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Dear Editor/s,

We are pleased to submit the accompanying article in the category of original manuscript to the *Journal of Sports Sciences.* Our article is entitled “The effects of the false start disqualification rules on the reaction times of elite sprinters”. We think this novel research paper is a valuable addition to the scientific literature in the fair and impartial refereeing of competitive athletics. The methods and results in our paper may have important implications in a future revision of the IAAF false start disqualification limit.

This article aligns well with the *Journal of Sports Sciences’* research interests and previously published research on the reaction time of athletes [1]. This article combines readers’ interest in the governance of false start disqualifications, while also incorporating significant findings on the sex difference in reaction times reported throughout the literature.

This study aimed to examine the effect of rule changes on reaction times in international athletic competitions and derive an improved reaction time threshold. The findings of our study have highlighted 1) an increase in the reaction time of athletes across rule changes, 2) the inadequacy of the current false start threshold and 3) a sex difference in reaction times of athletes. These findings are of particular importance to the validity of the current 100 ms false start threshold.

The work presented in this article is original research, has not been published elsewhere and is not currently submitted for publication in any other journal. The findings presented in this paper are novel and unique to the application area. The authors have no conflict of interest to declare. Authors involved in this research are:

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We would be most grateful if you would consider this article for publication.

Yours sincerely,

Kevin Brosnan

**References:**

1. Pain, Matthew TG, and Angela Hibbs. "Sprint starts and the minimum auditory reaction time." *Journal of sports sciences* 25, no. 1 (2007): 79-86.