

**THERMAL COMFORT OF FEMALE STUDENTS IN AN AIR-CONDITIONING
LABORATORY**

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ABSTRACT

In order to achieve the thermal comfort, there are several factors that need to be studied and understand. For this research, the factor is environmental factors such as air temperature, relative humidity, mean radiant temperature, and air velocity. Other factor is personal factor such as activity level (met-value) and clothing insulation (clo-value). In this research, it was found that the temperature range for students was from 22°C to 24°C which was almost the same as the acceptable air temperature for thermal comfort in air-conditioned room which is 21°C. For relative humidity, the RH range was from 52% to 58%. The humidity become higher whiles the temperature increasing. In this case, the humidity was lower because the temperature was low in air-conditioned room. The mean radiant temperature is considered as the same as air temperature. The range value of air velocity was between 0.05 m/s and 0.22 m/s which were quite the same as the acceptable air velocity in air-conditioned room. Thermal comfort study is a research that needs to be done continuously. Thermal comfort is due to climate that always changing depends on the weather. But it is if in the outdoor room. In this research, it is due to the air-conditioning system whether it is functioning or not. This studied need to be done from time to time in order to get the latest thermal comfort parameters value. In taking the data needed, the latest and acquire equipments need to be used. For that, thermal comfort study would be better and accurate.