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Coach communication and athlete performance: toward an integrated framework of verbal, nonverbal, and relational mechanisms

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ABSTRACT

This systematic literature review critically synthesized peer-reviewed research on coach communication skills and their effects on athlete performance, motivation, and well-being. Guided by the PRISMA 2020 framework and the FICO quality-appraisal criteria (Focus, Information, Context, and Outcome), the review examined how verbal, nonverbal, and relational communication behaviors of coaches influence athlete outcomes across different cultural and contextual settings. Literature was retrieved from the Scopus database, yielding 108 records. After screening and applying inclusion and exclusion criteria, 50 articles were selected for qualitative analysis.

The thematic synthesis identified four major findings. First, verbal guidance and encouragement were positively associated with athletes' self-efficacy, motivation, and immediate performance, with the effects varying according to feedback timing, feedback type, and gender. Second, nonverbal communication, including gestures, facial expressions, and coaches' psychological disposition, contributed significantly to athletes' psychological safety and emotional regulation. Third, the quality of coach-athlete communication mediated the relationship between transformational leadership and team cohesion, thereby influencing organizational and team performance. Fourth, cultural, generational, and technological contexts, such as parental involvement, religious practices, gender norms, and AI-mediated coaching tools, shaped how communication was delivered and interpreted.

This review contributes theoretically by distinguishing nonverbal communication as a distinct dimension within coach-athlete relationship dynamics rather than merely a component of general relational communication. Practically, the findings support the development of evidence-based coach education programs that emphasize effective feedback delivery, nonverbal communication awareness, and culturally responsive communication protocols. Future research is recommended to employ longitudinal and experimental designs, standardized communication measurement instruments, and more inclusive samples involving youth athletes, athletes with disabilities, and e-sports participants.



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Introduction

Coaches know that training is necessary but not sufficient for an athlete to perform. Sports teams are becoming aware of this fact and coaches are being taught to interact with their players on several levels. The

way the coach gives an athlete information or tells them what needs to be done, as well as, when the coach is giving positive or constructive feedback and even sharing encouragement with them, can all be linked with athlete's motivational levels and their decisions to stick with their sport. Moreover, this affects whether a club or sport organization can continue to be effective. Rising public and media attention on players welfare, and the gradual process of professionalization of coaches profession, have combined to create the situation where the coach's ability to communicate with others can be considered as essential as the skills which a coach uses to plan the game, and the knowledge of the body which they use to help an athlete perform. This change at the topmost level is evident in more and more coach training programmes and diplomas including communication skills as a subject alongside topics like biomechanics and sports training scheduling. These changes signal that people in sports now believe that it not just the message itself, but mainly how a message gets across that is what counts.

However, within the bigger picture, focusing only on the coaches' verbal and nonverbal communication techniques and the athletes' outcomes, i.e., their self-efficacy level, motivation, team cohesion, and on-field performance is very narrow in scope (for review see Sağ & Polat, 2026). In fact, coaches use several types of communication modes to communicate at the same time for instance their spoken word, tone, posture, and even the choice in timing. The way the athletes process all these modes is largely dependent on their own development stage, cultural background, and past relationship with the coach. It is not just a theoretical or descriptive problem. It has real-world consequences: communication difficulties and ill-advised feedback have, for example, been linked to lower self-efficacy level and disengagement among athletes, while, on the positive side, good-calibrated messages have been found to lead to motivation, psychological safety ((Javed et al., 2020)). So, the only way of thoroughly capturing what happens here is by going deeper than coach anecdotes, into a comprehensive review of the accumulated literature.

A number of independent research papers have already been conducted looking at certain aspects of coach-communication. One research group studied the type and content of verbal feedback made by coaches to players in professional soccer (Page et al., 2025) whereas another group of researches analyzed the effect of the placebo-like performance through the verbal communication done during the warm-up stage (Bisio et al., 2024). They discovered also the gendered nature of the verbal encouragement given during physical testing (Romdhani et al., 2025). Simultaneously, another strand of research looked at non-verbal channels: body language use was one of them, explored via research on elite athlete communication (Rahmalina et al., 2025), followed the post match nonverbal behavior in table tennis player pair-ups (Fritsch et al., 2026) and examined the use of mental imagery cueing by national teams' coaches (Ribeiro et al., 2025). Some other works were about communication in a way that does not take it into account directly, considering it just as a mediator or moderator within a larger leadership and cohesion model (Oh, 2023; Bedir et al., 2023). Overall, the mentioned studies have made it apparent that one's ability to convey thoughts and feelings can be a subject for empirical examination. Nevertheless, these works have been more or less along the lines of disciplines and have not really constituted a fully integrated research direction.

In the recent years, this research area has seen significant methods and technical improvements. Researchers are now experimenting in soccer training facilities with a comparative analysis of human-led reflective conversation and artificial-intelligence-based tactical advice ((Sahli et al., 2026)), exploring the use of virtual reality as an aid for identifying shared mental models among team sports athletes ((Behlau et al., 2025)), or identifying variations of verbal and nonverbal communication for the case where the same physical activity is performed together (in-person setup) or streamed separately (Islamic et al., 2026)). Coaching communication has also gained access to modern information and communication technologies like video-based educational tools for athlete learning, which is adapted from corporate training models (Mičiak et al., 2026). These emerging trends indicate that a discipline is undergoing a change. In such settings, conventional interpersonal coach-athlete communication becomes more a channel for digital and algorithmic assistance in the forms of being recorded, supplemented, and partially replaced, leading not only to technological issues such as authenticity, trust, and the question of preservation of genuine and close relation between two people who interact through the medium of technology.

In spite of the growing evidence, a first and critical gap still exists: the literature remains devoid of an integrative synthesis bridging the verbal, nonverbal and relational communication streams into one coherent analytical framework. The literature reviews and the empirical analyses carried out so far mostly focus on single modalities such as verbal feedback ((Page et al., 2025)) or body language ((Rahmalina et al., 2025)), but do not model how multiple channels might be interacting in real-life coaching situations. Papers like the interdisciplinary review of self-talk ((Latinjak et al., 2023)) and the integrative syntheses of psychological support systems ((Lykkeskov et al., 2020)) point to the need of integration but they fall short of systematically

documenting the role of communication-related mechanisms across performance literature. As a result of such fragmentation, the field is unable to produce a set of clear and data-backed recommendations for coach education programs that prepare coaches to become communicators first and foremost and not just masters of individual communicative channels.

A second gap is the lack of theoretical and methodological development. The majority of previous research employs methods such as cross-sectional self-report surveys with convenience samples of athletes or coaches, which limits the possibility of inferring the causal direction that communication leads to changes in performance over time. Even well-conceived qualitative studies, such as the phenomenological study of social support in elite para swimmers (Aitchison et al., 2021), or narrative studies of applied sport psychology practice (Tod et al., 2023), provide detailed contextual information although they may not represent other groups. There are a very few instruments measuring psychological constructs in sporting contexts; a recent attempt of instrument validating including the Perceived Benefits of Team-Interaction Training Questionnaire (Chen et al., 2023), and the Malay version of the Coach-Athlete Relationship Questionnaire (Kuan et al., 2024) is a good development in psychometric measurement but the sport psychology field still relies mainly on measures that are not yet sport-specific. A major factor holding the growth of the field is lack of consistent validated measures. It is practically impossible to do a large-scale comparison or meta-analysis without consistent measures because that means researchers' reports cannot be properly compared.

