

PERBEDAAN PENGUKURAN OBJEKTIF AKTIVITAS FISIK DENGAN  
FUNGSI KOGNITIF PADA ANAK USIA 4 TAHUN

SKRIPSI

diajukan untuk memenuhi sebagian syarat untuk memperoleh gelar Sarjana Olahraga  
Program Studi Ilmu Keolahragaan



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Skripsi yang diajukan untuk memenuhi sebagian syarat untuk memperoleh gelar Sarjana Olahraga (S1) pada Fakultas Pendidikan Olahraga dan Kesehatan Program Studi Ilmu Keolahragaan

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## ABSTRAK

### PERBEDAAN PENGUKURAN OBJEKTIF AKTIVITAS FISIK DENGAN FUNGSI KOGNITIF PADA ANAK USIA 4 TAHUN

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Perilaku gaya hidup yang dikembangkan di awal kehidupan dapat memengaruhi level dan pola aktivitas fisik di dalam hidupnya. Berperan aktif dalam aktivitas fisik dapat memberikan manfaat pada proses perkembangan keterampilan motorik dan perkembangan kognitif. Pertumbuhan dan perkembangan fisik dan kognitif anak merupakan satu hal yang sangat penting untuk diperhatikan. Akan tetapi, masih sangat banyak anak-anak yang tidak melakukan aktivitas fisik sesuai dengan rekomendasi dan pedoman yang sudah disepakati untuk mengetahui waktu yang dihabiskan oleh anak-anak dalam melakukan aktivitas fisik di setiap harinya, dan manfaat aktivitas fisik terhadap fungsi kognitif. Oleh karena itu, tujuan dari penelitian ini adalah untuk mengkaji perbedaan pengukuran objektif aktivitas fisik dengan fungsi kognitif pada anak usia 4 tahun. Metode yang digunakan pada penelitian ini adalah *causal comparative* dengan populasi pada penelitian ini adalah anak usia 4 tahun yang sedang bersekolah TK, PAUD, dan Kelompok Belajar di Kota Bandung dan Kabupaten Bandung Barat. Melibatkan 40 anak usia 4 tahun yang berpartisipasi sebagai sampel pada penelitian ini. Pengambilan data dengan metode objektif dilakukan menggunakan akselerometer *ActiGraph* untuk mengukur aktivitas fisik dan *EYT Toolbox Go No Go* dan *EYT Toolbox Mr Ant* untuk mengukur fungsi kognitif pada anak usia 4 tahun. Hasilnya, pada perbedaan pengukuran objektif Aktivitas fisik pada anak usia 4 tahun di dapatkan  $p(0.00) < 0.05$  yang berarti terdapat perbedaan yang signifikan, sedangkan pengukuran objektif fungsi kognitif pada anak usia 4 tahun di dapatkan  $p(0.297) > 0,05$  yang berarti tidak terdapat perbedaan yang signifikan.

Kata Kunci : Pengukuran Objektif, Aktivitas fisik, Fungsi kognitif, Anak Usia 4 tahun.

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## ABSTRACT

### DIFFERENCES IN OBJECTIVE MEASUREMENT OF PHYSICAL ACTIVITY AND COGNITIVE FUNCTION IN CHILDREN AGED 4 YEARS

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Lifestyle behaviors that are developed early in life can affect the level and pattern of aktivitas fisik in his life. Having an active role in aktivitas fisik can benefit the process of developing motor skills and cognitive development. Growth and physical development and cognitive of children is one thing that is very important to note. However, there are still many children who do not do aktivitas fisik in accordance with the recommendations and guidelines that have been agreed to know the time spent by children in doing aktivitas fisik every day, and the benefits of aktivitas fisik on fungsi kognitif. Therefore, the aim of this study is to examine differences in objective measurement of physical activity and cognitive function in children aged 4 years. The method used in this study is causal comparative with the population in this study are children aged 4 years who are attending kindergarten, PAUD, and Study Groups in Bandung City and West Bandung Regency. Involved 40 children aged 4 years who participated as a sample in this study. Data collection with an objective method is done using the ActiGraph accelerometer to measure aktivitas fisik and EYT Toolbox Go No Go and EYT Toolbox Mr. Ant to measure fungsi kognitif in children aged 4 years. The result, the difference in objective measurement of aktivitas fisik in 4-year-olds is  $p(0.00) < 0.05$ , which means there is a significant difference, while differences in objective measurement of fungsi kognitif in 4-year-olds are obtained  $p(0.297) > 0.05$ , which means there is no significant difference.

Keywords: Objectively Measured, Physical Activity, Cognitive Function, Children 4 years of age.

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