

2020 EU-Korea EcoMobility Conference: Imagining Carbon Neautral Roads



Social Network Interventions for Increasing Bike Use

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Network Interventions

"Induction interventions" force peer-to-peer interactions to create cascades in information or behavioral diffusion. Valente, 2010, 2012.

Peer pressure applied in

- *social mobilization problems; Pickard et al., 2011*
- *product adoption; Aral, 2012*
- *health behaviors; Centola, 2011*
- *Altruism; Leider, Möbius, Rosenblat 2009*
- *cooperative behavior; Rand et al. 2009*
- *in evolution theory; Nowak, 2006*





nature
human behaviour

ARTICLES

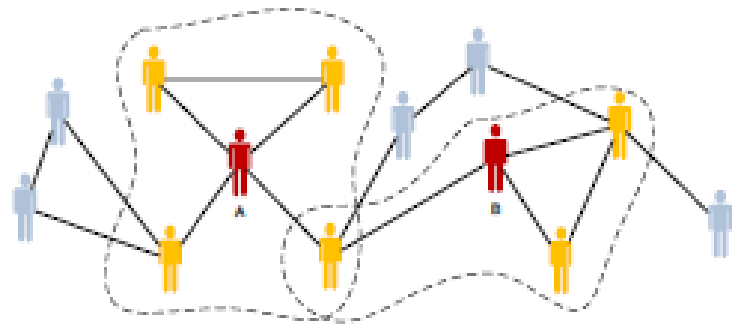
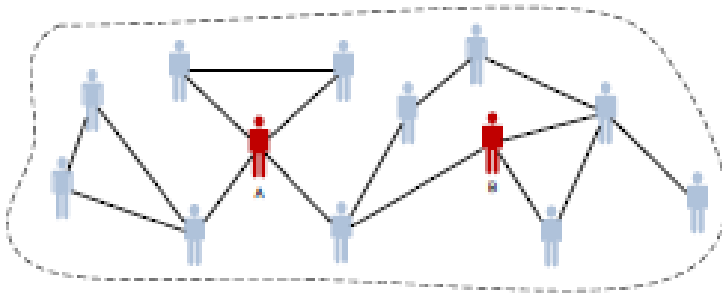
<https://doi.org/10.1038/s41562-018-0436-y>

Network interventions for changing physical activity behaviour in preadolescents

Antonios Proestakis ^{1*}, Eugenia Polizzi di Sorrentino ^{1,2}, Helen Elizabeth Brown³, Esther van Sluijs³, Ankur Mani⁴, Sandra Caldeira¹ and Benedikt Herrmann¹

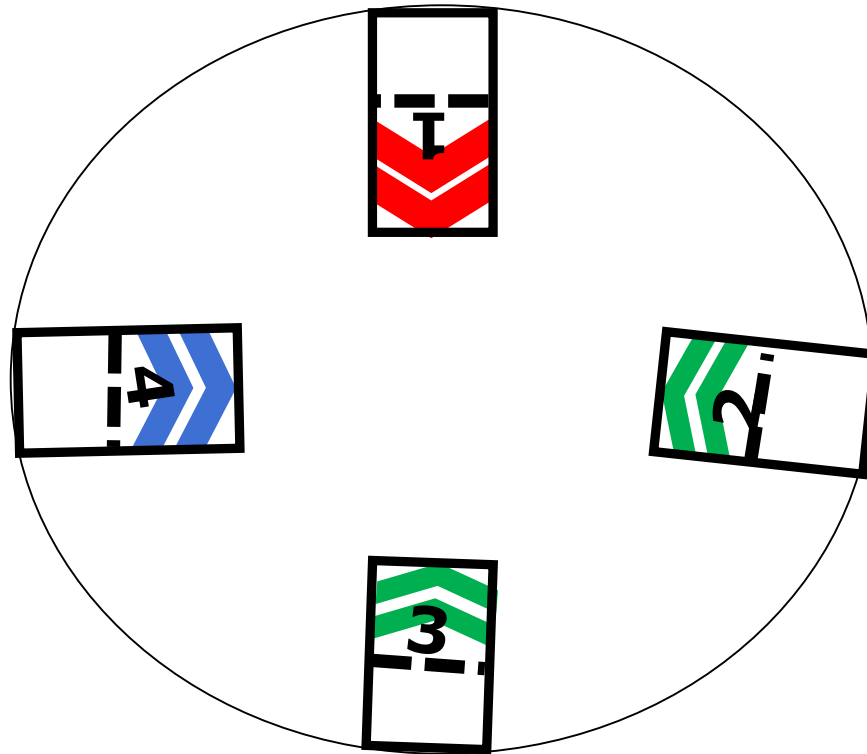
Social Incentives:

My behaviour affects other's welfare and other's behaviour is affecting my welfare.

