

**HUBUNGAN SELF-REGULATED LEARNING DAN FUNGSI KOGNITIF DENGAN
PERFORMANCE HASIL PEMERIKSAAN QEEG PADA MAHASISWA BARU
FKUPNVJ 2022/2023**

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ABSTRAK

Para mahasiswa baru, terutama mahasiswa kedokteran, termasuk dalam kelompok remaja yang perlu beradaptasi dengan perubahan dalam kehidupan mereka, terutama dalam konteks pendidikan. Mereka dituntut untuk melebihi prestasi para dokter saat ini. Kemampuan untuk belajar secara mandiri sangat penting bagi mahasiswa kedokteran, yang melibatkan proses pemantauan diri dan penetapan tujuan yang teliti. Proses ini melibatkan fungsi kognitif seseorang. Penelitian dalam bidang neurosains kognitif semakin maju, dan alat electroencephalography (EEG) digunakan secara luas dalam penelitian psikologi. EEG dapat merekam aktivitas otak dan telah menjadi instrumen penelitian yang populer dalam studi tentang fungsi kognitif. Penelitian ini bertujuan untuk memeriksa hubungan antara self-regulated learning (SRL) dan fungsi kognitif dengan menggunakan parameter qEEG. Metode penelitian ini adalah observasional analitik dengan menggunakan data dari kuesioner MSLQ dan MoCA-INA serta hasil perekaman qEEG pada irama alfa dan beta menggunakan absolute power. Uji korelasi Spearman rank digunakan dalam penelitian ini. Hasil penelitian menunjukkan bahwa terdapat hubungan antara SRL dan 10 parameter qEEG channel. Terdapat juga hubungan antara fungsi kognitif dan 3 parameter qEEG channel. Kesimpulan dari penelitian ini adalah terdapat beberapa faktor yang mempengaruhi hubungan antara SRL dan fungsi kognitif dengan parameter qEEG, seperti kondisi responden, fungsi otak yang berbeda, dan hasil rekaman qEEG.

Kata kunci: *self-regulated learning*, fungsi kognitif, qEEG

**THE RELATIONSHIP BETWEEN SELF-REGULATED LEARNING AND
COGNITIVE FUNCTION WITH PERFORMANCE BASED ON QEEG
EXAMINATION RESULTS AMONG NEW STUDENTS OF FKUPNVJ 2022/2023**

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ABSTRACT

New students are generally categorized as teenagers who will constantly adapt to changes in their lives, including in the realm of education. This is especially true for new medical students who are expected to surpass the achievements of current doctors. The ability to engage in self-regulated learning is crucial for medical students, as this meticulous process of monitoring and setting goals for oneself involves cognitive functions. It has been proven that good cognitive processes have a positive effect on academic achievement. With the advancement of cognitive neuroscience, electroencephalography (EEG) devices are increasingly being used for psychological purposes. These devices can record an individual's brain activity and serve as research instruments that have been widely used in studies on cognitive functions. This study aims to examine the relationship between self-regulated learning, cognitive function, and qEEG parameters. The research methodology employed an observational analytic approach, using ratio-scale data from the MSLQ and MoCA-INA questionnaires, as well as qEEG recordings of alpha and beta rhythms using absolute power. Spearman rank correlation tests were conducted for this study. The results indicate a correlation between SRL and 10 qEEG channel parameters, as well as a correlation between cognitive function and 3 qEEG channel parameters. In conclusion, there are several factors that influence the relationship between SRL, cognitive function, and qEEG parameters, such as the respondents' conditions, different brain regions, and the results of qEEG recordings.

Keywords: self-regulated learning, cognitive function, qEEG