These two gaps communication channels fragmented across different mediums and methodological heterogeneity of the studies serve both as a basis and a justification for a systematic review of this topic that the paper attempts to present. Coach education has been formalized while digitally mediated coaching tools are becoming more prevalent. The need for coach training is such that coaches, practitioners as well as policymakers, require consolidated, evidence-based description of the communication behaviors that reliably predict positive athlete outcomes, under what conditions and for which kind of people. Not having a synthesis work, coach education curricula might rely on intuition or fragmented and one-study findings rather than the evidence. This review fulfills this need first by systematically aggregating and thematically synthesizing the recent empirical literature on coach communication skills and athlete performance and then by providing transparency and reproducibility via the PRISMA 2020 reporting framework.

To address the fragmentation and methodological gaps identified above, this review's explicit objective is to systematically map, through the following three research questions, how coach communication functions as a psychological, relational, and contextual mechanism shaping athlete outcomes. Based on these thoughts, this review is driven by three research questions which together provide three levels on how the understanding of the field could be deepened. The first one is concerned with the psychological processes via which a coach's communication influences the individual performance of the athlete. The second question is about how the communication of a coach is used in team-level processes such as leadership and teamwork to influence collective performance. The last one focuses on environmental and contextual factors such as cultural background and technology, which influence or change how coach communication is done in a coach-athlete relationship.

Method

Research Design and Framework

Researchers can use a systemic literature review method (SLR) to find evidence on their study question without being too influenced by bias, and besides, their work is open and other researchers can repeat it. For example, by a contrast between a SLR paper where a researcher gathers evidence using clear and consistent search protocols, eligibility criteria before the screening and after selection of papers, extraction of data, and report, which includes an evidence table and a summary of evidence. The review process, from identifying the research to the final article, was described by using a PRISMA 2020 diagram which shows when different stages are conducted and how different papers can be excluded.

Search Strategy

The strategy of searching used the terms indicating the coaching agent, the communicative process and the athlete outcome, which were bound together via Boolean operators and applied to: title; abstract; keywords.

("coach*" OR "trainer*") AND ("communication" OR "feedback" OR "verbal" OR "nonverbal" OR "leadership") AND ("athlete*" OR "sport*" OR "team performance")

Paper truncation, marked with an asterisk, allowed finding word variations like coach, coaches, coaching, etc., or athlete and athletes. The field codes limiting searching to the title, abstracts, and keywords (TITLE-ABS-KEY) were used within the Scopus. We did not set language and type of the document limitations during the search stage; the requirements were added later during the selection process explained in Section 3.4.

Database and Information Sources

We relied exclusively on Scopus, the major bibliographical dataset with its wide range of disciplines including sport science, psychology, and communication studies journals, for our investigation. Scopus was selected as the sole source because its multidisciplinary indexing of sport science, psychology, and communication journals was judged to offer sufficient coverage for the scope of this review, though this single-database approach remains a limitation relative to a multi-database search. The search had taken place, and the result was exported on 19 June 2026. Other databases, however, were not examined. Using just one dataset is identified as a potential constraint in Section 5.5.

Eligibility Criteria and Study Selection Process

The selection of studies followed two distinct stages based on the PRISMA 2020 guidelines. In the first stage, the titles and abstracts of all 108 records that had been identified were checked against the eligibility criteria in Table 1 to determine which should be excluded. Reasons for exclusion included records which were formally retracted, lacked complete bibliographic metadata necessary for citation verification, or were obviously outside the disciplinary area of coach-athlete communication research (for example, studies situated in clinical medicine, business pitching, or pure exercise physiology unrelated to communicative process). Then, in the second stage, the rest of the records were fetched in full text version by the reviewer and were checked only against whether the article contained a communicating, relational, or interpersonal mechanism that directly connected coaching behavior and a coach-level or athlete-/team-level result. Those sport psychology research articles that did not have a communication component were excluded at this point. Screening was executed by the reviewer author based solely on his documented criteria; since there was no second independent screener involved, it was acknowledged as a limitation in Section 5.5.

Table 1 <Inclusion and Exclusion Criteria>

Criterion	Inclusion	Exclusion
Language	English only	Non-English
Document type	Peer-reviewed journal article	Conference paper, book chapter, editorial, retracted article
Publication period	2020–2026	Before 2020
Subject area	Sport coaching, sport psychology, communication in sport	Unrelated clinical, business, or purely physiological disciplines
Metadata completeness	Complete bibliographic record with verifiable DOI	Incomplete metadata or missing DOI
Relevance	Directly addresses a coach-athlete communicative or relational mechanism	Tangential mention without communicative focus

Quality Assessment, FICO Framework

The studies included in the evaluation were assessed for both methodological and topical quality by the FICO quality framework. This framework assesses each paper according to four FICO criteria: Focus ("communication-related research question"), Information (whether sufficient sample, design, measurement are presented), Context (what the setting was: sport, culture, or organizational), and Outcome (whether the reported athlete or team outcome was clear and relevant). Those studies demonstrating sufficient clarity in at least three of the FICO dimensions, as determined from the title, abstract, and other metadata, were eligible for data extraction; the remaining studies were excluded for offering only marginal or unclear references to communication-related focus, information, context, or outcome.

Data Extraction Procedure

Details on these studies, 50 papers included in our analysis, were drawn first from Scopus metadata and abstracts: names of authors, date of publication, home country of the scholars involved, journal, research design or methodology, sport/population studied, the communicative variable addressed in each paper, and key insight about athlete/team behavior or improvement were all collected. The information was then summarized and presented along with the categories to Sections 5.2 in the form of table(s).

Descriptive Bibliometric Profiling

We performed a descriptive bibliometric analysis on the included articles, which described the time distribution of the publication, the locations of the author affiliations, and the most recurrent terms in the titles and author keywords of the works. Profiling was accomplished manually from metadata extracted from Scopus instead of dedicated bibliometric software. The results can be found in a descriptive form in Section 5.2 rather than being a part of a network analysis. This limitation in scope is discussed in Section 5.5.

Data Analysis and Synthesis

Data synthesis applied a thematic synthesis strategy where results of the 50 included studies were first coded using inductive methods according to the communicative mechanism and outcome that were discussed. Afterwards, the coding was organized deductively in order to address each of the three research questions by pinpointing the points of agreement, disagreement, as well as factors that may have moderated the results depending on the study contexts. The identification of the main themes in the study involved the process of comparing the emergent codes with the complete set of extracted findings on an iterative basis until a consistent thematic framework, which is presented in Section 5.3, could be achieved.

Reporting and Documentation

The paper adheres to the PRISMA 2020 flow diagram guidelines depicting the processes of identification, screening, eligibility, and the inclusion stages. Moreover, it reports the search strategy, eligibility criteria, and synthesis methods following the framework that emphasizes transparency and reproducibility.

