

**HUBUNGAN PENGGUNAAN TELEPON PINTAR PADA METODE
PEMBELAJARAN DARING TERHADAP GANGGUAN FUNGSI
KOGNITIF ANAK USIA SEKOLAH DASAR SELAMA PANDEMI
COVID-19 DI KECAMATAN NGABLAK KABUPATEN MAGELANG**

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ABSTRAK

Pembelajaran daring selama pandemi COVID-19 meningkatkan penggunaan telepon pintar yang berdampak negatif yaitu siswa terstimulasi mengakses aplikasi lain, hal ini meningkatkan risiko penggunaan telepon pintar oleh siswa. Penggunaan telepon pintar dan alat-alat elektronik yang berlebihan memberikan berbagai dampak negatif pada anak. Kebiasaan yang berlebihan dapat menyebabkan perubahan sosial, gangguan tidur, bahkan gangguan fungsi kognitif berupa fungsi memori, atensi, dan fungsi eksekutif. Penelitian ini merupakan penelitian analitik observasional menggunakan metode *cross sectional*. Jumlah sampel penelitian ini sebanyak 63 subyek sesuai dengan kriteria inklusi dan eksklusi, dengan teknik pengambilan sampel menggunakan *consecutive sampling*. Analisis data menggunakan *Chi-square*, *Mann-Whitney U Test* (non-parametrik). Analisis multivariat menggunakan uji regresi logistik. Analisis data kualitatif untuk mengidentifikasi fenomena dengan wawancara mendalam. Penarikan sampel dilakukan secara *purposive sampling*. Hasil penelitian didapatkan penggunaan telepon pintar pada pembelajaran daring berhubungan terhadap gangguan fungsi kognitif anak usia sekolah dasar selama pandemi COVID-19 di Kecamatan Ngablak, Kabupaten Magelang. Hasil identifikasi wawancara mendalam pada 3 informan didapatkan 3 tema, yaitu: a) sistem pembelajaran daring dibagi menjadi 3 kategori yaitu tipe pembelajaran daring, media pembelajaran daring, dan kendala pembelajaran daring; b) penggunaan telepon pintar selama pembelajaran daring terdiri dari 2 kategori; karakteristik penggunaan telepon pintar, dan pengaruh penggunaan telepon pintar pada anak; c) fungsi kognitif anak selama pembelajaran daring terdiri dari 4 kategori, yaitu; prestasi siswa sebelum pembelajaran daring, prestasi siswa setelah pembelajaran daring, peningkatan nilai mata pembelajaran, dan kemampuan kognitif siswa selama pembelajaran daring.

Kata Kunci : penggunaan telepon pintar, pembelajaran daring, gangguan fungsi kognitif anak, pandemi COVID-19.

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**THE ASSOCIATION BETWEEN SMARTPHONE USE IN ONLINE
LEARNING TO FUNCTIONAL COGNITIVE IMPAIRMENT IN
ELEMENTARY SCHOOL-AGE CHILDREN DURING THE COVID-19
PANDEMIC IN NGABLAK DISTRICT, MAGELANG REGENCY**

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ABSTRACT

Online learning during COVID-19 pandemic increased smartphone use which had a negative impact, that students were stimulated to access other applications, this increased the risk smartphone use by students. Excessive use of smartphones and electronic devices has various negative impacts on children. Excessive habits can cause social changes, sleep disturbances, and even cognitive function disorders in the form of memory, attention, and executive functions. This research is an observational analytic research using cross sectional method. The number of samples in this study were 63 subjects according to the inclusion and exclusion criteria, with the sampling technique using consecutive sampling. Data analysis used Chi-square, Mann-Whitney U Test (non-parametric). Multivariate analysis using logistic regression test. Qualitative data analysis to identify phenomena with in-depth interviews. Sampling was done by purposive sampling. The results of this study found that the use of smartphones in online learning was related to impaired cognitive function of elementary school-age children during the COVID-19 pandemic in Ngablak District, Magelang Regency. The results of in-depth interviews with 3 informants obtained 3 themes, that is: a) online learning systems are divided into 3 categories, types of online learning, online learning media, and online learning constraints; b) smartphone use during online learning consists of 2 categories; characteristics of smartphone use, and the effect of smartphone use on children; c) children's cognitive function during online learning consists of 4 categories, that is; student achievement before online learning, student achievement after online learning, increase in learning subject scores, and students' cognitive abilities during online learning

Keywords: smartphone use, online learning, children cognitive impairment, COVID-19 pandemic.

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