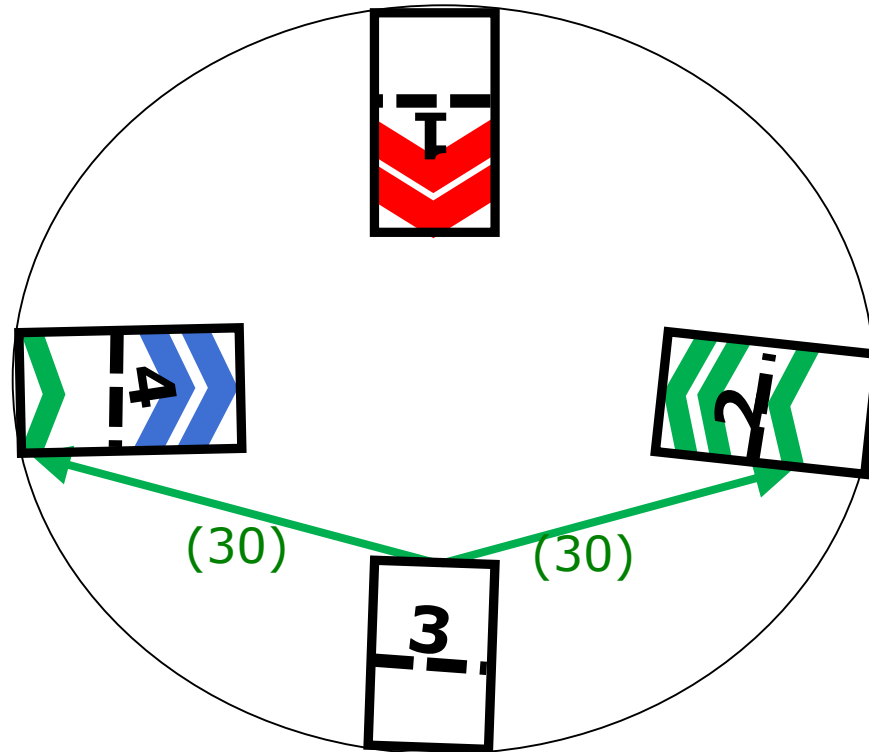


Social incentives vs. individual incentives in promoting cooperative outcomes (Mani, Rahwan & Pentland, 2013).

