## INPLASY PROTOCOL

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# The effect of mental fatigue on basketball performance: A meta-analysis

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Review question / Objective: To evaluate the effect of mental fatigue on basketball performance.

Condition being studied: To evaluate the effect of mental fatigue on basketball performance.

Eligibility criteria: (a) basketball players (b) cognitive tasks induce mental fatigue condition; (c) mentally fatigued group vs. non-mentally fatigued group; (d) basketball performance. Information sources: Pubmed, Scopus, Ebscohost, Web of Science.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 22 April 2022 and was last updated on 22 April 2022 (registration number INPLASY202240134).

### INTRODUCTION

Review question / Objective: To evaluate the effect of mental fatigue on basketball performance.

Condition being studied: A condition of mental fatigue was induced by various cognitive tasks.

### **METHODS**

Participant or population: basketball players.

Intervention: Cognitive tasks used to induce mental fatigue.

Comparator: Mental fatigue vs. low/non mental fatigue.

Study designs to be included: All experimental designs.

Eligibility criteria: (a) basketball players (b) cognitive tasks induce mental fatigue condition; (c) mentally fatigued group vs. non-mentally fatigued group; (d) basketball performance.

Information sources: Pubmed, Scopus, Ebscohost, Web of Science.

Main outcome(s): Accuracy of free throw or 3-point throw; the number of throw; and the number of turnovers.

Quality assessment / Risk of bias analysis:

The quality of the methodology used in this study was assessed using the quantitative assessment tool "QuallSyst".

Strategy of data synthesis: All data will be synthesized with mean and SD.

Subgroup analysis: Competitive level; Motivation; Perception of effort.

Sensitivity analysis: Examine the influence of mental fatigue on exercise performance and ratings of perception of effort.

Language: No limitation of the language.

Country(ies) involved: China.

Keywords: mental fatigue; perception of effort; basketball performance; basketball players.

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