well as coaching collaboration and learning through collaborative action research (Chapron & Morgan, 2020). In addition, the study also discussed the communication of leaders who inspire athletes (Smith et al., 2018), the effectiveness of emotional intelligence training in professional rugby players (Campo et al., 2019), and barriers and facilitators in the implementation of injury prevention programs in school rugby (Barden et al., 2022; Sly et al., 2022). The overall findings highlight the importance of psychological, social and structural aspects in improving performance, continued participation and safety in rugby and elite sports teams.

DISCUSSION

The role of motivation in the performance of rugby athletes

Motivation plays a very important role in determining the performance of rugby athletes. In sports that require strong physical and mental strength such as rugby, motivation is the main factor that affects the level of involvement and consistency of athletes in undergoing training and matches (Durand-Bush et al., 2023). Without sufficient motivation, athletes tend to lose focus and enthusiasm easily, so their performance can decrease (Johnson & Peters, 2014). Intrinsic motivation, which comes from within the athlete himself such as the pleasure and satisfaction of playing rugby, plays a big role in maintaining a long-term commitment (Ajlouni et al., 2023). When an athlete enjoys the process of training and matches, they will naturally be more diligent in training and trying to improve their skills (Behnke et al., 2019). Feelings of satisfaction and pride in personal achievements encourage athletes to continue to develop without having to rely on external factors (Almagro et al., 2020). In addition, extrinsic motivation also provides an additional boost that is no less important (Morris et al., 2022). Awards, social support from family, coaches, and teammates, and expectations for professional achievement can spur athletes to be more active and excited. Mental development through psychological training can strengthen this motivation so that athletes are able to manage stress and improve their performance on the field (Reinebo et al., 2024). With a balanced combination of intrinsic and extrinsic motivation, the performance of rugby athletes becomes more optimal.

The influence of coaches' leadership style on player motivation

The influence of the coach's leadership style on player motivation is significant in shaping team spirit and performance (Keegan et al., 2014). The right leadership style can increase the intrinsic motivation of the player, which is the drive that comes from within to excel and contribute optimally to the team (Xue et al., 2022). In addition, the leadership style also fosters a greater sense of responsibility in players for the overall success of the team, so that they are more passionate and committed in carrying out their respective roles (Fan et al., 2023). Communication by coaches plays an important role in motivating players (Davis et al., 2019). Coaches who are able to provide inspirational communication and support group identity are often more effective at increasing athlete motivation (J. P. Pope et al., 2014). Motivation that comes from inspiration and a sense of community in a team has proven to be stronger and more lasting than motivation that is based solely on formal authority or rules (Scotto di Luzio et al., 2020). As such, coaches need to build positive relationships and encourage players so that they feel valued and involved in the team's process. In addition to communication, the coach's approach that is able to facilitate player-based learning and collaboration between coaches also plays an important role in increasing motivation and understanding of athletes' games

(Larkin et al., 2022). In an environment conducive to learning and collaboration, players feel more involved and have the opportunity to develop their skills independently. This kind of leadership helps players not only be emotionally motivated, but also intellectually in understanding the strategy and objectives of the game, which ultimately improves performance and teamwork.

Social and cultural dimensions in rugby playing motivation

Motivation in playing rugby is greatly influenced by the social and cultural dimensions that surround it (J. Pope & Wilson, 2012). At the community and school level, the desire to demonstrate courage and masculinity identity is one of the main factors that drive individuals to get involved in this sport (Kingsman, 2023). Rugby is often associated with the values of strength, toughness and courage which are considered important in the formation of character and self-image, especially for young men (Paul et al., 2022). In addition, group solidarity also plays a significant role in motivation to play rugby (Chiwaridzo et al., 2019). The sense of community and unity formed within the team provides a strong incentive to actively participate (Bloom et al., 2003). A supportive social environment, such as coaches, teammates, and the surrounding community, creates an atmosphere that fosters passion and loyalty to the sport, leaving players feeling valued and motivated to continue to improve (Simons & Bird, 2023). At the level of elderly amateur players and women, the motivation to play rugby has shifted focus. They are more driven by a sense of belonging to the sports community, friendship, and self-identification with the values and culture of rugby itself. These psychosocial factors confirm that motivation in rugby is not only based on physical or competitive aspects, but also on complex emotional and social needs, which drive long-term participation.

The role of motivation in volunteering and injury prevention

The role of motivation is crucial in supporting volunteer activities, especially for coaching staff and volunteers in rugby sports environments (Neely et al., 2022). This motivation is a key factor in carrying out their roles consistently and dedicatedly. Through strong motivation, they not only help develop players' abilities, but also contribute to the success of safety programs that aim to prevent injuries while competing or practicing. The motivational factors that drive volunteer engagement are very diverse. Some of them are motivated by the expression of personal values, such as a passion to help others and contribute positively to the sports community. In addition, the love for the sport of rugby itself is also a major driver that makes volunteers feel satisfied and continue to participate in various activities. This intrinsic motivation is able to significantly improve the quality and quantity of volunteer involvement. However, challenges such as lack of awareness of the importance of volunteers' roles as well as time constraints are major obstacles that must be overcome (Southby et al., 2019). For this reason, proper training and continuous support are needed so that the coaching staff and volunteers can carry out their duties optimally. With this approach, injury prevention programs and volunteer activities can run more effectively and support the overall development of the sport of rugby.

