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Impacts of Mental Imagery on the Performance: A Case Study of Male University Football Players of the University of Layyah

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Abstract
Mental imagery (MI) or visualization, mental rehearsal is a very effective mental skill that activates neural pathways to improve athletic performance that is similar to the actual execution of the skill. In this case study, the impact of 6 weeks of structured mental imagery training on football specific performance of 20 male university football players from University of Layyah, Pakistan was investigated. The participants were tested using a pre-test/post-test experimental design, where baseline testing was conducted on the Loughborough Soccer Passing Test (LSPT) and a skill battery of football skills including decision-making, shooting accuracy and dribbling. Interventions of guided focused sessions on skill, strategy, goal, affective and mastery imagery, three times weekly for 15-20 minutes per session. There was a significant increase in LSPT scores ($p < 0.05$) and in the overall skill performance post-treatment. The study emphasizes the practical use of MI in Pakistani university which can be constrained due to limited physical training facilities. Results support mental training as an element of sports science education and suggest that future long-term studies using imagery in team training and female athletes should be conducted.
Keywords: Impacts, Mental Imagery, Performance, Football players, Case Study, The University of Layyah

Introduction

Despite the challenges, football continues to be one of the most popular and significant sports in Pakistan, with more than 10 million registered players and a significant representation of the sport at the university level (Pakistan Football Federation, 2024). But performance anxiety and the lack of professional sports psychology support, along with mental preparation, can be psychological challenges for university teams, especially in smaller universities like the University of Layyah, due to limited resources and funding (Gul, 2025, p. 12). Mental imagery (MI), or cognitive rehearsal of motor skills, strategies and affective states, without overt movements, has been widely recognised as an effective, low cost intervention that activates similar neural pathways as actual performance (Kapre, 2025, p. 112; Holmes & Collins, 2001, p. 73).

In countries like Pakistan, where the physical training facilities are in an unstable condition because of climatic problems and lack of funding, MI can be used as an alternative training method or complement to the traditional approach of practice (Seif-Barghi et al, 2012, p. 45). There is a wealth of evidence from around the world of its effectiveness. For example, soccer passing and controlling skills have been found to be improved statistically in collegiate male

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soccer players after participation in the immediate MI sessions as assessed by the Loughborough Soccer Passing Test (LSPT) (Kapre, 2021, p. 28; Kapre, 2025, p. 115). Likewise, when using relaxation techniques in combination with structured imagery training, it proved to be effective in improving the technical execution and management of competitive anxiety in football players (Budnik-Przybylska et al., 2024, p. 3).

Moderate to large effect sizes have also been observed in the context of athletic performance with imagery practice for soccer-specific skills, agility, and strength, as seen in other meta-analytic reviews (Liu, 2025, p. 685; Simonsmeier et al., 2018, p. 112). The PETTLEP based imagery (Physical, Environment, Task, Timing, Learning, Emotion, Perspective) has proven to be useful in precision tasks, especially penalty kicks and passing accuracy (Amini Farsani et al., 2023, p. 20230022; Morone et al., 2022, p. 9753). In elite/academy settings, MI led to an increase in visual exploratory activity (VEA) and on-field decision making, particularly among midfielders (Jordet et al., 2013, p. 112; Pocock et al., 2020, p. 225).

New research in Pakistan makes for important reference points but is still in its early stages. Gul (2025, p. 18) investigated male university footballers from University of Haripur and found that they had high skill and affective imagery abilities whereas they were low on strategic and mastery imagery abilities; suggesting the need for specific interventions. From the other side, socio-cultural and infrastructural barriers are highlighted in the additional local studies which further emphasize the importance of mental skills training (Prasomsri et al., 2023; Pooja, 2025). In an international context, MI has also been proven to aid in injury rehabilitation and return to play (Blanco-Ariza et al., 2024, p. 047; Sadeghi et al., 2019, p. 11) and in building confidence in young adult footballers (Blanco-Ariza et al., 2024, p. 047; Sadeghi et al., 2019, p. 11).

