

“It’s Getting Hot in Here”

Examining the user acceptability of single-use temperature stickers for the detection of hyperthermia for implementation in music festival settings

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Translational Research
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priority populations



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Illicit drug use



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We acknowledge and pay respect to the traditional owners of the land on which we meet and pay respect to Elders past, present, and emerging.

As we share our own knowledge, teaching, and learning here today, may we also pay respect to the knowledge embedded forever within the Custodianship of Country.



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Disclosure of Interest

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Manufacturers of the single-use temperature stickers (feverpatches) were not involved and did not contribute to this study, financially or otherwise



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Background

- Harm reduction strategy needed due to drug-related deaths at music festivals in NSW
- MDMA + ambient conditions + individual conditions → hyperthermia

Are temperature stickers acceptable to users undertaking extended physical activity in a controlled environment?

Methods

- Approached participants (N=204) at University fitness centre attending high-intensity fitness class (Body Attack)
- Compared three brands of temperature sticker on four locations on the body
 - Wrist
 - Forearm
 - Upper chest
 - Forehead
- Rate sticker comfort by brand and body location (0–10 scale) and ease of application (0–10 scale) and provide open ended feedback
- Participants reimbursed with \$20 grocery vouchers.

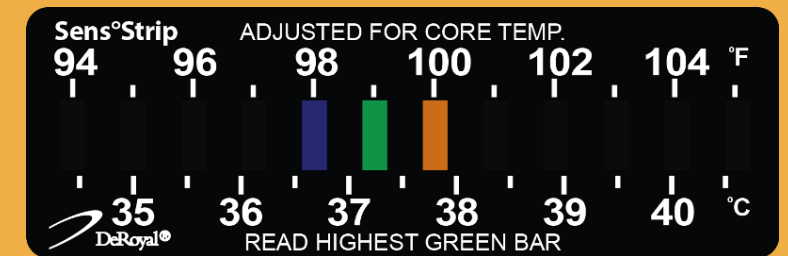
FeverBugz



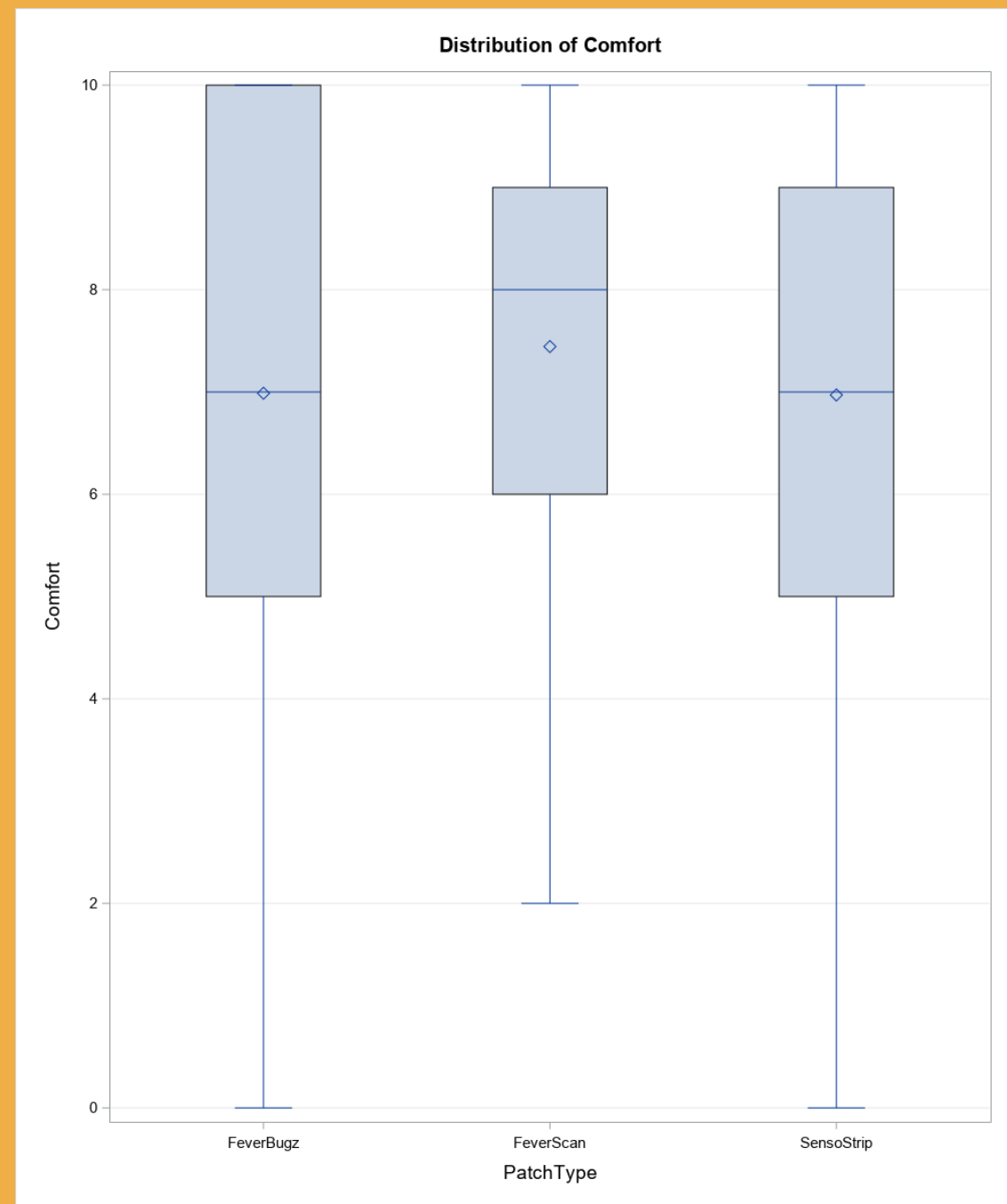
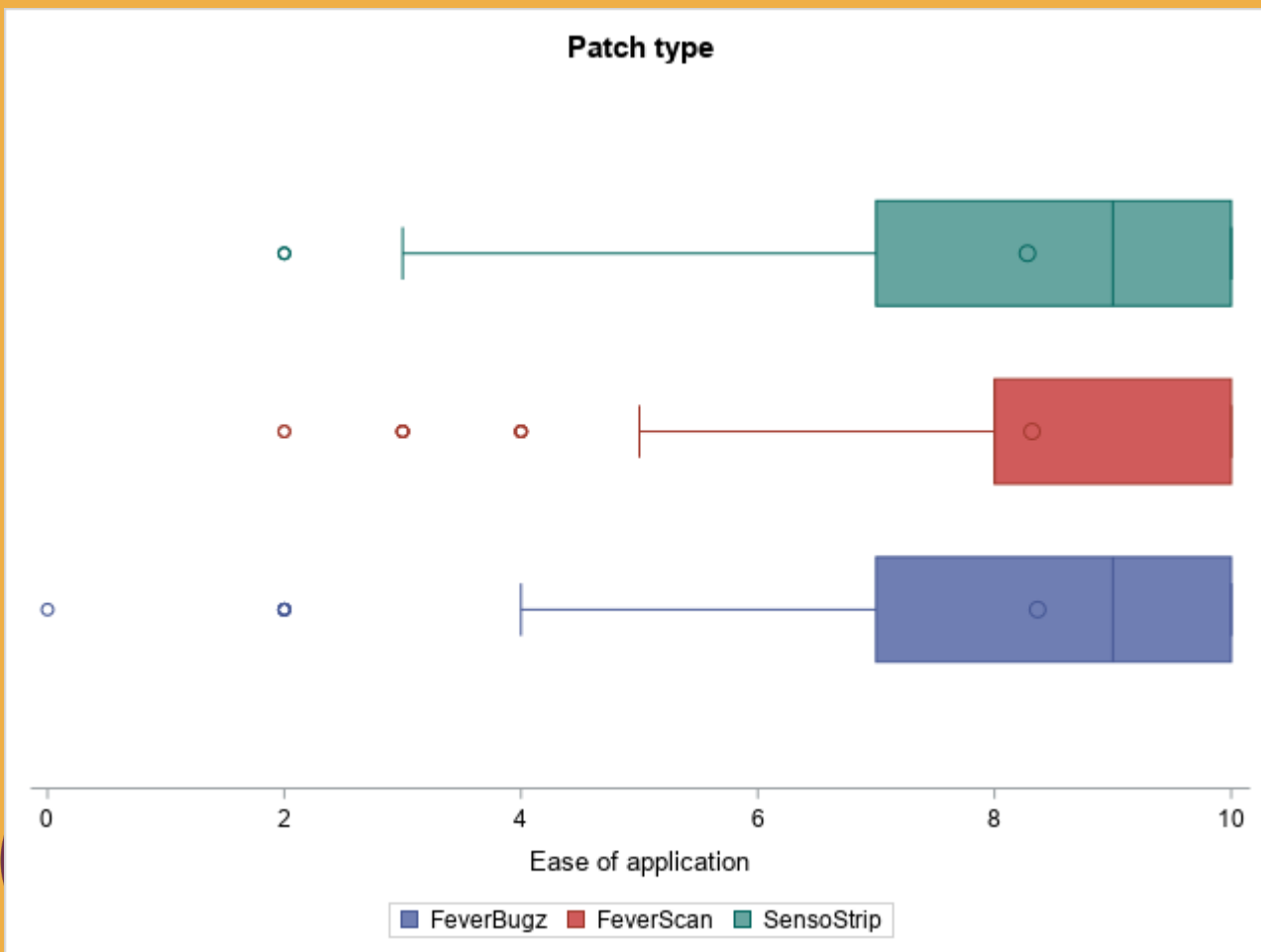
FeverScan