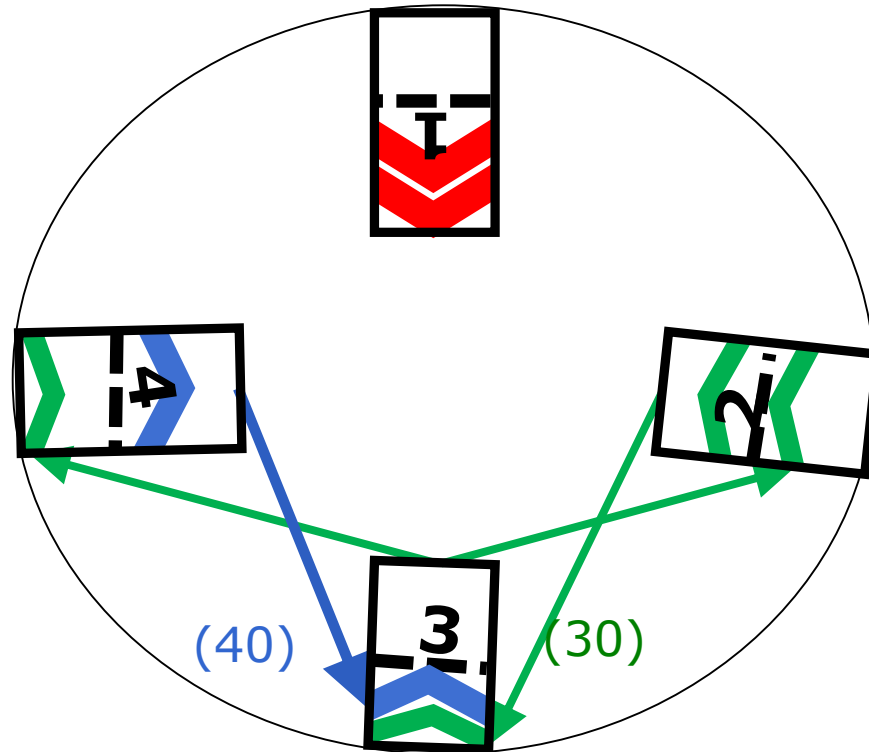
Direct Reciprocity Scheme



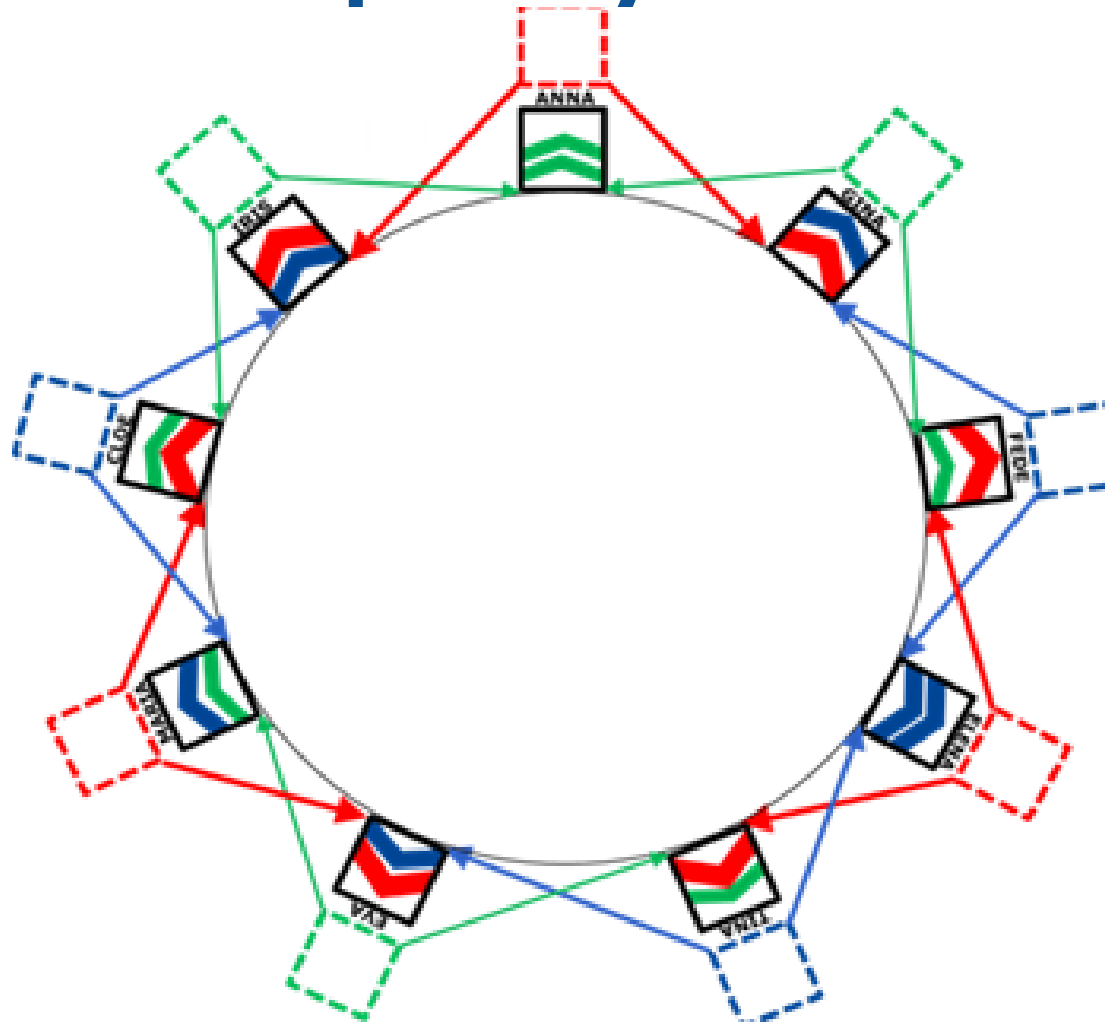