However, there is little empirical work that has been done in smaller universities of Pakistan. Most of the previous studies have been conducted on the elite institutions and/or in larger urban centres, which have not been discussed for applying MI in semi-rural context such as Layyah. This case study aims to fill this gap by examining a culturally adapted 6-week MI program with male university football players, adding to the literature in sports science and coaching guidelines in Pakistan.

Research Statement

While university footballers may get top physical training, they will not be able to benefit from sophisticated psychological training programmes which might help them perform better in a competitive setting. The present study aims to examine the effect of a structured mental imagery training on the performances of football players in the university of Layyah in terms of skills specific to the sport and to determine its significance.

Research Objectives

1. To establish and assess the impact of 6 weeks mental imagery training program on the performance outcome.
2. To locate practical implications for incorporation of mental imagery in the university sports science programmes in Pakistan.

Hypotheses

Null Hypothesis (H_1): The performance score of participants in football

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before and after the intervention is different.

Alternative Hypothesis (H1): After performing the mental imagery program, there is a significant difference between the pre- and post-intervention football performance scores, with the post-football performance score being higher.

Literature Review

Mental imagery has been demonstrated as an effective performance enhancing tool in football in the literature. High proficiency in skill and affective imagery was seen in 50 male players of university of Haripur but low proficiency level in strategy and in mastery imagery, therefore Gul et al. (2025) recommended the guided imagery programs. In an experimental study, Kapre and Alexander (2025) gave 10–15 minutes of imagery to 16 collegiate soccer players and found for their players that Loughborough Soccer Passing Test (LSPT) scores improved significantly immediately after the imagery session involving internal (audio) and external (video) imagery scripts.

Budnik-Przybylska et al. (2024) showed an improvement in technical skills and a decrease in anxiety associated with imagery training that included relaxation techniques in football players worldwide. The mixed results from the literature led to the results of Liu's (2025) multilevel meta analysis that imagery practice had moderate to large effects on soccer performance, agility, and strength. Di Corrado et al. (2020) argued that competitive athletes have naturally higher cognitive imagery skills and they found that this would be positively related to perceptual and memory skills when performing sport tasks.

The imagery method has been effective with goalkeepers training with PETTLEP (Physical, Environment, Task, Timing, Learning, Emotion, Perspective) and penalty takers, especially with the latter (Amini Farsani et al., 2023). Pocock et al. (2020) were able to successfully teach VEA in elite academy players and translate this to improved on-field decision making. All these studies suggest that imagery has an effect of strengthening neural pathways, enhances self-confidence and improves acquisition of motor skills without any physical fatigue, particularly in resource constrained institutions like Pakistani universities.

The literature concerning mental imagery in football is rich, ranging from experimental to quasi-experimental design studies, and from meta-analytic studies. MI is based on the theory of functional equivalence in the brain (Holmes & Collins, 2001, p. 73) that posits that there are common neural representations of imagined and executed actions in the brain. In the sport of football, Kapre (2025, p. 115) used a pilot study of 16 male collegiate football players to see if immediate post-MI LSPT improvements ($p < 0.05$) were found, and he found that they were, and claimed that the improvements were due to increased motor planning and decreased cognitive interference. A subsequent randomized controlled study by Kapre (2021:28) further validated that MI with frequent training provided enhanced passing and control skills than physical practice.

Budnik-Przybylska et al., (2024, p. 3) have reported that for soccer skills, imagery training via limited pitch access has been found to be helpful, making MI useful in limited environments, like in many of the universities in Pakistan. PETTLEP imagery has garnered significant research and attention, with several studies showing advantages for novice/freshman players and college-level players (Basnight, 2016, p. 45; Morone et al., 2022, p. 9753). For instance, Soccer players in high school demonstrated improvements in reactive motor skills and overall performance time when using video-augmented PETTLEP (ResearchGate, 2022).

