International Platform of Registered Systematic Review and Meta-analysis Protocols



INPLASY202570084 doi: 10.37766/inplasy2025.7.0084 Received: 21 July 2025

Published: 21 July 2025

Corresponding author:

Martin Rodriguez

martin.rodrigz@gmail.com

Author Affiliation:

Escuela Universitaria Real Madrid, Universidad Europea.

Impact of mindfulness on the psychological profile of professional baseball players: a systematic review according to PRISMA 2020

Rodriguez, MR.

ADMINISTRATIVE INFORMATION

Support - N/A.

Review Stage at time of this submission - Completed but not published.

Conflicts of interest - None declared.

INPLASY registration number: INPLASY202570084

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 21 July 2025 and was last updated on 21 July 2025.

INTRODUCTION

eview question / Objective P (Population): Professional baseball players (major, minor, or equivalent leagues); I (Intervention): Structured mindfulness programs; C (Comparator): No intervention or alternative psychological intervention; O (Outcomes): Changes in variables such as anxiety, concentration, resilience, and emotional regulation (Population): Professional baseball players (major, minor, or equivalent leagues).

Condition being studied To evaluate the available empirical evidence on the effectiveness of mindfulness in improving the psychological profile of professional baseball players through a qualitative systematic review guided by PRISMA 2020.Evaluar la evidencia empírica disponible sobre la eficacia del mindfulness en la mejora del perfil psicológico de los peloteros profesionales, a través de una revisión sistemática cualitativa guiada por PRISMA 2020.

METHODS

Search strategy Date: Last 10 years (2014-2024). Type of study: Controlled trials, qualitative studies, and systematic reviews.

A comprehensive search was conducted in five scientific databases: PubMed, Scopus, Web of Science, PsycINFO, and SportDiscus, using Boolean operators and controlled terms, as well as gray literature in Google Scholar. The search strategy combined keywords related to the object of study, such as "mindfulness," "professional baseball," "sports performance," "psychological profile," "mindfulness," "flow," "competitive stress," and "emotional regulation." Filters were applied by language (Spanish and English), type of publication (empirical articles and systematic reviews), and peer review.Qualitative systematic review.

Participant or population Professional baseball players (major, minor, or equivalent leagues) others athletes with similar characteristics.

Intervention Structured mindfulness programs.

Comparator Absence of intervention or alternative psychological intervention.

Study designs to be included Qualitative systematic review.

Eligibility criteria Empirical studies, systematic reviews, or meta-analyses with a sample of professional or college baseball players.

Application of structured mindfulness interventions.

Assessment of psychological variables (stress, anxiety, attention, concentration, resilience, well-being).

Studies published between 2013 and 2024. Languages: Spanish and English.

Information sources Searches were conducted in PubMed, Scopus, Web of Science, PsycINFO, SportDiscus, ScienceDirect, and Google Scholar, using terms such as: mindfulness, baseball, sport psychology, anxiety, stress, concentration, and resilience, combined with Boolean operators.

Main outcome(s) The results reveal that mindfulness has a positive effect on emotional regulation and stress management. Studies such as that by García-González et al. (2023) demonstrated significant improvements in impulse control and concentration in semi-professional baseball players. Similarly, Lee and Huang (2019) observed a reduction in pre-competition anxiety and improved sleep quality in college players after four weeks of structured practice.

Meta-analyses such as those by Li and Zhang (2023) and Wang and Chen (2024) reinforce these findings, highlighting that mindfulness reduces anxiety levels, improves emotional resilience, and promotes a greater state of flow in high-performance athletes.

Although some studies did not directly measure athletic performance, they did report improvements in psychological factors that determine it. For example, greater emotional recovery after errors, improved focus in critical situations, and a Lower incidence of emotional exhaustion were observed (Smith & Brown, 2019).

The qualitative study by Thompson and Ríos (2023) highlights that, although only 12% of MLB teams apply mindfulness programs, 63% of coaches recognize its usefulness in improving focus, reducing stress and fostering a healthier sports culture.

Quality assessment / Risk of bias analysis Scales PEDro, CASPe, STROBE (depending on the type of studys).

Strategy of data synthesis Narrative, without meta-analysis due to heterogeneity of designs.

Subgroup analysis Other athletes with characteristics comparable or similar to professional baseball players.

Sensitivity analysis A quantitative sensitivity analysis is not planned due to the qualitative nature of this review. However, the results will be compared based on the methodological quality of the studies, identifying whether key findings come from studies with a high risk of bias or low scores on the scales used (PEDro, CASPe, STROBE).

Language restriction Spanish, English.

Country(ies) involved Spain - Escuela Universitaria Real Madrid, Universidad Europea.

Keywords Mindfulness, professional baseball, psychological profile, pre-competition anxiety, emotional regulation.

Contributions of each author

Author 1 - Martin Rodriguez - Investigation manuscrito.

Email: martin.rodrigz@gmail.com