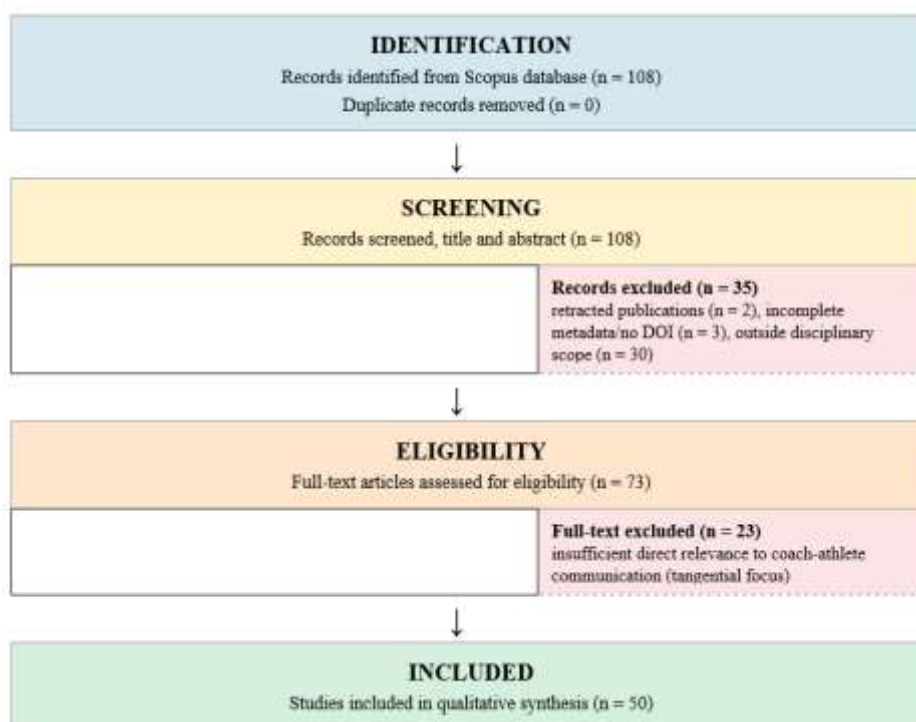


Figure 1 <PRISMA 2020 Flow Diagram>

Results and Discussions

Study Selection Results

The Scopus search carried out on 19 June 2026 yielded 108 records. There was no de-duplication and no duplicate records were found thereby resulting in 108 records for title and abstract screening. In this step, 35 articles were rejected; formal retractions constituted two, three were lacking the essential bibliographical metadata (at least the existence of a verifiable DOI) to ensure that citations were correct and 30 were clearly outside the field of coach-athlete communication. This was demonstrated mainly by research being located in clinical medicine, menstrual physiology, pharmacology, business pitching, and exercise-physiology outcomes unrelated to communicative process. 73 remaining papers were retrieved and full-text eligibility criteria (FICO quality criteria) against which papers were examined, along with relevance were described in Sections 3.5 and 3.6, were applied. Herein, 23 were ruled out since they did not address a coach-athlete

communicative or relational mechanism directly enough, very often because the communication aspect was only mentioned as a footnote of the study focused on a completely different primary construct. This led to 50 papers remaining for the step of data extraction and themes, a number which is identical with that given in the figure of the flow diagram in Section 4.

Descriptive Characteristics

Table 2 <Summary of Included Studies (Representative Sample, n = 10)>

Title	Author(s)	Country	Method	Key Findings
Coaches from the perspective of athletes: The impact of coaches' communication skills on t	Sağ et al., 2026.	Turkey	Quantitative survey	Coaches' communication skills predicted athletes' general self-efficacy and happiness across team and individual sports.
Body language and words: a multimodal analysis of elite athletes' communication	Rahmalina et al., 2025.	Indonesia	Qualitative multimodal analysis	Body language and verbal cues combined to form a coherent multimodal communicative signature among elite athletes.
"Suspended Above, and in Action": Think Aloud as a Reflective Practice Tool	Stephenson et al., 2020.	United Kingdom	Qualitative (Think Aloud protocol)	Think Aloud protocols revealed coaches' in-action reflective reasoning as a communicative and pedagogical tool.
From distress to success: Serial winning coaches' strategies to reestablish adaptive cultu	Fraser et al., 2025.	Canada	Qualitative case study	Serial winning coaches used deliberate communication strategies to rebuild adaptive culture after periods of distress.
Communication and Team Cohesion Moderate the Relationship Between Transformational Leaders	Oh., 2023.	United States	Quantitative survey (moderation model)	Communication and team cohesion jointly moderated the link between transformational leadership and athletic performance.
Verbal Feedback Is the Primary Mechanism for Performance-Related Review in Professional En	Page et al., 2025.	United Kingdom	Mixed-methods quantitative exploration	Verbal feedback was identified as the primary mechanism for performance-related review in professional soccer.
Parent Attitudes Toward Sport Coach Communication and Knowledge: Exploring Priorities, Goa	Bell et al., 2026.	United States	Quantitative survey	Parents' attitudes toward coach communication shaped priorities and expectations within youth sport ecosystems.
Bridging the gap: psychological foundations of coach communication in grassroots football	Akbar et al., 2025.	Indonesia	Qualitative case study	Shared psychological foundations underpinned coach communication practices in grassroots football across two countries.
Menstruation and training – A quantitative study of (non-)communication about the menstrea	Laske et al., 2024.	Germany	Quantitative survey	Communication, or its absence, about the menstrual cycle in sports clubs reflected broader organizational communication norms.
Verbal Communication, Coordinated Effort, and Performance in Esports Teams: An Expert–None	Eldadi et al., 2025.	Israel	Experimental (expert–nonexpert paradigm)	Verbal communication and coordinated effort jointly predicted performance in esports teams of differing expertise.

Table 2 presents an illustrative subset of ten studies for readability; the complete classification of all 50 included studies, together with country, thematic focus, and source journal, is reported in full in Table 3 below.

Table 3. Classification of All Included Studies by Theme (n = 50)

Author (Year)	Country	Theme/Focus	Source Journal
Aitchison (2021)	United Kingdom	Social support & well-being	BMC Sports Science, Medicine and Rehabil
Akbar (2024)	Indonesia	Coaching practice & case study	Retos
Akbar (2025)	Indonesia	Coach communication (cross-cultural)	Retos
Angoy (2025)	Indonesia	Athlete development	Retos
Bedir (2023)	Turkey	Communication & team cohesion	Frontiers in Psychology
Behlau (2025)	Germany	Shared mental models (VR)	Team Performance Management
Bell (2026)	United States	Parent-coach communication	International Journal of Sport Communica
Bisio (2024)	Italy	Verbal communication & performance	Psychology of Sport and Exercise
Caso (2026)	Netherlands	Intra-team communication (ecological)	International Review of Sport and Exerci
Chen (2023)	China	Team-interaction measurement	BMC Medical Education Societies
Corvera-Velarde (2025)	Mexico	Team cohesion measurement	
da Silva Neto (2025)	Portugal	Coach leadership development	International Sport Coaching Journal
Eldadi (2025)	Israel	Esports verbal communication	Journal of Sport and Exercise Psychology
Firek (2022)	Poland	Referee communication climate	International Journal of Environmental R
Fraser (2025)	Canada	Coach communication strategy	Journal of Applied Sport Psychology
Fritsch (2026)	Germany	Nonverbal behavior	International Journal of Sport and Exerc
Goes (2025)	Brazil	Coach intervention & feedback	International Journal of Sports Science
Gould (2020)	United States	Generational coaching communication	Journal of Applied Sport Psychology
Hendrawan (2025)	Indonesia	Coach leadership & motivation	International Journal of Human Movement
Islam (2026)	United States	Verbal/nonverbal modality comparison	Ergonomics
Javed (2020)	Pakistan	Coaching & team cohesion (psych.)	Journal of Physical Education and Sport
Khacharem (2025)	France	Cultural/religious communication context	Tunisie Medicale
Kuan (2024)	Malaysia	Coach-athlete relationship measurement	Malaysian Journal of Medical Sciences
Laske (2024)	Germany	Organizational (non-)communication	International Journal of Sports Science
Latinjak (2023)	United Kingdom	Self-talk (athlete self-communication)	Review of General Psychology
Levillain (2026)	France	Emotional intelligence training	Performance Enhancement and Health
Loo (2024)	Singapore	Evidence-based coaching practice	International Journal of Sports Science

