

INTISARI

Latar belakang: Pandemi Covid-19 menimbulkan munculnya kebijakan Pembatasan Sosial Berskala Besar (PSBB) sebagai respon pemerintah. Salah satu dampak PSBB bagi para pelajar dan mahasiswa adalah penurunan aktivitas fisik. Mahasiswa termasuk dalam kelompok masyarakat yang rentan mengalami stres dan rasa cemas akibat tuntutan performa akademik. Aktivitas fisik memiliki pengaruh terhadap kesehatan mental dengan mengurangi gejala depresif yang dampak terburuknya adalah bunuh diri. Salah satu intervensi aktivitas fisik yang feasible dan telah terbukti efektif adalah intervensi digital melalui aplikasi pada gawai.

Tujuan Penelitian: Penelitian ini bertujuan untuk mengetahui efektivitas intervensi tantangan aktivitas fisik berbasis ponsel pintar pada masa pandemi Covid-19 terhadap luaran kesehatan mental mahasiswa UGM yang diukur dengan kuesioner SRQ-20

Metode: Penelitian ini merupakan studi *one group quasi experimental pre-post test* yang mengukur kondisi mental peserta penelitian dengan kuesioner skrining SRQ-20 sebelum dan sesudah intervensi aktivitas fisik berupa tantangan berkelompok menggunakan aplikasi InaFit pada gawai. Intervensi yang dilakukan diharapkan mampu meningkatkan luaran kesehatan mental dengan mekanisme *neurobiological*, *psychosocial*, dan *behavioral*. Analisis statistik dilakukan dengan analisis subgrup menggunakan uji statistik *wilcoxon signed rank test* untuk mengetahui efektivitas intervensi dengan nilai signifikansi 0.05.

Hasil: 22 dari 99 peserta penelitian (22.2%) dieksklusi karena masalah kompatibilitas aplikasi pada perangkat yang digunakan dan tidak mengikuti penelitian secara lengkap. Hasil analisis *wilcoxon signed rank test* menunjukkan bahwa intervensi memiliki pengaruh menurunkan skor SRQ-20 secara signifikan pada subgrup laki-laki ($p = 0.027$) dan perempuan ($p = 0.000$) yang sebelum intervensi terskrining mengalami

gangguan distress emosional. Secara keseluruhan, intervensi efektif menurunkan skor SRQ-20 secara signifikan ($Z = -3.944$; $p = 0.000$).

Kesimpulan: Intervensi berupa kompetisi aktivitas fisik berbasis ponsel pintar pada masa pandemi Covid-19 efektif secara statistik untuk menurunkan skor SRQ-20 mahasiswa Universitas Gadjah Mada yang menjadi luaran kesehatan mental dalam penelitian ini.

Kata kunci: SRQ-20, aplikasi, aktivitas fisik, distress emosi

ABSTRACT

Background: The Covid-19 pandemic has led to the emergence of a *Pembatasan Sosial Berskala Besar* (PSBB) policy as a government response. One of the impacts of PSBB for students is a decrease in physical activity. Students belong to a group of people who are prone to experiencing stress and anxiety due to the academic performance evaluation. Physical activity is known to influence mental health by reducing depressive symptoms, which the worst impact is suicide. One of the physical activity interventions that is feasible and has proven effective is digital intervention through applications on smartphone.

Objectives: This study aims to determine the effectiveness of the smartphone-based physical activity challenge intervention during the Covid-19 pandemic on the mental health outcomes of students from Universitas Gadjah Mada as measured by the SRQ-20 questionnaire.

Methods: This study is a one-group quasi-experimental pre-post test study that measures the mental condition of the study participants with the SRQ-20 screening questionnaire before and after the physical activity intervention in the form of group challenges using the InaFit application on the device. The interventions carried out are expected to be able to improve mental health outcomes with neurobiological, psychosocial, and behavioral mechanisms. Statistical analysis was performed by subgroup analysis using the Wilcoxon signed rank test statistical test to determine the effectiveness of the intervention with a significance value of 0.05.

Results: 22 of 99 study participants (22.2%) were excluded due to application compatibility issues on the device used and did not participate in the study completely. The results of the Wilcoxon signed rank test analysis showed that the intervention had a significant effect on reducing the SRQ-20 score in the male ($p = 0.027$) and female ($p = 0.000$) subgroups who had experienced emotional distress

before the intervention was screened. Overall, the effective intervention reduced the SRQ-20 score significantly ($Z = -3.944$; $p = 0.000$).

Conclusion: The intervention in the form of a smartphone-based physical activity competition during the Covid-19 pandemic was statistically effective in reducing the SRQ-20 score of Gadjah Mada University students which was the mental health outcome in this study.

Keywords: SRQ-20, application, physical activity, emotional distress