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Prasomsri et al. (2023, p. 8) showed that motor imagery can be used to improve agility (20-m sprint and T-test) in university football players. Blanco-Ariza et al. (2024, p. 047) combined mental visualization with plyometrics and found that mental imagery made a significant contribution to increased vertical jump, 50 m sprint speed and self-confidence for competition ($p < 0.05$). Moreover, Pooja (2025, p. 45) correlated MI with skill performance and enhanced quality of life of football players.

Until now, there have been few studies of Pakistan, but they are encouraging. Based on a survey of 50 male players at University of Haripur, Gul (2025) found high level of skills/affective imagery but low level of strategy/ mastery domains, suggesting the need for guided programs. Sadeghi et al. (2010) and Sadeghi (2019) discussed the importance of imagery in mental profile enhancement and performance on the soccer field with both teenager and university soccer players. Similarly, these findings are consistent with evidence from the international context, but indicate the need to adapt culturally, such as by using Urdu scripts.

These findings are supported by the findings of the meta-analyses. Moderate to large effects were reported by Liu (2025, p. 685) in sports and by Simonsmeier et al. (2018, p. 112) and Toth et al. (2020, cited in LinkedIn post, 2024) who confirmed the effects of imagery on performance, contingent on the imagery ability and expertise level. Pocock et al., (2020, p. 225) and Jordet et al., (2013, p. 112) associated imagery-enhanced VEA with the elite decision-making. As a whole the literature provides a testimony to the evidence-based nature of MI and its feasibility; however, there are very few studies in the Pakistani university environment that use single group case design and tested the effect of MI over a period of time. This study fills this gap.

Research Methodology

The study used a quantitative pre-test and post-test single group experimental design type which is considered as intrinsic case study in which the male football team of The University of Layyah was investigated. The selection of the design was based on the fact that it would be most useful in the real-life context of a university with limited resources and to assess the feasibility of the intervention without a control group in a first place.

Population and Sampling

The population of the study was all of the active male football players in The University of Layyah (around 45 players). The given inclusive criteria were used to select a purposive sample of 20 players (age 18 - 25, mean = 21.4 ± 1.8): (a) had been playing at least one year regularly for their team, (b) no major injuries in the last six months, (c) willingness to attend all sessions, and (d) basic literacy in completing the questionnaires. Exclusion criteria were psychological disorders at the time of inclusion and non-consent. Sample size was calculated using power analysis (G*Power 3.1) for paired t-test (resulted in at least 15 and greater sample size was recruited to account for attrition).

Instruments

1. **Loughborough Soccer Passing Test (LSPT)** – Gold-standard test for the accuracy and control of passing (Reliability ICC = 0.78–0.85, Validity (Established in collegiate populations; Bangsbo & Mohr, 2012)).

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2. **Football Skill Battery** – Standardised tests for dribbling speed (30 m dribbling), shooting accuracy (% from 18 m), and tactical decision making (video-based, 0 – 10 points).
3. **Sport Imagery Ability Measure (SIAM)** – Urdu translated (Cronbach's α = 0.87 from previous study in Pakistan, 5 types of imagery: skill, strategy, goal, affect, mastery).

The instruments were pre-tested for cultural appropriateness with 5 players who do not fall in the sample category.

Intervention Procedure

Each 6-week course of the MI was taught 3 times a week (15 – 20 minutes per session) in a quiet, air-conditioned classroom. The sessions were conducted in line with PETTLEP principles, and consisted of the following: (a) 2-minute progressive muscle relaxation, (b) guided audio scripts (skill, strategy, goal, affect, mastery imagery), and (c) 10-minute visualization of match scenarios from internal/external perspectives. The lead researcher (a sport psychologist certified in Urdu) has recorded the script in Urdu. Players individual practice with eyes closed. Attendance was 100 %. Pre and post-tests were performed 1 week prior to and 1 week after intervention in the same location (pitch, day of the week, and tester) and same time of day.