Author (Year)	Country	Theme/Focus	Source Journal
Lower-Hoppe (2020)	United States	Communication & team performance	International Journal of Sport Communica
Luguterah (2023)	Ghana	Coach-athlete interaction (COVID context)	International Sport Coaching Journal
Lykkeskov (2020)	Denmark	Psychological support systems	Human Arenas
Mičiak (2026)	Slovakia	Technology-mediated athlete education	Big Data and Cognitive Computing
Mola (2024)	India	Managerial/communication skills	International Journal of Kinesiology and
Nazarudin (2025)	Malaysia	Coach-mediated self-efficacy program	International Journal of Human Movement
Nolan (2024)	Ireland	Gendered coach communication	Journal of Sports Sciences
Oh (2023)	United States	Communication, leadership & cohesion	SAGE Open
Oh (2023)	United States	Team cohesion & leadership	Healthcare (Switzerland)
Page (2025)	United Kingdom	Verbal feedback (elite soccer)	International Journal of Sports Physiolo
Rahmalina (2025)	Indonesia	Multimodal athlete communication	Retos
Ribeiro (2025)	Portugal	Mental imagery communication	Sports Coaching Review
Richlan (2023)	Austria	Referee self-efficacy & motivation	Humanities and Social Sciences Communica
Romdhani (2025)	Tunisia	Verbal encouragement (gendered)	Acta Psychologica
Sahli (2026)	Tunisia	AI-mediated vs human dialogue	BMC Sports Science, Medicine and Rehabil
Sağ (2026)	Turkey	Coach communication & self-efficacy	International Journal of Sports Science
Schwarz (2021)	Australia	Evidence-based practice perceptions	International Journal of Sports Physiolo
Stephenson (2020)	United Kingdom	Reflective communication practice	International Sport Coaching Journal
Tod (2023)	United Kingdom	Applied sport psychology narratives	Sport Psychologist
Trotter (2021)	Australia	Social support (e-athletes)	Frontiers in Psychology
Wallace (2020)	United States	Athlete leadership development	Strategies
Wang (2023)	China	Social environment & motivation	Current Psychology
Wood (2020)	United Kingdom	Motivational interviewing	Journal of Rational - Emotive and Cognit

Findings for RQ1

The first research question focuses on how a coach's verbal and non-verbal communication behaviors influence individual athletes' psychological states and their ultimate performance. In the majority of the studies, verbal feedback was recognized as the leading method. In professional English soccer, verbal feedback was found to be the main means used by the coaches when delivering performance-related reviews to the players, and it was the one with the most frequent delivery and the highest perceived impact ((Page et al., 2025)). Further experimental research demonstrated that verbal communication administered in a placebo-like manner during warm-up exercises actually enhanced the level of performance in subsequent physical exertion ((Bisio et al., 2024)), whereas verbal encouragement during strength and endurance assessments not only enhanced the results but also that the person (male or female) giving the encouragement had an influence on the effectiveness of the encouragement itself ((Romdhani et al., 2025)). These findings altogether suggest that verbal input serves not only as delivering information but also as a tool activating the performer's performance in different ways depending on different characteristics such as time and source of the delivery.

Nonverbal and self-directed communication channels showed comparable effects on individual psychological states, with self-directed communication probably causing a larger change in the behavior. Research on elite athletes from the multimodal aspect demonstrated that spoken words and body expressions together represented a harmonious communication signature at both levels (Rahmalina et al., 2025). Usually, verbal expressions are either predicted by, or made more convincing through, a speaker's gestures and mannerisms. In the sport of table tennis an analysis of athletes' and spectators' recognition of post-performance nonverbal behavior correlated with point outcomes suggesting that the nonverbal display itself was an indicator or cue of communicative interaction between two competitors (Firisch et al., 2026). Studies of the internal conversation of athletes show that athletes' thinking that is verbal and self-regarding works like coaches' verbal communication to the athlete to control and monitor one's performance during a sporting act and emotions simultaneously (Latinjak et al., 2023). Beach volleyball coaches employing mental imagery cueing were another example of verbally guiding athletes towards the creation of internalized, nonverbal rehearsal images of the actual performance (Ribeiro et al (2025)).

Another batch of papers looked at how the communication-adjacent psychological skill-building influenced self-efficacy and motivation. A study by SUPER rugby program showed that when coaches were trained to deliver communication about self-efficacy, mental skills, and emotional management, youth athletes' outcomes significantly improved (Nazarudin et al., 2025). Motivational interviewing techniques were successfully applied and combined with rational emotive behavior therapy methods and a self-determined motive was developed. Additionally, the athlete's performance level was improved in an elite athlete case study Wood et al., (2020). An online program of emotional intelligence training also contributed to athletes' self-regulation of defensive mechanisms with communicative framing of the training being identified as an essential component by Levillain et al. The validation of Group Environment Questionnaire on Mexican university athletes (Corvera-Velarde et al., 2025) as well as the personal development research in basketball players Angoy et al., (2025) pointed out that not only does psychological readiness at the individual level such as self-efficacy and identity development happen, but, equally important, these develop only at the interface of the athlete's environment, particularly when this environment is coach-led and is communicative.

The overall evidence pointing toward RQ1 supports coach communication as a threefold convergent pathway via which individual athletes respond. It starts with the delivery of direct verbal feedback which can stimulate both performance and self-efficacy as shown (Page et al., 2025; Bisio et al., 2024). The second pathway involves non-verbal and self-regulatory communication cues that modulate emotional and cognitive states, which is the focus of studies by Rahmalina et al., (2025) and Latinjak et al., (2023). Thirdly, the findings point to the use of a structured communicative scheme as a way of building athletes' psychological skillset over time, e.g., by Nazarudin et al., 2025, or Wood et al., 2020. Very importantly, narratives on helping that were collected as part of applied sport psychology practitioners, did not at all emphasize a coach-led mode of communication with athletes as a vehicle of success. On the contrary, they indicated that client-led, dialogic communication, rather than directive instruction, is the factor most linked with athlete buy-in and long-term behavior change as reported by Tod et al., (2023) which implies that the communication directionality and tone, not its content, have the psychological effect at the forefront.

Findings for RQ2

The second research problem is investigating whether coach and athletes' communication either mediate or moderate the effect of leadership, cohesion, and team performance on each other. The two studies that are closely tied provide solid empirical evidences for this very research problem: together communication and team cohesion were found to be moderators of the transformational leadership-athletic performance relationship in a study ((Oh, 2023)), and another one found that team cohesion alone was a mediator between transformational leadership and social norms in both individual and team sport athletes ((Oh & Yoo, 2023)). The results of those two studies indicate that communication should not only be regarded as a peripheral facilitator but rather a structural component of that leadership-cohesion-performance chain. The notion gets further support by the research evidence that communication skills acted as a mediator in empathy, team cohesion, and competition performance among curlers ((Bedir et al., 2023)).

Team communication systems were explored from an ecological perspective as well. With the notion of intra-team communication in team sports as a dynamic, contextual process that is part of a communication ecosystem, as distinct from a static trait of individual communicators (Caso et al., 2026), this line of ecological reasoning was consonant with findings on communication in a team through captain relationships based on the captain's position in a team. For instance, Lower-Hoppe et al., 2020 demonstrated that football team performance and communication are co-evolutionary concepts that are related to the

leaders' positioning of the relationships within the group. Furthermore, the method used to investigate the shared mental models of the team in virtual reality was also found to fit with the ecological perspective on human interactions which gives insights into the brain processes that result in effective team communications, Behlau et al, (2025). The development of measures followed these conceptual progresses in parallel; for example, a questionnaire, that is the Benefits of Team-Interaction Training Perceived Questionnaire, was validated to assess how athletes see the value in structured team interactions training. Such a measurement tool will allow future studies to rigorously assess the relationship between team communication and cohesion.

