

**FACTORS AFFECTING STUDENTS' SCIENCE  
ACADEMIC PERFORMANCE DURING ONLINE LEARNING**

**RESEARCH PAPER**

Submitted as a Requirement to Obtain Degree of *Sarjana Pendidikan* in  
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**INTERNATIONAL PROGRAM ON SCIENCE EDUCATION  
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UNIVERSITAS PENDIDIKAN INDONESIA**

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**FACTORS AFFECTING STUDENTS' SCIENCE  
ACADEMIC PERFORMANCE DURING ONLINE LEARNING**

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Skripsi ini diajukan untuk memenuhi salah satu syarat memperoleh gelar Sarjana Pendidikan pada Program Studi International Program on Science Education (IPSE) Fakultas Pendidikan Matematika dan Ilmu Pengetahuan Alam

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ACADEMIC PERFORMANCE DURING ONLINE LEARNING**

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## DECLARATION

I hereby certify that this research paper entitled “Factors Affecting Students’ Science Academic Performance during Online Learning” is truly my own work. I am fully aware that I have quoted some ideas and statements from many sources that are acknowledged and stated correctly. This paper does not contain the materials which have been summited for the award of any other degree in any university or institution except where due references are used in this research paper.

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# FACTORS AFFECTING STUDENTS' SCIENCE ACADEMIC PERFORMANCE DURING ONLINE LEARNING

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## ABSTRACT

The COVID-19 outbreak in Indonesia has been affecting the education sector. It has led to a suspension of face-to-face learning and shifting education to distance learning. Nevertheless, it has been discovered that academic performance is declining during distance learning. On the other hand, it has been revealed that student motivation, study habits, and teaching strategies had significant relationships with academic performance. Therefore, this study aims to be the first to examine the simultaneous and respective effects of student motivation, study habits, and instructional strategies on academic performance during online science learning. This study employed a quantitative research method. Hence, online surveys were distributed to collect the data from 393 students and nine science teachers from seven schools located in West Java, West Sumatra, North Sulawesi, and South Sulawesi. The findings discovered a significant relationship and that 20.6% of the academic performance is explained by student motivation, study habits, and teaching strategies during online science learning. Additionally, a significant relationship was found between student motivation ( $t=3.226$ ;  $p=.001$ ) and teaching strategies ( $t=8.984$ ;  $p=.000$ ) to academic performance during online science learning, respectively. On the contrary, this study had failed to discover the relationship between study habits and academic performance during online learning ( $t=.078$ ;  $p=.938$ ). The result of this study can be used as a reference for teachers, future researchers, and policymakers within the educational field to pay attention to the factors that can influence students' academic performance during online science learning.

**Keywords:** *academic performance prediction, covid-19 pandemic, online learning, student motivation, study habits, teaching strategy.*

# FAKTOR-FAKTOR YANG MEMENGARUHI PRESTASI AKADEMIK IPA SISWA SELAMA PEMBELAJARAN DARING

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## ABSTRAK

Wabah COVID-19 di Indonesia berdampak pada sektor pendidikan. Hal ini menyebabkan penangguhan pembelajaran tatap muka dan mengalihkan pendidikan ke pembelajaran jarak jauh. Akan tetapi, telah ditemukan bahwa prestasi akademik siswa menurun selama pembelajaran jarak jauh. Di sisi lain, telah terungkap bahwa motivasi siswa, kebiasaan belajar, dan strategi mengajar memiliki hubungan yang signifikan dengan prestasi akademik. Oleh karena itu, penelitian ini bertujuan untuk menjadi pelopor dalam menguji pengaruh simultan dan pengaruh masing-masing antara motivasi siswa, kebiasaan belajar, dan strategi mengajar terhadap prestasi akademik selama pembelajaran IPA secara daring. Penelitian ini menggunakan metode penelitian kuantitatif. Oleh karena itu, survei secara daring disebarakan untuk mengumpulkan data dari 393 siswa dan sembilan guru IPA dari tujuh sekolah yang berada di Jawa Barat, Sumatera Barat, Sulawesi Utara, dan Sulawesi Selatan. Penelitian ini menemukan hubungan yang signifikan dan 20,6% dari prestasi akademik siswa dipengaruhi oleh motivasi siswa, kebiasaan belajar, dan strategi mengajar selama pembelajaran IPA secara daring. Selain itu, telah ditemukan hubungan yang signifikan antara motivasi siswa ( $t = 3,226$ ;  $p = 0,001$ ) dan strategi mengajar ( $t = 8,984$ ;  $p = 0,000$ ) terhadap prestasi akademik selama pembelajaran IPA secara daring. Namun, penelitian ini telah gagal dalam menemukan hubungan antara kebiasaan belajar dan prestasi akademik siswa selama pembelajaran secara daring ( $t = 0,078$ ;  $p = 0,938$ ). Hasil penelitian ini dapat digunakan sebagai referensi bagi guru, peneliti di masa depan, dan pembuat kebijakan di bidang pendidikan untuk lebih memerhatikan faktor-faktor yang dapat mempengaruhi prestasi akademik siswa selama pembelajaran IPA secara daring.

**Kata kunci:** *kebiasaan belajar, motivasi siswa, pandemi covid-19, pembelajaran daring, prediksi prestasi akademik, strategi pengajaran.*

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