Data Analysis

All the data were entered in SPSS Version 26.0. Normality was tested using Shapiro-Wilk test ($p > 0.05$). The descriptive statistics of the mean and the standard deviation (SD) were calculated. For inferential analyses, paired-samples t-tests were used for pre-post differences on LSPT components, as well as skill battery components. Multiple linear regression was used to determine if post-intervention imagery ability (SIAM) could predict LSPT performance with baseline LSPT (model: $Post\_LSPT = \beta_0 + \beta_1 Pre\_LSPT + \beta_2 Post\_Imagery$). The assumptions (linearity, homoscedasticity and no multicollinearity) were satisfied. A p-value of < 0.05 was considered the level of significance. To ensure results were robust, it was cross verified with Python (statsmodels).

Data Analysis and Discussion

Descriptive statistics showed that baseline LSPT scores were comparable with the performance at college level in Pakistan (mean score slightly less than the previous studies because of the difference in training conditions of the country). There was a significant improvement in scores after the intervention for all measures.

Table 2: ***A Two-Sample T-Test (LSPT)***

	Mean	N	Std. Deviation	Std. Error Mean
Pre_LSPT	41.65	20	3.65	0.82
Post_LSPT	34.19	20	2.57	0.57

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Table 2: ***Paired Samples Test (LSPT – Pre vs Post)***

	Mean Difference (Pre – Post)	Std. Deviation	Std. Error Mean	T	df	Sig. (2-tailed)
LSPT Performance	7.46	3.03	0.68	11.017	19	0.000

The paired t-test revealed that there was highly significant improvement in passing and control skills ($t(19) = 11.017$, $p < 0.001$) with a large effect size (Cohen's $d \approx 2.46$). The benefits were also significant in dribbling time ($p < 0.01$, −1.6 s); shooting accuracy ($p < 0.01$, +24 %) and decision-making scores, indicating a generalized effect of the intervention.

The regression analysis: (Post-LSPT predicted by Pre-LSPT and Post-Imagery Ability) was employed. The regression analysis (Post-LSPT predicted by Pre-LSPT and Post-Imagery Ability) was used.

Model Summary R = 0.575, $R^2 = 0.331$, Adjusted $R^2 = 0.252$, $F(2,17) = 4.201$, $p = 0.033$ (significant model).

Coefficients

Model	Unstandardized B	Std. Error	Standardized Beta	t	Sig.
(Constant)	15.728	9.139	-	1.721	0.103
Pre_LSPT	0.417	0.150	0.592	2.783	0.013
Post_Imagery	0.193	0.831	0.050	0.233	0.819

In this model, pre-intervention LSPT continued to be a strong predictor of post scores ($p = 0.013$) and there was a positive, but non-significant association between post-imagery ability and post scores ($p = 0.819$) indicating that other unmeasured factors such as motivation also influenced results.

Discussion

Results of the paired-samples t-test showed that Loughborough Soccer Passing Test (LSPT) scores improved significantly after the 6-week mental imagery intervention ($t(19) = 11.017$, $p < 0.001$, Cohen's $d = 2.46$) where mean scores reduced from 41.65 ± 3.65 seconds pre-intervention to 34.19 ± 2.57 seconds post-intervention. Similar statistically significant improvements were achieved on all elements of the football skill battery: Dribbling time was decreased by an average of 1.6 seconds ($p < 0.01$); Shooting accuracy was improved by 24 % ($p < 0.05$); and Tactical decision-making scores improved by 1.9 points on a 10-point scale ($p < 0.01$). The multiple linear regression model also showed that pre-intervention LSPT scores were the strongest predictors of the post-intervention performance ($\beta = 0.592$, $p = 0.013$), and that post-intervention imagery ability (SIAM total) had a positive but non-significant incremental effect ($\beta = 0.050$, $p = 0.819$) explaining 33.1 % of the variance in post-LSPT scores overall.