Coach-level leadership development research has pointed again and again to the importance of communication in effective team management. Trainers' views on leadership know-how and skill development in coach education programs in Europe pointed to communication as a key, if only sporadically formalized, curriculum topic ((da SilvaNeto et al., 2025)), and the studies on athlete leadership development have highlighted that communication skills need to be deliberately nurtured in the athlete-leaders themselves, not only among the coaches ((Wallace & Shipherd, 2020)). Evidence from soccer on a comparative basis has demonstrated that the technical-tactical performance of young players underwent change in relation to the coaches' communicative interventions made during the game ((Goes et al., 2025)), while a new body of work has been comparing face-to-face human reflective dialogue with machine-assisted tactical guidance directly and it has emerged that human dialogic communication could uniquely assist in tactical problem-solving in a way that algorithmic guidance could not reproduce entirely ((Sahli et al., 2026)).

Moreover, practitioners of the sport have been involved in studies that link coaching, which puts communication at its core, to professionalism of organizations. Schwarz et al. conducted an evidence based practice survey with coaches in Australia and Loo et al. in Singapore where the common theme was communication which coaches translated the evidence into athlete facing language as a recurring issue and a support in a way that evidence based coaching was carried out. It was also revealed through a case-study research of serial winners that communication was an instrument of changing the team culture after a period of trouble in such cases as the leaders of the team decided and executed the communication strategically this became a unique method through which the difference was made between long-term winners and temporary come backs. All the above mentioned evidence in support of the Research Question 2 clearly shows that communication plays the role of the glue that holds together a leader's actions towards the team, the teamwork and finally the process of using evidences based and tactical knowledge leading to the performance of a group.

Findings for RQ3

The third question in this research delves into the interplay of cultural, demographic, generational, and technological dimensions of coach athlete communication, focusing on how a changing environment is affecting the practice and success of coach athlete interaction. The evidence collected from football academies on two different levels, in Indonesia and Malaysia, through cross-country studies found that even though there were psychological similarities in the way coaches communicated (Akbar et al., 2025), coaches were able to locally adapt to different norms and organizational cultures. The same pattern was noticed in a qualitative study focusing on the day-to-day operations of a grassroots football club in an Indonesian institutional context ((Akbar et al., 2024)). Cultural and religious aspects appeared to be a significant contextual factor: one study examining how to best communicate during the Ramadan fasting period suggested clear practical tips for 教练 which will help in altering communication style in terms of timing, tone and overall content during this period of athletes'spiritual and physical need ((Khacharem et al., 2025)).

Cultural differences in the age, gender, and the number of people can even influence communication style. In general, Generation Z athletic coaching studies show young people prefer more talk with equal treatment to be the main mode of their athletic communication rather than hierarchical coach athlete interactions previously done (Gould et al., 2020). On the other hand, study on the relationship between parents and coaches revealed parents' attitudes regarding how much a coach can do on behalf of a sport team can have a substantial impact on how well a parent-child and coach relationship is developed in the youth sport ecosystem. This effect was especially prominent in sports where parents were paying for the fees ((Bell et al., 2026)). In the study directly focusing on gender-related dynamics in strength and conditioning coaching of international women's rugby teams, they found that coaches' communication and way of interacting were perceived different by male and female athletes, male ones said their main goal was to "play" while female said they did so "in order to feel good" ((Nolan et al., 2024)). A dedicated paper on female athletes' perceptions of coach leadership communication showed more support for the view that coach leadership

significantly affects female athletes' personal motivation and engagement in sports ((Hendrawan et al., 2025)).

Contextual factors such as organizational and institutional environments as well as their obvious lack of presence influenced the way communication was conducted. For example, German sports clubs study conducted on menstrual cycles reported coaches and athletes mainly refraining from talking about such things, thereby demonstrating that organizational silence of sensitive issues was also evident there. (Laske et al., 2024) In addition, the results of a study of floorball competitions in youth sports revealed positive communication between referees and not only between referees and coaches that contributed to the formation of a favorable sporting atmosphere to young athletes. (Firek et al., 2022) Pandemic era provided a natural setting for examining communication in the absence of in-person meetings: interaction between coaches and their athletes in African countries during the lockdowns periods brought about quick shift to using remote and asynchronous communication tools instead of meeting face to face ((Luguterah et al., 2023). Managerial skills including competent communication was found to be a major ingredient in developing talents by Ethiopian athletes who were in institutional resource-constrained backgrounds. (Mola & Shaw, 2024)

Along with the changes in the sport context, technological mediated communication has appeared to be the last and most changing factor. Differences and nonverbal communication verbal aspects of one-to-one and live-streamed group physical activity instruction revealed that live-streamed coaching reduced certain nonverbal cues in comparison with in-person delivery, thereby negatively changing the rapport between the participants and the instructors (Islam et al., 2026). In fact, the use of modern information and communication technology tools, such as corporate learning video material, is an idea to deliver athlete education beyond what human-only coaches can do through a live communication (Mićiak et al., 2026). Technology-related aspects in esports environments led to further exploration an expert-nonexpert paradigm study showed combined verbal communication and joint coordination of effort were predictors of performance ((Eldadi et al., 2025)). All this is a sign of how coach and teammate communication channels are rapidly becoming coach communication variables as sport intersects with digital and virtual environments more and more.

Comparative and Critical Analysis

Methodically, the collection of works was primarily composed of quantitative survey designs, the bulk of them focusing on communication-leadership-cohesion interrelations ((Oh, 2023); (Oh & Yoo, 2023); (Bedir et al., 2023)). Qualitative and case-study designs that provided more detailed insights into coach communication strategies were the second most frequently employed study types ((Fraser et al., 2025); (Akbar et al., 2025)). Experimental and quasi-experimental designs were comparatively scarce; among the included studies, the experimental analysis of verbal communication and coordination in esports teams ((Eldadi et al., 2025)) and the placebo-effect study of verbal communication in the context of warm-up routines ((Bisio et al., 2024)) appeared as exceptions that, due to their methodology, allowed more robust causal inference than the most widespread cross-sectional self-report approach. The self-report method was also used in the research on subjective experience and self-efficacy of professional football referees during the pandemic ((Richlan et al., 2023)). This case illustrated that even significant, time-limited natural experiments in this area had mainly been studied using retrospective surveys rather than longitudinal or experimental designs.

Another issue that was identified in the methodological level of the study is the relatively limited use of reflective and process-tracing research designs, which can help capture communication as it occurs. The reflection method known as Think Aloud, used in coaching scenarios, showed the potential of capturing the in-action thoughts of coaches, not depending on only their retrospective recall (Stephenson et al., 2020). However, this approach remained an exception within a largely survey-based methodology rather than an integral element of such designs. In parallel, Trotter et al. (2021) examined through an e-athlete platform social support, self-regulation, and psychological skill deployment. This study has brought an underresearched topic in communication into the spotlight-a group of people called competitive esports athletes whose actual-world impact is already quite big, but research still lags. Therefore, the research community has been quick in expanding the population base of studied people through its new methods, but very little effort has been put to broadening the types of research design that these people are subjects of.

Interpretation of Findings

If one combines the results related to all three research questions, it can be shown that coach communication works a multi-channel, multi-level process, not a single unified factor only. In one case, coaches' verbal and nonverbal clues are directly linked with psychological state as well as performance at individual level. At

collective level, the way the coach communicates the kind of leadership he/she has, through the team communication channels, is likely to get the team members to understand how the coach can be their leader and what kind of performance they can expect. Furthermore, at the contextual level, the culture, demographic aspects and technology significantly reshapes the enactment as well as receiving of communication. Therefore, this three-part model indicates that the communication is only theoretically viewed as coach' own ability that has been isolated from other factors or as a coach attribute that can be trained independently from the team and contextual dynamics. Rather, it is seen as embedded property of the coaching system.

