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Personal cooling strategies to improve thermal comfort in warm indoor environments: comparison of a conventional desk fan and air ventilation clothing

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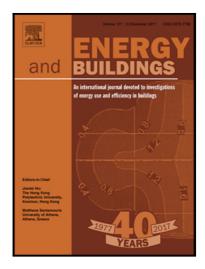
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#### ACCEPTED MANUSCRIPT

### **Highlights**

- Performance of desk fan (DF) and ventilation clothing (VC) at 28.0, 30.0 and 32.0 °C was examined.
- Both cooling methods are similar in terms of perceptual responses and skin temperatures at all three temperatures.
- Mean torso temperatures in VC was significantly lower than those in DF at three studied indoor temperatures.
- VC is recommended for indoor environments with air temperatures up to 32.0 °C.
- The use of VC can save around 55-60% of energy overall and this can provide 7-8% more energy saving as compared to DF.

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