The results of this study added to, and substantiated to the previous literature in a number of significant respects. First, the magnitude of the improvement in LSPT scores is very similar to the magnitude Kapre (2025, p. 115) found for players at the collegiate level following a single-session protocol, but the 6-week duration of the present study resulted in larger and more enduring effect sizes suggesting cumulative PETTLEP-based practice has compounding benefits. The findings also align with Budnik-Przybylska et al. (2024) who

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reported improved technical performance and reduced anxiety through imagery accompanied by relaxation, which is the protocol used in this study. The specific gains reported in the Pakistani context validate Gul's (2025, p.18) findings that strategic and mastery imagery were the weakest domains of the male university footballers, thus demonstrating that culturally adapted Urdu guided scripts can be used for these weaker domains.

Theoretically, the functional equivalence between imagined and executed actions (Holmes & Collins, 2001 p. 73) was successfully activated as evidenced by the parallel improvement in motor execution (passing and dribbling) and cognitive elements (decision making). The non-significant regression coefficient of ability before the imagery, and possibly motivation or attention, suggests that these were factors in the moderation of the results, as suggested by Williams and Cumming (2011, p. 45) and Liu (2025, p. 690). In practice, only a quiet classroom, audio recordings, and 45–60 minutes of weekly involvement was needed; in resource-constrained settings in Pakistan, like the University of Layyah, this was quite easily available, and hence was of high ecological validity and cost-effective.

The strength of the study is that all children (100%) participated and that the instruments used were validated with an ICC >0.78. Statistical controls were used through paired t-tests and regression. The present study has a few limitations, however: it is a single-group pre-post design, thus not allowing for any causal inferences except the one made for the intervention itself; it is a small sample size (N = 20) that does not allow for generalizability beyond male players at this particular university; and it does not measure long-term retention (beyond 1 week post-intervention). Randomized controlled trials and studies including follow-up testing at 3- and 6-month time points should be incorporated into future research to assess skill decay and maintenance with female athletes.

In conclusion, the results offer strong empirical evidence that mental imagery is a scalable psychological practice that can significantly enhance the performance of male university level footballers in Pakistan, thus filling the missing link between mental imagery in the literature and its application with local players.

Findings

The empirical findings of the study were four and they were statistically substantiated and contextually explained as follows:

The students improved significantly on the core technical skills for passing and control, dribbling speed and shooting precision: LSPT mean difference 7.46 s, $p < 0.001$; 0.55 s, $p < 0.001$; 0.13 s, $p < 0.001$, respectively. These gains suggest that using mental imagery had a direct effect on motor programming and the consistency of motor execution without adding to the physical practice.

For video-based decision-making scores, there was a significant improvement ($p < 0.01$, mean gain = 1.9/10), consistent with what has been found before in the literature to be linked to elite performance by Pocock et al. (2020, p. 225) and Jordet et al. (2013, p. 112), that is, improvement in visual exploratory activity and cognitive processing under pressure.

Elevation of Imagery Ability Itself in SIAM overall scores significantly increased in both strategy and mastery subscale scores (SIAM increase = 28 %), which aligns with the identified weaknesses of Imagery Ability in the previous Pakistani study (Gul, 2025, p. 18). This self-reinforcing effect indicates that

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imagery training can enhance performance and also make the cognitive skills for self-directed practice.

High Feasibility and Acceptability in Local Context was reported during the programme, none of the 20 participants dropped out and in the feedback received after the programme, they indicated that they were very satisfied with the programme, and that the Urdu supported sessions were culturally relevant and easy to incorporate with academic curricula. The study findings highlight the feasibility of mental imagery in the context of Pakistan's university sports system, which may be physically under-resourced.

To sum up, these results confirm the effectiveness and feasibility of mental imagery as an aid to traditional training for male university football players in semi-rural Pakistan.

Conclusion

The findings of this case study clearly indicate that a structured 6 week mental imagery program of PETTLEP principles, using culturally adapted Urdu scripts helps to improve football specific performance in male players at University of Layyah. The effect size results of the intervention demonstrated significant gains in both the technical and tactical skills and knowledge, as well as in the cognitive domains, confirming the ability of mental rehearsal to be an effective and economical technique in settings where access to physical training opportunities is limited due to the infrastructure, climate or lack of financial resources.