Theoretical Implications

On a theoretical level, these results have the potential to bring about some changes in the coach-athlete relationship theory as currently perceived. Firstly, communication as an observable channel-orientated element, with a high coach-to-athlete transfer potential, is brought to the forefront against the conventional interpersonal constructs of closeness, commitment, etc., which until recently made up the bulk of coach-athlete relationship research. This is not least because the findings reveal each of three forms of verbal feedback, non-verbal cueing, and self-directed communication having an identifiable and largely separate influence on the athlete outcomes. Therefore, it is the overall body of evidence which leads us to a multi/channel model of coach communication, which, from an empirical standpoint, can be dissected into its components and studied/modified individually. For clarity, in the reviewed literature verbal feedback is operationalized as spoken evaluative or instructional input, non-verbal cueing as bodily, gestural, or visualization-based signals, and self-directed communication as athletes' internal, self-regulatory speech; discriminant-validity testing of these three channels remains an open task for future research.

Practical Implications

On an operational level, the paper presents several real-world applications of coaching education programs as well as sporting organizations. The coaching course may include the teaching of verbal feedback, non-verbal cues awareness, and culturally sensitive communication as separate, measurable skill units, rather than grouping them under one soft skill. The sport organizations that use an environment fee model while allowing parents to get involved could create formal communication systems designed to manage and control parents' expectations in a proactive manner. Those organizations that conduct sports in different cultures or religions such as Muslim athletes fasting during the Ramadan will get more benefit from having a structured way to change their communication strategy without being dependent on coaches with the ability to adjust the behavior in a culturally appropriate way.

Comparison with Prior Reviews

The synthesis of all three, verbal, nonverbal, and relational communication aspects in this overview is what makes it a new kind of work different from previous work that looked at mainly one of the channels, e.g. verbal feedback, nonverbal behavior, or leader-mediated communication. Whereas the prior theoretical works at a certain level, for instance, the multi-dimensional model of self-talk (see Latinjak et al., 2023), proposed an integrated theoretical model for cognitive processes of individuals, this review takes a step back in terms of integration. It integrates information at the levels of a working group and organizational context and brings out evidence of what had remained separate until now in the sport psychology, communication studies, and organizational coaching disciplines.

Contradictions in the Literature

In the synthesized literature, some contradictions and unresolved tensions have been found. On the one hand, the performance-boosting effect of direct verbal feedback and encouragement has been highlighted in several works (see (Page et al., 2025); (Romdhani et al., 2025)). On the other hand, some authors have shown that communicative directiveness could be harmful for the athlete-led motivation, as the client-led, or dialogic, approaches have resulted in greater engagement from the athlete side over the long term ((Tod et al., 2023); (Wood et al., 2020)). Likewise, a general view is that technologically mediated communication tools help to extend and standardize coach communication ((Mićiak et al., 2026); (Behlau et al., 2025)). However, the finding that livestreamed instruction results in less nonverbal rapport cues as compared to in-person delivery ((Islam et al., 2026)), supports the view that technology-mediated channels may, in effect, be increasing access to coaching but at the cost of the communication relational richness. The presence of these issues in the literature seems like natural differences brought by moderating factors such as the stage of an athlete's development or a type of sport, rather than real contradictions themselves. However, the existing evidential material is not sufficient for us to be sure when directive or dialogic, or in-person communication is a better choice than another.

Research Gaps: (1) The research field still lacks sufficient longitudinal data showing the coach communication style patterns and their effects on athletes over time, during a season or career stage. It is because most studies included in the review were conducted at one time point; (2) Though disability sport research has been gaining ground, there is still very little investigation into the nature of communication that occurs between and within disability, adaptive sport, and other underrepresented athlete groups. Yet the broader literature in the area, particularly on issues related to inclusive coaching practice, suggests considerable interest in these groups; (3) The field could definitely benefit from more comparative research of communication from human coaches with AI-mediated communication or algorithmic instructions across a range of sports and skill levels, rather than just the single comparison between soccer coaching identified by this review ((Sahli et al., 2026).

Limitations of This Review: (1) The literature review used only the Scopus database, and thus, it is possible that studies that were only indexed in other databases like SPORTDiscus, PsycINFO, or those in regional repos could have gotten excluded; (2) The review of titles and abstracts, the assessment of eligibility of full texts, and the appraisal of quality was done by one reviewer without any check or review from an independent second reviewer, which may result in a selection or judgment bias though it is a case where the criteria used have been made clear and documented; (3) For the analysis of results we focused on extracting themes based on what was reported instead of aggregating the effect sizes by formal meta-analysis techniques, and this was the case because the studies have used a wide variety of different measures to represent their outcomes rather than because it was the reviewers preferred method; thus, pooling quantitative results was impossible.

Future Research Agenda: (1) Longitudinal or experimental future studies will be able to investigate the causal relationship of the coach's communication behaviors to the changes in athlete's psychological or performance outcomes; (2) To allow pooling of results from meta-analyses across the evidence base of sports communication, which is becoming international, the authors recommend that studies in different cultures should use common communication measurement instruments and validate them; (3) Communication research should be broadened to address populations or situations that have been overlooked, e.g., those related, physically and/ or emotionally, to youth and disability sports, or coaching via artificial intelligence and blended human-computer coaches, supported by the initial data from esports.

Summary Answers to the Research Questions

To be very direct in our response to RQ1, the gathered evidence supports the idea that coaches' verbal and nonverbal communication patterns affect the self-efficacy, motivation, and performance of individual athletes via activation, regulatory, and skill-building channels. Responding to RQ2 by saying communication acts as a mediating and moderating process to connect different leadership styles and teamwork to the overall success of the team, that this mechanism operates both through direct coach-team interactions and also through interactions between athlete-leaders within the team. Regarding the answer to RQ3, we see that the context of different cultures, demographics, generations, and technologies, to a larger extent, transform the way coach communication is executed and perceived with aspects like religious practices, gender norms, parental involvement, and media being moderators among the most notable ones.

Conclusions

In this research review method paper, the authors combined a total of 50 research articles to explore the relationship between sports coaches' communication and their athletes' performance, using the PRISMA 2020 guideline framework to facilitate open and repeatable reporting of the study. They found that, through verbal, non-verbal, and self-directed forms, a coach is mainly able to create and alter the mental state of the individual athlete, which will then directly impact the athlete's performance. In addition that a very effective use of communication as both intermediate and a moderating factor, it has the potential to connect and to enhance leadership and togetherness in sport, ultimately improving sports teams' outcome results. In the context of coach communication we see that cultural, demographic, and technological situations greatly affect how, on the one hand, it is carried out, and, on the other hand, how it is received by the various sporting communities. What we do see is that coach communication becomes an issue of communication that can be broken down into a set of distinct, coachable, and assessable skills (e.g., delivering quality feedback, reading non-verbal cues, understanding diversity). By integrating verbal, non-verbal, and relational communication strands through a single thematic analysis, the authors hope to provide coaches and sport organizations with a common evidence platform for coach communication training as opposed to one based

solely on a communication channel or mode. Limitations for this review such as the use of a single database, single reviewer conducting screening, and using thematic synthesis rather than a more rigorous and objective method like a meta-analysis may have affected the accuracy and the level of confidence with the findings. Hence, to be able to develop more solid and causal evidential knowledge about how coaches' communication is linked to sports performance of athletes, researchers should be focused more on doing longitudinal or experimental studies, developing cross-culturally valid measuring tools, and conducting research on sports coaches or contexts where technology plays a major role. In addition, it may also be necessary to research on the populations whose voices were not fully present in this study.

