

INTISARI

Bangunan gedung memiliki peran penting dalam mendukung berbagai aktivitas manusia, termasuk sebagai hunian sementara bagi mahasiswa. Agar bangunan berfungsi dengan baik, aspek keselamatan, kesehatan, kenyamanan, dan kemudahan harus dipenuhi. Kondisi bangunan, khususnya asrama, berperan besar dalam kesejahteraan penghuninya. Penelitian ini bertujuan membandingkan hasil pengukuran lapangan dengan persepsi penghuni terkait kondisi bangunan asrama dari segi kesehatan, kenyamanan, dan kemudahan.

Penelitian ini menggunakan metode campuran (*mixed methods*), yang mencakup pendekatan kualitatif (kuesioner penghuni) dan kuantitatif (pengukuran lapangan). Data persepsi penghuni dikumpulkan melalui kuesioner yang diisi oleh 88 responden. Pengukuran lapangan dilakukan dengan menggunakan alat ukur seperti meteran, *4 in 1 Environmental Meter*, dan *Sound Level Meter*. Selain itu, sampel air bersih diambil dari kran air asrama menggunakan wadah steril dan botol air minum 1,5 liter, yang kemudian dianalisis secara fisika, kimia, dan mikrobiologi di Balai Laboratorium Kesehatan dan Kalibrasi Daerah Istimewa Yogyakarta. Data yang terkumpul dianalisis menggunakan statistik deskriptif dan uji korelasi antara ketinggian lantai serta orientasi bangunan terhadap hasil pengukuran lapangan, yang mencakup suhu, kelembapan, dan tingkat pencahayaan alami.

Hasil penelitian menunjukkan bahwa kondisi bangunan asrama mahasiswa secara umum telah memenuhi sebagian besar standar kesehatan, kenyamanan, dan kemudahan. Ventilasi alami, pencahayaan alami, dan pengelolaan sampah dinilai baik, sementara pencahayaan buatan di area tertentu serta kualitas air bersih masih memerlukan perbaikan. Pada aspek kenyamanan, kelembapan udara menjadi tantangan utama, meskipun ruang gerak, suhu udara, dan tingkat kebisingan telah memenuhi standar. Sebagian besar fasilitas kemudahan telah memadai, tetapi beberapa fasilitas, seperti tangga dan tempat parkir, memerlukan penyesuaian. Selain itu, hasil analisis korelasi menunjukkan bahwa ketinggian lantai berpengaruh signifikan terhadap suhu, kelembapan, dan pencahayaan alami, sementara orientasi bangunan memengaruhi intensitas pencahayaan alami di dalam ruangan. Selain itu, variasi lingkungan seperti vegetasi dan ruang terbuka hijau turut memengaruhi pencahayaan alami. Perbedaan antara hasil pengukuran lapangan dan persepsi penghuni, terutama terkait pencahayaan, mengindikasikan bahwa penghuni telah beradaptasi dengan kondisi eksisting. Secara keseluruhan, temuan ini memberikan rekomendasi untuk meningkatkan aspek kesehatan dan kenyamanan guna mencapai kondisi bangunan yang lebih optimal.

Kata kunci : kondisi bangunan, pengukuran lapangan, persepsi penghuni, asrama mahasiswa.

ABSTRACT

Building structures play an essential role in supporting various human activities, including serving as temporary housing for students. To ensure that a building functions properly, aspects of safety, health, comfort, and convenience must be met. The condition of a building, particularly dormitories, significantly influences the well-being of its occupants. This study aims to compare field measurement results with occupant perceptions regarding the condition of dormitory buildings in terms of health, comfort, and convenience.

This research employs a mixed-methods approach, combining qualitative (occupant questionnaires) and quantitative (field measurements) methods. Occupant perception data were collected through questionnaires filled out by 88 respondents. Field measurements were conducted using measuring tools such as a tape measure, a 4-in-1 Environmental Meter, and a Sound Level Meter. Additionally, clean water samples were collected from dormitory faucets using sterile containers and 1.5-liter water bottles. These samples were then analyzed for physical, chemical, and microbiological properties at the Health and Calibration Laboratory of the Yogyakarta Special Region. The collected data were analyzed using descriptive statistics and correlation tests, examining the relationship between floor height and building orientation with field measurement results, including temperature, humidity, and natural lighting levels.

The research findings indicate that the overall condition of the student dormitory building meets most health, comfort, and convenience standards. Natural ventilation, natural lighting, and waste management were rated as good, while artificial lighting in certain areas and the quality of clean water still require improvement. Regarding comfort, air humidity emerged as a primary challenge, although factors such as available space, air temperature, and noise levels were within acceptable standards. Most convenience facilities were deemed adequate, but certain amenities, such as staircases and parking spaces, require adjustments. Additionally, correlation analysis results showed that floor height significantly influences temperature, humidity, and natural lighting, while building orientation affects the intensity of natural lighting inside rooms. Environmental variations, such as vegetation and green open spaces, also impact natural lighting. The discrepancies between field measurement results and occupant perceptions, particularly concerning lighting, indicate that occupants have adapted to existing conditions. Overall, these findings provide recommendations to enhance health and comfort aspects to achieve more optimal building reliability.

Keywords: *building condition, field measurements, occupant perceptions, student dormitories.*