# INPLASY PROTOCOL

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Support: None.

Review Stage at time of this submission: Preliminary searches.

Conflicts of interest: None declared. The Role of Video Games in Supporting Mental and Physical Health During the COVID-19 Pandemic: PRISMA Systematic Review

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**Review question / Objective:** This systematic review aims to describe the literature on the potential role of video games in supporting mental and physical health during the COVID-19 pandemic.

**Condition being studied:** The World Health Organization (WHO) stress that mental health is "more than just the absence of mental disorders or disabilities. It is a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively, and is able to make a contribution to his or her community." Physical health is defined as a dynamic state, the process of preserving and developing its biological, physiological, and optimal work capacity and social activity with the maximum life expectancy.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 13 August 2021 and was last updated on 13 August 2021 (registration number INPLASY202180053).

#### INTRODUCTION

**Review question / Objective:** This systematic review aims to describe the literature on the potential role of video games in supporting mental and physical health during the COVID-19 pandemic. Rationale: During the COVID-19 pandemic, video games have been much more than just a pastime. Institutions and governments have encouraged video games promoting social connection and physical activity as instruments for addressing the impact of COVID-19 on mental and physical health. Notably, the World Health Organization launched in March 2020 the campaign #PlayApartTogether, aimed at promoting social interaction and diminishing loneliness through online gaming activities.

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#### **METHODS**

Search strategy: The search string will be: [("video game\*") OR ("computer game\*") OR ("gaming")] AND [("COVID-19")].

**Participant or population:** All human participants (clinical and non-clinical population).

Intervention: Video games, or none.

Comparator: Usual care intervention, nonvideo game group, or none.

Study designs to be included: Quantitative (i.e., randomized controlled trial, quasiexperimental, or cross-sectional correlational design), or mixed-methods studies.

Eligibility criteria: Only studies meeting the following criteria will be considered eligible for inclusion: (1) showed evidence on the potential role of video games in supporting mental and physical health during the COVID-19 pandemic; (2) were written in English; (3) were published after December 2019. This date frame was chosen as COVID-19 first emerged in Wuhan, China, in December 2019 and then spread worldwide. Quantitative (i.e., randomized controlled trial, quasi-experimental, or cross-sectional correlational study designs), qualitative, and mixed-methods studies will be selected as long as they used at least one outcome measure.Letters to editors, commentaries, and preprint papers, will be excluded from the review. Studies describing protocols will be also eliminated as they would be unable to provide outcome measures.

Information sources: Databases used in the search will be PsycINFO, Web of Science, and Medline. Additional articles will be identified via hand-searching and reviewing the reference lists of relevant papers.

Main outcome(s): Mental health and/or physical health data.

Quality assessment / Risk of bias analysis: The Mixed Methods Appraisal Tool (MMAT) will be used to assess the methodological quality of studies included in this systematic review. It has high reliability and efficiency as a quality assessment protocol and can concomitantly appraise methodological quality across various empirical research. Two of the authors independently will assess study quality.

Strategy of data synthesis: Papers meeting inclusion criteria will be identified through database searches. Papers published in languages other than English, and duplicate instances of papers will be removed. Remaining papers will be assessed using the inclusion and exclusion criteria outlined above. Initially, abstracts will be searched to assess a paper's eligibility for inclusion. If abstract information alone will not be sufficient to determine whether a paper met the criteria, the entire paper will be studied. The following data will be extracted: the populations included in the study (participants; mean age or age range); (2) the study design used (i.e., randomized controlled trial, quasi-experimental, crosssectional/correlational, mixed-method study); (3) the measures used for the assessment of outcomes (e.g., self-report questionnaires); (4) the study outcomes (i.e, mental health, physical health, or both).

Subgroup analysis: None.

Sensitivity analysis: None.

Language: English.

Country(ies) involved: Italy.

Keywords: Video games, COVID-19 pandemic, mental health, physical health.

## Contributions of each author:

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