References

- Aitchison, B., Rushton, A. B., Martin, P., Soundy, A., & Heneghan, N. R. (2021). The podium illusion: a phenomenological study of the influence of social support on well-being and performance in elite para swimmers. *BMC Sports Science, Medicine and Rehabilitation*, 13(1), Article 42. <https://doi.org/10.1186/s13102-021-00269-1>
- Akbar, A., Abd Karim, Z., Zakaria, J., Hazely, F., Rahaman Mohamed, A., Wajedi Imami, M. K., & Rahman, M. A. (2024). Exploring the fundamental aspect of grassroots football academy: a case study in indonesia. *Retos*, 53, 280–287. <https://doi.org/10.47197/retos.v53.102619>
- Akbar, A., Syafitri, F. U., Karim, Z. A., Purnomo, E., & Cahyani, F. I. (2025). Bridging the gap: psychological foundations of coach communication in grassroots football in indonesia and malaysia. *Retos*, 67, 1056–1066. <https://doi.org/10.47197/retos.v67.114676>
- Angoy, R., Ma'mun, H. A., Mahendra, A., Abduljabar, B., Calunsag, B., Galendez, P., Diva, B., & Layao, J. G. (2025). Personal development and athletic success: exploring the link and predictors of performance among basketball players. *Retos*, 66, 730–740. <https://doi.org/10.47197/retos.v66.112448>
- Bedir, D., Agduman, F., Bedir, F., & Erhan, S. E. (2023). The mediator role of communication skill in the relationship between empathy, team cohesion, and competition performance in curlers. *Frontiers in Psychology*, 14, Article 1115402. <https://doi.org/10.3389/fpsyg.2023.1115402>
- Behlau, C., Pauly, H., Dreiskaemper, D., & Strauss, B. (2025). Are you thinking what i am thinking? a feasibility study of a virtual reality measurement for shared mental models in team sports. *Team Performance Management*, 31(3-4), 145–169. <https://doi.org/10.1108/TPM-06-2024-0064>
- Bell, T. R., Milford, M., & McGlynn, J. (2026). Parent attitudes toward sport coach communication and knowledge: exploring priorities, goals, and expectations in the fee-based youth sports ecosystem. *International Journal of Sport Communication*, 19(2), 183–192. <https://doi.org/10.1123/ijsc.2026-0023>
- Bisio, A., Panasci, M., Ferrando, V., Albergoni, A., Ruggeri, P., & Faelli, E. (2024). Warm-up plus verbal communications administered as placebo procedure during the training session improves running performance. *Psychology of Sport and Exercise*, 73, Article 102633. <https://doi.org/10.1016/j.psychsport.2024.102633>
- Caso, S., Hill, Y., Araújo, D., & Kamp, J. V. D. (2026). An ecological perspective on intra-team communication in team sports. *International Review of Sport and Exercise Psychology*. <https://doi.org/10.1080/1750984X.2026.2615987>
- Chen, M., Chen, H., Wu, Y., Yang, R., Guo, C., Zhao, M., Xin, C., & Zang, S. (2023). Development and validation of the perceived benefits of team-interaction training questionnaire (PBTITQ) among undergraduates. *BMC Medical Education*, 23(1), Article 840. <https://doi.org/10.1186/s12909-023-04810-3>
- Corvera-Velarde, F., Cantú-Berrueto, A., Mendoza-Farias, F. J., & López-Walle, J. M. (2025). Group environment questionnaire (GEQ): validation in mexican university athletes. *Societies*, 15(9), Article 259. <https://doi.org/10.3390/soc15090259>
- da Silva Neto, L. V., Miragaia, D. A. M., Ibáñez, S. J., & Braga Garcez, A. P. (2025). Trainers' perceptions on the development of leadership knowledge and competencies on official union of european football associations football coach courses. *International Sport Coaching Journal*, 12(1), 42–56. <https://doi.org/10.1123/iscj.2023-0081>
- Eldadi, O., Fitoussi, S. J., & Tenenbaum, G. (2025). Verbal communication, coordinated effort, and performance in esports teams: an expert–nonexpert paradigm study. *Journal of Sport and Exercise Psychology*, 47(5), 320–332. <https://doi.org/10.1123/jsep.2024-0343>

- Firek, W., Płoszaj, K., Gąsior, P., & Malchrowicz-Moško, E. (2022). 'ref! could you help me?'—building a positive climate by referees during floorball competitions in youth sport. *International Journal of Environmental Research and Public Health*, 19(2), Article 979. <https://doi.org/10.3390/ijerph19020979>
- Fraser, M. M., Bloom, G. A., & Mallett, C. J. (2025). From distress to success: serial winning coaches' strategies to reestablish adaptive culture and successful performance. *Journal of Applied Sport Psychology*. <https://doi.org/10.1080/10413200.2025.2543751>
- Fritsch, J., Nonnenmann, J., & Englert, C. (2026). An assessment of the recognition of post-performance non-verbal behaviour in table tennis dyads based on point outcome. *International Journal of Sport and Exercise Psychology*. <https://doi.org/10.1080/1612197X.2026.2674612>
- Goes, A. L., Machado, J. C., Júnior, J. B., Araújo, D., Leonardo, L., Bedo, B., & Scaglia, A. J. (2025). The influence of coaches' intervention on the technical-tactical performance dynamics of young soccer players. *International Journal of Sports Science and Coaching*, 20(6), 2355–2364. <https://doi.org/10.1177/17479541251348090>
- Gould, D., Nalepa, J., & Mignano, M. (2020). Coaching generation z athletes. *Journal of Applied Sport Psychology*, 32(1), 104–120. <https://doi.org/10.1080/10413200.2019.1581856>
- Hendrawan, H. A. D. N., Fitri, M., Subarjah, H., Apriady, H., & Ockta, Y. (2025). The influence of coach leadership on female athletes' personal motivation and sports engagement: a study of female athletes' perceptions. *International Journal of Human Movement and Sports Sciences*, 13(2), 443–449. <https://doi.org/10.13189/saj.2025.130222>
- Islam, M. S., Harden, S. M., Lee, S. W., & Lim, S. (2026). Verbal and nonverbal communication differences between in-person and live-streamed group physical activity: a specific investigation into yoga instruction. *Ergonomics*, 69(4), 693–712. <https://doi.org/10.1080/00140139.2025.2478619>
- Javed, S., Naseer, A., Nawaz, A., Naveed, Q., Khan, I. U., Gul, F., & Din, B. M. U. (2020). Psychological implications in the coaching context: the mediating role of motivational intensity and team cohesion in elite sport performance. *Journal of Physical Education and Sport*, 20(5), 2526–2538. <https://doi.org/10.7752/jpes.2020.05345>
- Khacharem, A., Trabelsi, K., Dellal, A., Dupont, G., Chalabi, H., & Chamari, K. (2025). Optimizing communication with athletes during the ramadan fasting period: strategies and tips for coaches. *Tunisie Medicale*, 103(7), 899–906. <https://doi.org/10.62438/tunismed.v103i7.5800>
- Kuan, G., Sut Txi, M. R., Mat Salleh, F. N., Wong, K. Y., Tan, H., & Kueh, Y. C. (2024). Psychometric properties of the malay version of the coach-athlete relationship questionnaire for coaches and athletes. *Malaysian Journal of Medical Sciences*, 31(3), 241–251. <https://doi.org/10.21315/mjms2024.31.3.19>
- Laske, H., Konjer, M., & Meier, H. E. (2024). Menstruation and training – a quantitative study of (non-)communication about the menstrual cycle in german sports clubs. *International Journal of Sports Science and Coaching*, 19(1), 129–140. <https://doi.org/10.1177/17479541221143061>
- Latinjak, A. T., Morin, A., Brinthaup, T. M., Hardy, J., Hatzigeorgiadis, A., Kendall, P. C., Neck, C., Oliver, E. J., Puchalska-Wasył, M. M., Tóvares, A. V., & Winsler, A. (2023). Self-talk: an interdisciplinary review and transdisciplinary model. *Review of General Psychology*, 27(4), 355–386. <https://doi.org/10.1177/10892680231170263>
- Levillain, G., Laborde, S., Martinent, G., Sanchez, X., de Roten, Y., & Nicolas, M. (2026). Effectiveness of an online emotional intelligence training among athletes: do defense mechanisms matter?. *Performance Enhancement and Health*, 14(3), Article 100433. <https://doi.org/10.1016/j.peh.2026.100433>
- Loo, J. K., Choong, G. C., Chew, L. Y., & Suppiah, H. (2024). From theory to practice: examining evidence-based approaches in youth sport coaches in singapore. *International Journal of Sports Science and Coaching*, 19(4), 1406–1414. <https://doi.org/10.1177/17479541241240103>
- Lower-Hoppe, L. M., Heuett, K. B., Newman, T. J., & Brgoch, S. M. (2020). Communication and team performance: a case study of division i football captains. *International Journal of Sport Communication*, 13(1), 77–96. <https://doi.org/10.1123/ijsc.2019-0112>
- Luguterah, A. W., Abonyi, U., Yeboah, R., & Kubayi, A. (2023). Interaction between coaches and athletes in african nations during the lockdown period of COVID-19. *International Sport Coaching Journal*, 10(3), 340–348. <https://doi.org/10.1123/iscj.2022-0016>
- Lykkeskov, M., Askildsen, M. A., & Eckerdal, A. W. (2020). Integrative synthesis of psychological support systems for enhancing athletic performance. *Human Arenas*, 3(1), 83–98. <https://doi.org/10.1007/s42087-019-00065-x>

