*This study, the first of its kind known to the authors, investigated the accuracy of several commercially-available activity trackers while riding a motorcycle over a moderate distance.*

Our results noted that each of the studied activity trackers miscounted steps. Only the Apple Watch had one trial where the true step count was exactly matched.

Because each device has a proprietary algorithm for assessing step counts, we can only speculate as to why each device performed as it did during the motorcycling trials.

Previous research has noted that newer algorithms and additional sensors, such as optical heart rate (photoplethysmography) may increase step accuracy [10]. This may be why the Fitbit Zip did poorly compared to the other two activity trackers.

**REFERENCES**