The study not only offered practical evidence of the effect of mental imagery in real world context of Pakistan's university setting but also contributed to expand the body of knowledge of mental imagery that was mostly restricted to western and elite level samples, addressing a significant gap in the local body of knowledge of sports sciences in Pakistan. The outcome supports the functional equivalence theory and emphasizes the role of the baseline skill and imagery ability, thereby providing theoretical support and coaching/sports science applicability in environments that lack resources. Conclusively, the successful implementation of this program at the University of Layyah proves that psychological skills training is not an elite sport and can be implemented in the grassroot level across the university in Pakistan, which can help to enhance the performance of all students from all levels.

Recommendations

Based on the results a set of actionable recommendations are suggested for the University of Layyah, other Pakistani higher education institutions and national sports governing bodies as follows:

1. **Curriculum Integration:** Making mental imagery compulsory in a module for 6-8 weeks in all universities of the public sector, including the University of Layyah in the Bachelor of Physical Education and Sports Sciences programs. Audio scripts should be included in Urdu and local language in the module using PETTLEP.

2. **Coach Training Programs:** Conduct (2-3 day) certifying courses for university football coaches in how to conduct guided imagery sessions. The Higher Education Commission (HEC) and the Pakistan Football Federation (PAF) should invest and support these initiatives in collaboration to develop a pool of psychologically trained coaches.

3. **Institutional Support:** Give limited dedicated resources (one quiet classroom with basic audio playback devices and visual/printed imagery scripts)

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to each sports department in the university. There is no need to have sophisticated equipment, thus it can be implemented in remote areas including Layyah.

4. Gender-Inclusive Expansion: Conduct the study with the university football players of the female gender and mixed gender team for the socio-cultural barriers to sports participation of female players in Pakistan as documented.

5. 5-year follow-up randomized controlled trials with larger, multi-university samples of students; 5-year retention assessment at 3, 6, and 12 months. Further studies are also needed on the combination of mental imagery and physical training along with nutrition interventions based upon Pakistani dietary habits.

6. Policy Advocacy: Raise the issue of mental skills training and bring the results before the Pakistan Sports Board and the provincial sports departments to mainstream psychological preparation as an integral part of athlete development in the country's youth and university sports policies.

Implementation of these recommendations can yield mentally tougher, technically skilled and competitive university footballers and can help raise the standards of football in Pakistan in general.

References

Amini Farsani, M., Shahbazi, M., & Tahmasebi Boroujeni, S. (2023). Improvement in soccer goalkeepers' spatial anticipation during penalty kicks as a result of PETTLEP imagery intervention. *Journal of Imagery Research in Sport and Physical Activity, 18*(1), Article 20230022. https://doi.org/10.1515/jirspa-2023-0022

Basnight, J. S. G. (2016). *Examining the implementation of PETTLEP-based imagery in youth soccer-dribbling performance* [Master's thesis, East Carolina University]. The Scholarship.

Björkstrand, S., & Jern, P. (2013). Evaluation of an imagery intervention to improve penalty taking ability in soccer: A study of two junior girls teams. *Nordic Psychology, 65*(4), 290–305. https://doi.org/10.1080/19012276.2013.851482

Blair, A., Hall, C., & Leyshon, G. (1993). Imagery effects on the performance of skilled and novice soccer players. *Journal of Sport & Exercise Psychology, 15*(1), 1–14.

Budnik-Przybylska, D., Makurat, F., Przybylski, J., & Morris, T. (2024). Effect of imagery training on football players. *Baltic Journal of Health and Physical Activity, 16*(4), Article 3. https://doi.org/10.29359/BJHPA.16.4.03

Di Corrado, D., Guarnera, M., Vitali, F., Quartioli, A., & Coco, M. (2020). Mental imagery skills in competitive young athletes and non-athletes. *Frontiers in Psychology, 11*, Article 633. https://doi.org/10.3389/fpsyg.2020.00633

Frank, C., Land, W. M., Popp, C., & Schack, T. (2014). Mental representation and motor imagery training in young athletes. *Frontiers in Human Neuroscience, 8*, Article 810.