Interventions and training to improve motivation and performance

Interventions and training designed to improve the motivation and performance of rugby athletes have an important role to play in supporting team performance (Sato et al., 2023). One approach that shows significant potential is emotional intelligence training. By improving athletes' ability to recognize, understand, and manage their own emotions, this training helps players to deal with pressure during games more effectively (Kopp et al., 2021). In addition, the development of the team's social identity is also the main focus in this intervention. When players feel connected and have a strong sense of community within the team, they tend to show higher motivation and a better fighting spirit. A strong social identity creates an emotional bond between team members, which contributes to creating a positive atmosphere on the field. Overall, this training strategy that combines psychological aspects has a real positive impact on the performance of rugby athletes.

A comprehensive approach not only improves the technical and physical aspects but also focuses on the mental and emotional well-being of players. Thus, the development of rugby athletes becomes more holistic and sustainable, resulting in optimal performance in every match.

Practical implications for policy trainers and developers

The findings suggest that coaches need to adopt leadership styles that are both intrinsically and extrinsically motivating, build a team climate of strong solidarity and social support, and pay attention to the diversity of athletes' sociocultural backgrounds. Support in the development of emotional intelligence and effective communication is also key in improving athlete performance and safety. In addition, the development of volunteer training and injury prevention programs that take into account motivations and on-field barriers is critical to the sustainability of rugby more broadly.

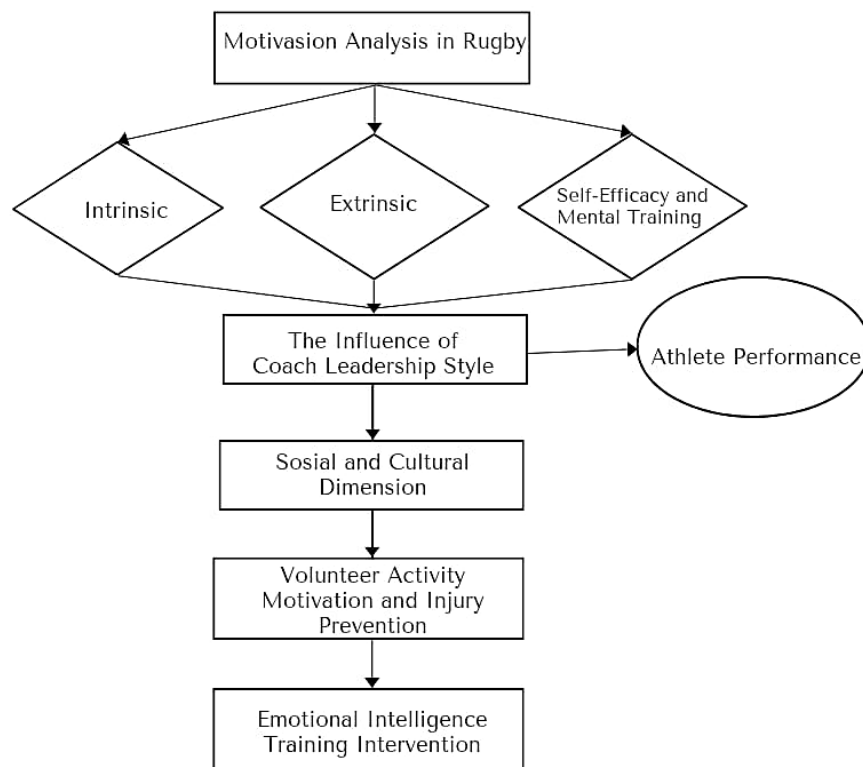


Figure 2. Framework Motivation analysis rugby.

Recommendations for further research

The future research recommendation in this study is to explore more deeply the influence of rugby coaches' transformational and democratic leadership styles on athletes' intrinsic and extrinsic motivations in the context of intensive training and competition, taking into account moderation variables such as sociocultural background and emotional intelligence of players. Research can test the effectiveness of leadership training interventions focused on developing inspirational communication and psychological support to improve ongoing motivation as well as overall team performance. In addition, it is important to examine the role of motivation in stress management and athlete injury prevention, as well as how coaches and volunteer staff can be optimised through motivation-based training to support the safety and sustainability of the sport of rugby. This multidimensional approach will provide a comprehensive overview of the most effective leadership and motivational strategies in the development of rugby athletes at various levels.

CONCLUSION

The conclusion of this study is that motivation, both intrinsic and extrinsic, plays a key role in improving the performance of rugby athletes. The coach's inspirational and supportive leadership style is able to significantly increase player motivation, which has a positive impact on the effectiveness of the team. In addition, social and cultural factors also play an important role in shaping athletes' motivation, especially in terms of identity, solidarity, and a sense of belonging to sports. Motivation is also important for coaching staff and volunteers for the sustainability of the sport development and safety program. Interventions that focus on emotional intelligence training and effective communication can significantly improve athletes' motivation and performance. Therefore, coaches and policy makers are advised to integrate a motivating leadership approach, strengthen a solid social climate, and pay attention to the diversity of athletes' backgrounds to improve performance and safety in rugby.

AUTHOR CONTRIBUTIONS

Nanang Indriarsa: Visualization, investigation. Suryanto Agung Prabowo: Data curation. Anung Priambodo: Conceptualization, data curation. Rizki Satrio Utomo: Formal analysis, data curation. Ainun Zulfikar Rizki: Writing – review. Alvin Afandi: Methodology, writing – review, editing.

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No potential conflict of interest was reported by the authors.

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