

RELIABILITAS DAN VALIDITAS KUESIONER AKTIVITAS FISIK, PERILAKU SEDENTER, DAN KEBIASAAN TIDUR INDONESIA (I-PASS)

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ABSTRAK

Latar Belakang: Aktivitas fisik, perilaku sedenter, serta kebiasaan tidur merupakan kebiasaan harian yang mempengaruhi kesehatan. Di Indonesia, sebagian besar masyarakat belum melakukan kebiasaan yang baik, 33,5% kekurangan aktivitas fisik, 24,1% melakukan perilaku sedenter berlebihan, dan 47,3% mengalami gangguan tidur. Prevalensi tersebut lebih tinggi pada populasi mahasiswa di masa pandemi, 55% kurang beraktivitas fisik dan 61,4% mengalami gangguan tidur. Karena itu, perlu dilakukan evaluasi untuk meningkatkan kesehatan, terutama populasi mahasiswa, agar mencapai rekomendasi WHO. Kuesioner Aktivitas Fisik, Perilaku Sedenter, dan Kebiasaan Tidur Indonesia (I-PASS) dibuat untuk menilai kesesuaian dan kecukupan tersebut.

Tujuan: Mengetahui validitas dan reliabilitas kuesioner I-PASS.

Metode: Penelitian mencakup validitas konstruk, validitas konten, dan reliabilitas mengikuti panduan WHO dan COSMIN pada semester ganjil 2022. Sampel berasal dari mahasiswa, jenjang vokasi, S1, S2, hingga S3. Validitas diawali dengan menyusun kuesioner untuk menilai kesesuaian aktivitas fisik aerobik, penguatan otot, perilaku sedenter, kebiasaan tidur dengan *WHO Physical Activity and Sedentary Behaviour Guidelines 2020* dan *Canada 24-hour Movement Guidelines*. Validitas konten, metode kualitatif, dilakukan dengan FGD dan wawancara mendalam dengan *purposive sampling*. Metode kuantitatif mencakup validitas konstruk, objektif ataupun subjektif, dan reliabilitas dilakukan dengan teknik sampling *convenience sampling*.

Hasil: I-PASS telah dievaluasi dan dimodifikasi pada validitas konten. I-PASS berkorelasi dengan *7-Days Diary* pada MPA ($r=0,87$), MVPA ($r=0,91$), frekuensi ($r=0,99$), durasi ($r=1,00$), dan volume MSE ($r=0,99$) dengan $p<0,01$. Plot Bland-Altman mengukur MVPA 109,47 METs -min/ minggu, perilaku sedenter 123,53 menit, frekuensi MSE 0,1 kali, volume MSE 13 menit, dan durasi tidur 0,96 menit lebih rendah dari *7-Days Diary*. Pengukuran MVPA I-PASS dengan $VO_2\max$ dari 6MWT dan mengontrol BMI memiliki $r=0,36$ ($p<0,01$). Pengukuran MSE I-PASS dengan *handgrip strength* relatif tidak berkorelasi. Reliabilitas I-PASS (*test-retest reliability*) memiliki ICC 0,63-0,92 (95%CI 0,326-0,72) dan nilai kappa 0,78.

Kesimpulan: Kuesioner I-PASS memiliki validitas dan reliabilitas yang cukup baik dan dapat menilai kebiasaan terhadap rekomendasi.

Kata kunci : aktivitas fisik, perilaku sedenter, kebiasaan tidur, kebiasaan harian, pola tidur

RELIABILITY AND VALIDITY QUESTIONNAIRE OF INDONESIAN PHYSICAL ACTIVITY, SEDENTARY BEHAVIOR, AND SLEEP HABITS (I-PASS)

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ABSTRACT

Background: Physical activity, sedentary behavior, and sleeping habits are daily habits that affect health. In Indonesia, most people do not have good habits, 33.5% lack physical activity, 24.1% do excessive sedentary behavior, and 47.3% experience sleep disturbances. This prevalence was higher in the college student population during the pandemic, 55% lacked physical activity and 61.4% experienced sleep disturbances. Therefore, it is necessary to carry out an evaluation to improve health, especially the college student population, to achieve WHO recommendations. The Indonesian Physical Activity, Sedentary Behavior, and Sleep Habits Questionnaire (I-PASS) was created to assess the suitability and adequacy of it.

Purpose: Knowing the validity and reliability of the I-PASS questionnaire.

Methods: The study included construct validity, content validity, and reliability following WHO and COSMIN guidelines in the odd semester of 2022. The samples came from college students, vocational level, undergraduate, postgraduate, to doctoral degrees. Validity begins with compiling a questionnaire to assess the suitability of aerobic physical activity, muscle strengthening, sedentary behavior, sleep habits with the WHO Physical Activity and Sedentary Behavior Guidelines 2020 and Canada 24-hour Movement Guidelines. Content validity, a qualitative method, was carried out by means of FGDs and in-depth interviews with purposive sampling. Quantitative methods include construct validity, objective or subjective, and reliability is done by using convenience sampling technique.

Result: I-PASS has been evaluated and modified on content validity. I-PASS correlated with 7-Days Diary on MPA ($r=0.87$), MVPA ($r=0.91$), frequency ($r=0.99$), duration ($r=1.00$), and MSE volume ($r=0.99$) with $p<0.01$. The Bland-Altman plot measures MVPA of 109.47 METs -min/week, sedentary behavior of 123.53 minutes, MSE frequency of 0.1 times, MSE volume of 13 minutes, and sleep duration 0.96 minutes lower than 7-Days Diary. The I-PASS MVPA measurement with a VO₂max of 6MWT and controlling for BMI has $r=0.36$ ($p<0.01$). MSE I-PASS measurement with relatively uncorrelated handgrip strength. The I-PASS reliability (test-retest reliability) has an ICC of 0.63-0.92 (95% CI 0.326-0.72) and a kappa value of 0.78.

Conclusion: The I-PASS questionnaire has fairly good validity and reliability and can assess behavior towards recommendations.

Keywords: physical activity, sedentary behavior, sleep habit, daily habits, sleep pattern