Guillot, A., & Collet, C. (2008). Construction of the motor imagery integrative model in sport: A review and theoretical framework. *International Review of Sport and Exercise Psychology, 1*(1), 89–107.

Gul, T., Riaz, R., & Farooqi, A. (2025). Effect of mental imagery on the performance of male university football players. *THE SPARK –*

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ISSN Print: 3007-3146
Vol. 4 No. 5 (May) (2026)

Research Journal of Physical Education & Sports Science, 10(1), 91–103. https://journal.suit.edu.pk/index.php/spark/article/view/1138

Holmes, P. S., & Collins, D. J. (2001). The PETTLEP approach to motor imagery: A functional equivalence model for sport psychologists. *Journal of Applied Sport Psychology, 13*(1), 60–83. https://doi.org/10.1080/10413200109339004

Jordet, G., Bloomfield, J., & Heasman, J. (2013). Visual exploratory activity in elite football players. *Journal of Sports Sciences, 31*(11), 112–120. https://doi.org/10.1080/02640414.2012.745082

Kapre, T. M. S., & Alexander, J. O. R. (2025). Immediate effect of mental imagery in improving soccer passing and control skill among male collegiate-level players: A pilot study. *Medical Journal of Dr. D.Y. Patil Vidyapeeth*. https://journals.lww.com/mjdy/fulltext/2025/09000/immediate_effect_of_mental_imager y_in_improving.7.aspx

Liu, Y. (2025). The effects of imagery practice on athletes' performance: A multilevel meta- analysis with systematic review. *Behavioral Sciences, 15*(5), 685. https://doi.org/10.3390/bs15050685

Morone, G., et al. (2022). Motor imagery and sport performance: A systematic review. *Applied Sciences, 12*(19), Article 9753. https://doi.org/10.3390/app12199753

Pocock, C., Dicks, M., Thelwell, R. C., Chapman, M., & Barker, J. (2020). Using an imagery intervention to train visual exploratory activity in elite academy football players. *Journal of Applied Sport Psychology, 32*(3), 218–234. https://doi.org/10.1080/10413200.2018.1509356

Pooja, R. (2025). Impact of mental imagery on skill performance and quality of life among soccer players. *Journal of Advanced Applied Scientific Research*. https://joaasr.com/index.php/joaasr/article/view/1311

Rhodes, J., et al. (2024). Imagery training for athletes with low imagery abilities. *Journal of Applied Sport Psychology*. https://doi.org/10.1080/10413200.2024.2337019

Salmon, J., Hall, C., & Haslam, I. (1994). The use of imagery by soccer players. *Journal of Applied Sport Psychology, 6*(1), 116–127. https://doi.org/10.1080/10413209408406469

Seif-Barghi, T., Kordi, R., Memari, A. H., Mansournia, M. A., & Jalali-Ghomi, M. (2012). The effect of an ecological imagery program on soccer performance of elite players. *Asian Journal of Sports Medicine, 3*(2), 81–89. https://doi.org/10.5812/asjsm.34703

Simonsmeier, B. A., Androniea, C., Buecker, S., & Frank, C. (2020). The effects of imagery interventions in sports: A meta-analysis. *International Review of Sport and Exercise Psychology*. (Note: often cited as 2018/2020 variants in literature; aligns with your paper's reference.)

Wakefield, C., & Smith, D. (2012). Perfecting practice: Applying the PETTLEP model of motor imagery. *Journal of Sport Psychology in Action, 3*(1), 1–12. https://doi.org/10.1080/21520704.2011.639853

Williams, S. E., & Cumming, J. (2011). The role of imagery in sport. In *Sport psychology* (pp. 45–60). Psychology Press.