SensoStrip



Findings: comfort and ease of application



Sticker Location



Comfort Rating by Body Location



Results: Feedback

- User attributes
- Design considerations
- Comfort by location



"Long stickers fall off more easily compared to circular ones. Head stickers gets itchy when sweating."



"I would not be very comfortable to wear the wearable thermometer on my forehead when going out in community. Otherwise all good."



"It is a bit hard as you automatically tend to worry about the wearables falling off... maybe think about a band for the arms"



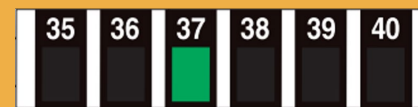
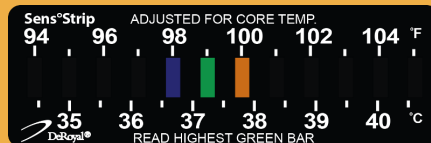
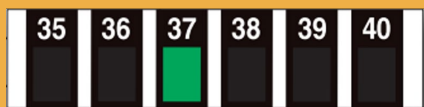
"Sweat caused the forehead and forearm thermometers to slide"



"The upper chest sticker was the most comfortable one."

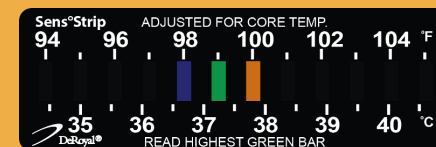
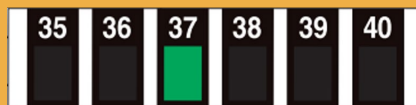
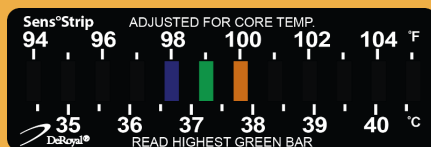


"Wrist fell off quickly. Forehead came loose at end."



Summary

- Participants found the stickers to be acceptable
- Upper chest location preferred due to comfort
- Considerations for future: design, user attributes, location
- Further assess use at music festival or club



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