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Estimate Temperature Threshold for Low to Middle-Income Dwellers of Faisalabad City during Hot Summer Days

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With the evolution in climate, heat waves are occurring more commonly which leads to imply indoor temperatures. Several temperature thresholds have been suggested in diverse environments for the indication of indoor overheating. In this study, threshold values for perceived heat stress are evaluated and differentiated between susceptible households and non-susceptible households for the residents of Faisalabad in Pakistan. Data from 52 low to middle-income households were analyzed with the help of regression analysis, t-tests, and analysis of variances to discover characteristics associated with perceived heat stress during the nighttime period in the selected houses. We considered socio-demographic characteristics, health-related queries, heat-related health problems, and house/building material variables from the selected households. The results suggest that the health status during heat stress, age factor, climate zone, and high indoor temperature were the key attributes for the perceived heat stress. The threshold limit advised by the WHO for indoor is 24°C and most of the dwellers in case study live in 36-38°C. People appeared to be at risk for perceived heat stress without knowing to be at risk, particularly when numerous people live in one room (threshold limit 34.8°C), suffering from disease (35.6 °C) and below 60 (39.8 °C); therefore they do not take it seriously, to take adaption measures.