

INPLASY PROTOCOL

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None declared.

Can Self-regulatory Strength Training Counter Prior Mental Exertion? A Systematic Review

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Review question / Objective: The study evaluates all the literature and creates a comprehensive view about the intervention increased the strength of self-regulation, which provides evidence for future studies to examine specific methods to counter prior mental exertion.

Condition being studied: Mental fatigue is a psychobiological state caused by prolonged cognitive activity and it is implicated in many aspects of daily life. This condition causes an acute feeling of tiredness and a decreased cognitive ability. Ego depletion is a depleted condition of self-regulation strength, thus, individuals lose the ability to adjust physiological and psychological state.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 12 January 2022 and was last updated on 12 January 2022 (registration number INPLASY202210060).

INTRODUCTION

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prolonged cognitive activity and it is implicated in many aspects of daily life. This condition causes an acute feeling of tiredness and a decreased cognitive ability. Ego depletion is a depleted condition of self-regulation strength, thus, individuals lose the ability to adjust physiological and psychological state.

METHODS

Participant or population: Healthy humans.

Intervention: Self-regulatory strength training protocol/intervention.

Comparator: Self-regulatory strength training vs. no self-regulatory strength training.

Study designs to be included: RCT.

Eligibility criteria: (a) evaluated the self-regulation training in healthy humans; (b) included physical and/or cognitive performance outcomes after partaking in a mental exertion task; (c) reported a randomized controlled trial; (d) were a peer-reviewed piece of literature published in the English language; and (e) included records published sometime between the span of 1999 to 2021.

Information sources: A thorough search was conducted on PubMed, Web of Science, EBSCOhost (CENTRAL, Psychology and Behavioural Sciences Collection, SPORTDiscus), and Scopus to select relevant literature, as well as on Google Scholar and the sources of reference for grey literature.

Main outcome(s): A thorough search was conducted on PubMed, Web of Science, EBSCOhost (CENTRAL, Psychology and Behavioural Sciences Collection, SPORTDiscus), and Scopus to select relevant literature, as well as on Google Scholar and the sources of reference for grey literature.

Quality assessment / Risk of bias analysis: Rob 2 risk of bias assessment.

Strategy of data synthesis: Not meta-analysis.

Subgroup analysis: Not meta-analysis.

Sensitivity analysis: Not meta-analysis.

Country(ies) involved: China and Malaysia.

Keywords: mental exertion, self-regulatory strength, physical performance, cognitive performance.

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