# DIFFERENCES ACCORDING TO MODALITIES, DISTANCES AND GENDERS OF HOW THE TRIATHLETES CARRY THEIR BICYCLES FOR THE BOXES DURING THE FIRST TRANSITION IN THE SPANISH CHAMPIONSHIPS

Romero-Ramos, O.1, Fernández-Rodríguez, E. 1, Merino-Marban, R.1, Mayorga-Vega, D. 2

1: Faculty of Education Sciences (University of Málaga, España) 2: Faculty of Humanities and Education Sciences (University of Jaen, España)

# Introduction

Fernandez-Rodriguez et al. (2015) studied the last part of T1, paying attention to the way in which triathletes carry their bicycles into the boxes. There were four habitual types of hold-riding bikes in the transition area:

Hold-riding of the bicycle by the saddle, by the handlebar, "by the front/rear" and by the stem.

The purpose was to compare the proportion in the use (by elite or pro category) of the 4 types of hold-riding the bicycle during the transition between triathletes' sex (men and women), distance or modality (Olympic, sprint, long and cross) at the Triathlon Spanish Championships.

## Method

It was decided to place two cameras in box (Fernandez-Rodriguez et al., 2015;2016). The sample was composed by 648 Spanish triathletes, participants of eight elite Spanish championship triathlon during 2016.

### Results

Most of triathletes hold-ride the bike by the seat only while driving it (76.2%), followed by the handlebar (14.9%), seat-handlebar (7.1%) and stem styles (1.9%). The same tendency was showed within sex, category and race subcategories, except for Olympic (seat style was used for the 95% of triathletes), sprint (seat and handlebar styles were similar), and long (seat-handlebar and stem styles were equal). The results showed that there were statistically significantly differences in the proportion of triathletes that used each hold-riding of the bicycle between sex, race, and sex-race subcategories (p < 0.05). As regards the sex race analyses, although both, men and women, elite triathletes mostly used the seat style during the short (Olympic), sprint and long distances, while during cross race men used more the handlebar style, women used the seat style. However, when men and women were compared within each race subcategory independently, statistically significantly differences were not found (p > 0.05; Cramer's V = 0.000-0.244).

### Discussion

The difference between men and women is that men have twice the grip on the handlebars. The videos show that this may be because the groups of men in the boxes are greater than those of the women, and this sometimes forces them, to take the bike by the handlebar to control it better and avoid incidents. While in the Olympic, sprint and long-distance elite triathletes mostly used the seat style, and in the cross race the handlebar style. This may be because in the first one, the surface is asphalt or similar, so taking the saddle goes more comfortable, fast or without problems. In contrast, in the triathlon cross as the surface (boxes) is usually more unstable, it requires a more secure grip so that the handlebar does not deviate.

#### References

Fernández-Rodríguez, E., Merino-Marban, R., Romero-Ramos, O., & April, J. (2015). How triathletes hold-ride the bike through boxes during the first transition. A proposal of classification, *JPES*.15(4),864-870

Fernández-Rodríguez, Romero-Ramos, Romero Ramos & April Cullimore (2016). How triathletes mount their bikes after the first transition. A classification proposal. *JPES* 16(3),761 - 769