Direct Reciprocity Scheme



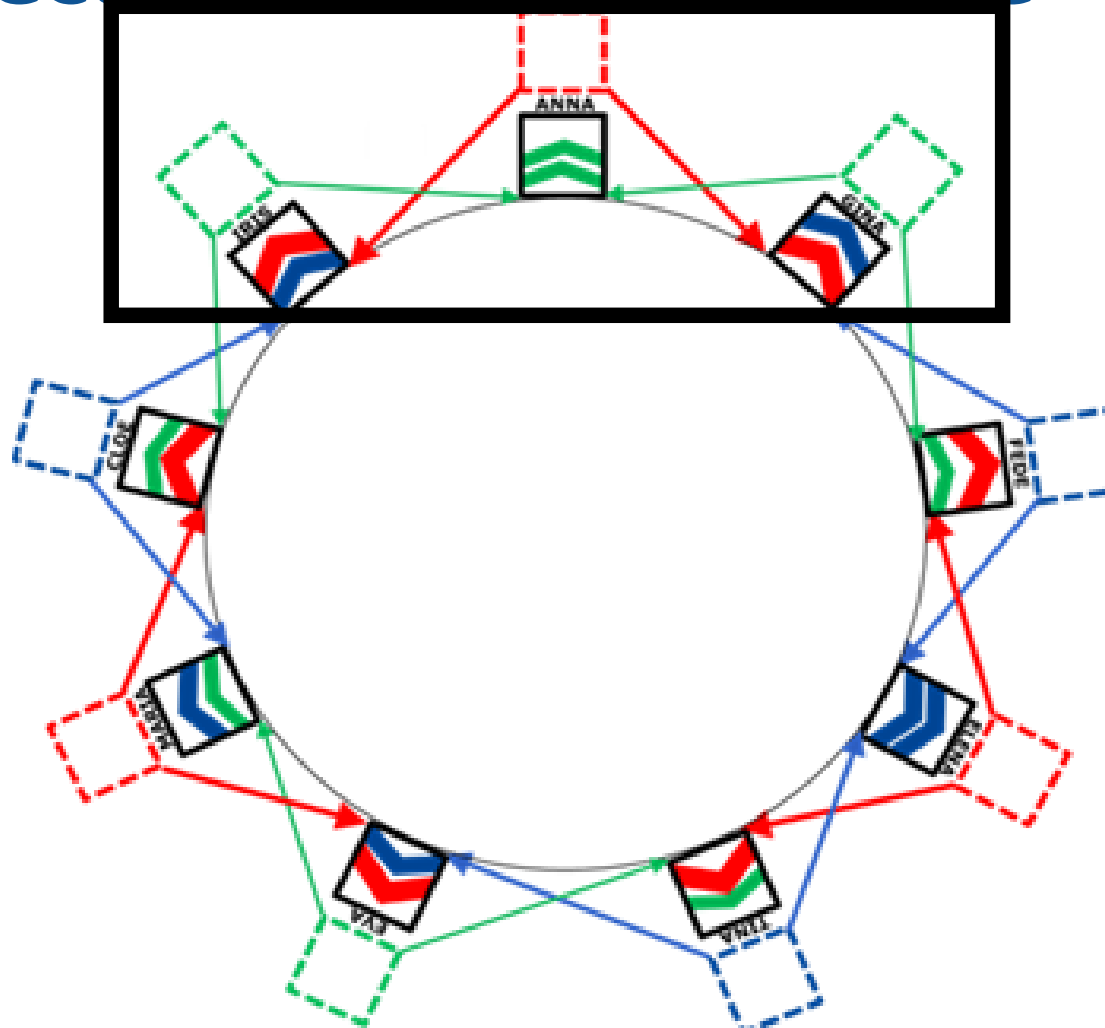
Direct Reciprocity Scheme

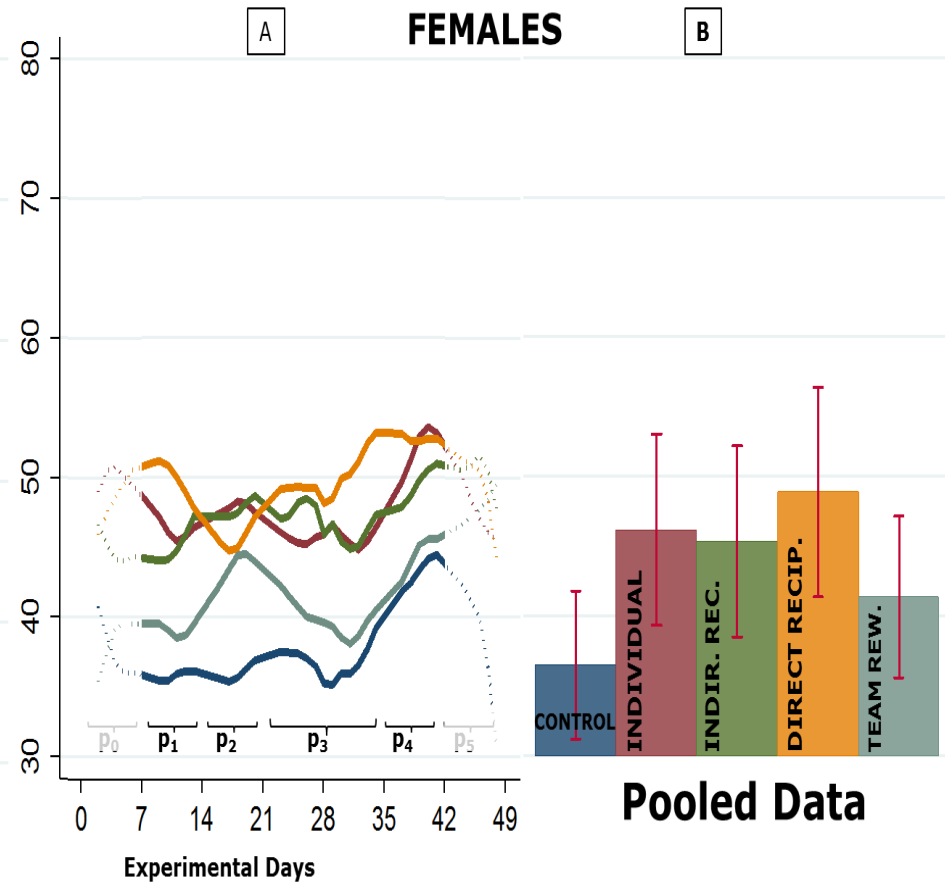
