



SADDLESPUR™

Improved comfort Increased performance



**“These findings show that the saddle could have a huge potential for cycling.”
Anglia Ruskin University**

A new research study demonstrates SaddleSpur™’s innovative design provides performance and comfort benefits for cyclists.

SaddleSpur™ was explicitly designed to improve comfort and increase performance for cyclists. Initial feedback from testers during the development phase was positive. Still, the team at SaddleSpur™ wanted to partner with sports science experts to test the saddle in a more controlled environment under rigorous scientific conditions.



With funding provided by Innovate UK Edge, the Cambridge Centre for Sport & Exercise Sciences of Anglia Ruskin University was commissioned and came on board to investigate the impacts of using the saddle in a more controlled environment.

On the basis of the unique design of SaddleSpur™, patents have been granted in 15 of the major cycling countries of the world.



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Why do a study?

The objective was to investigate the impact of a novel saddle design, incorporating a 15 cm saddle spur, using cycling time-trial performance conditions. The study assessed physiological, mechanical, and perceptual responses to determine the effectiveness of the SaddleSpur™ design. The researchers aimed to compare cyclists' performance and comfort levels using the novel saddle design with those using a commercially available, high-performance, standard saddle.



Who took part and how?

The research team recruited six men and six women participants with previous experience in time-trial cycling. Participants completed a 10-mile time trial on two separate occasions using either the SaddleSpur™ or the standard saddle; miles 8 -10 had gradients averaging 11%, maxing out at 20%. Multiple physiological, mechanical, bio, and perceptual data were collected during the trials, which included cardiorespiratory responses, muscle activation through surface electromyography (EMG), and perceived discomfort ratings. Data analysis was conducted using statistical tests to identify all differences between the two saddle designs.

What did we learn?

The study revealed two key findings.

Firstly, participants perceived significantly less discomfort when using the SaddleSpur™, particularly during the final three miles of the time trial. This finding suggests that the SaddleSpur™ offers improved comfort compared to the standard saddle.

Secondly, participants using the SaddleSpur™ were able to recover time between miles 8 and 10 – the steepest part of the course – and ultimately completed the time trial 11 seconds faster on average than with the standard saddle, notwithstanding trial order. Despite the potential for confounding factors such as course familiarity and pacing effects to impact results, it clearly shows the opportunity SaddleSpur™ can offer in driving performance.



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What happens now?

The study will be published in The Journal of Sports Sciences and subject to peer review. However, the cycling community is already getting excited by these findings, which indicate the potential benefits of adopting the novel saddle design, particularly in terms of increased efficiency and reduced discomfort.

This first study is extremely promising. SaddleSpur™ is committed to ongoing research to explore more potential benefits as they launch the saddle onto the market this autumn.

Visit www.saddlespur.com to download the full study.

Pre-order and be among the first in the saddle to experience the future of cycling!

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Acknowledgments

Anglia Ruskin University
Innovate UK Edge
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