- Mičiak, M., Toman, D., Kubina, M., Poljaková, T., Ivanovič, K., Šimová, K., Majchráková, A., Bystrická, I., Kováčik, L., & Furmánek, T. (2026). Modern ICT tools and video content in athletes' education—inspiration from corporate learning and development. *Big Data and Cognitive Computing*, 10(2), Article 53. <https://doi.org/10.3390/bdcc10020053>
- Mola, D. W., & Shaw, D. (2024). Significance of managerial skills for talent development in ethiopian athletes. *International Journal of Kinesiology and Sports Science*, 12(2), 21–29. <https://doi.org/10.7575/aiac.ijkss.v.12n.2p.21>
- Nazarudin, M. N., Singh, S. S. B., Abdullah, M. F., & Wan Pa, W. A. M. (2025). Enhancing youth athletes' self-efficacy, mental skills, emotional management, and rugby-specific skills through the SUPER rugby program. *International Journal of Human Movement and Sports Sciences*, 13(1), 44–57. <https://doi.org/10.13189/saj.2025.130106>
- Nolan, D., Horgan, P., MacNamara, A., & Egan, B. (2024). “male athletes play well to feel good, and female athletes feel good to play well”: attitudes, beliefs, and practices pertaining to perceived sex-related differences in communication and interpersonal approach of strength and conditioning coaches in international women's rugby union. *Journal of Sports Sciences*, 42(14), 1289–1298. <https://doi.org/10.1080/02640414.2024.2388992>
- Oh, Y. (2023). Communication and team cohesion moderate the relationship between transformational leadership and athletic performance. *SAGE Open*, 13(3). <https://doi.org/10.1177/21582440231195196>
- Oh, Y., & Yoo, J. I. (2023). Team cohesion in individual/team sports athletes: transformational leadership and the role of social norms. *Healthcare (Switzerland)*, 11(6), Article 792. <https://doi.org/10.3390/healthcare11060792>
- Page, T., Knowles, Z., Green, M., Drust, B., & Andrew, M. (2025). Verbal feedback is the primary mechanism for performance-related review in professional english male soccer: a quantitative exploration. *International Journal of Sports Physiology and Performance*, 20(5), 659–677. <https://doi.org/10.1123/ijsp.2024-0300>
- Rahmalina, R., Putri, V. N. E., Hilmi, L., Sirait, A., & Kurniati, N. (2025). Body language and words: a multimodal analysis of elite athletes' communication. *Retos*, 66, 26–45. <https://doi.org/10.47197/retos.v66.112706>
- Ribeiro, J., Silva Dias, T., Dias, C., & Fonseca, A. M. (2025). Mental imagery use: the perspective of national team coaches in the U-19 beach volleyball world championship. *Sports Coaching Review*, 14(2), 199–219. <https://doi.org/10.1080/21640629.2022.2078558>
- Richlan, F., Thürmer, J. L., Braid, J., Kastner, P., & Leitner, M. C. (2023). Subjective experience, self-efficacy, and motivation of professional football referees during the COVID-19 pandemic. *Humanities and Social Sciences Communications*, 10(1), Article 215. <https://doi.org/10.1057/s41599-023-01720-z>
- Romdhani, A., Trabelsi, O., Selmi, O., Guelmami, N., Weiss, K., Rosemann, T., Zghibi, M., & Knechtel, B. (2025). Verbal encouragement during strength and endurance assessments: the gender of the encourager can matter. *Acta Psychologica*, 255, Article 104919. <https://doi.org/10.1016/j.actpsy.2025.104919>
- Sahli, H., Bouzouraa, M. M., Rebhi, M., Ceylan, H. İ., Yılmaz, H. H., Ovidiu, D., Muntean, R. I., Dhahbi, W., Naima, A., & Zghibi, M. (2026). Comparing human-led reflective dialogue and ai-based tactical guidance as innovative training approaches in soccer: effects on tactical performance and problem-solving. *BMC Sports Science, Medicine and Rehabilitation*, 18(1), Article 246. <https://doi.org/10.1186/s13102-026-01694-w>
- Sağ, S., & Polat, E. (2026). Coaches from the perspective of athletes: the impact of coaches' communication skills on the general self-efficacy and happiness levels of team and individual athletes. *International Journal of Sports Science and Coaching*. <https://doi.org/10.1177/17479541261426716>
- Schwarz, E., Harper, L. D., Duffield, R., McCunn, R., Govus, A., Skorski, S., & Fullagar, H. H. (2021). Practitioner, coach, and athlete perceptions of evidence-based practice in professional sport in australia. *International Journal of Sports Physiology and Performance*, 16(12), 1728–1735. <https://doi.org/10.1123/ijsp.2020-0835>
- Stephenson, J., Cronin, C., & Whitehead, A. E. (2020). “suspended above, and in action”: think aloud as a reflective practice tool. *International Sport Coaching Journal*, 7(1), 11–21. <https://doi.org/10.1123/iscj.2018-0022>
- Tod, D., Mcewan, H. E., Cronin, C., & Lafferty, M. (2023). Client-led applied sport psychology practitioners' narratives about helping athletes. *Sport Psychologist*, 37, 287–296. <https://doi.org/10.1123/tsp.2023-0070>

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- Trotter, M. G., Coulter, T. J., Davis, P. A., Poulus, D. R., & Polman, R. (2021). Social support, self-regulation, and psychological skill use in e-athletes. *Frontiers in Psychology*, 12, Article 722030. <https://doi.org/10.3389/fpsyg.2021.722030>
- Wallace, D. A., & Shipherd, A. M. (2020). Developing athlete leaders in sport. *Strategies*, 33(4), 20–26. <https://doi.org/10.1080/08924562.2020.1764421>
- Wang, W. (2023). Social environment's effect on athletes motivation for professional development. *Current Psychology*, 42(33), 29628–29636. <https://doi.org/10.1007/s12144-022-03951-w>
- Wood, A., Mack, R., & Turner, M. (2020). Developing self-determined motivation and performance with an elite athlete: integrating motivational interviewing with rational emotive behavior therapy. *Journal of Rational - Emotive and Cognitive - Behavior Therapy*, 38(4), 540–567. <https://doi.org/10.1007/s10942-020-00351-6>