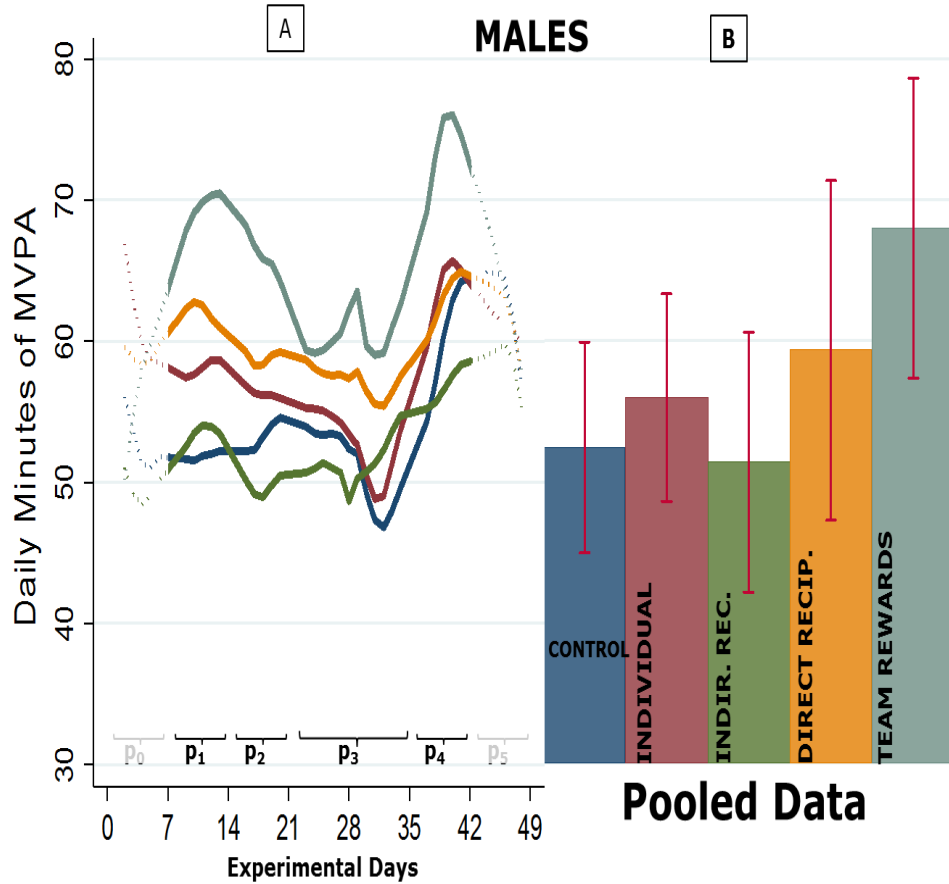


Direct Reciprocity Scheme



Direct Reciprocity Scheme







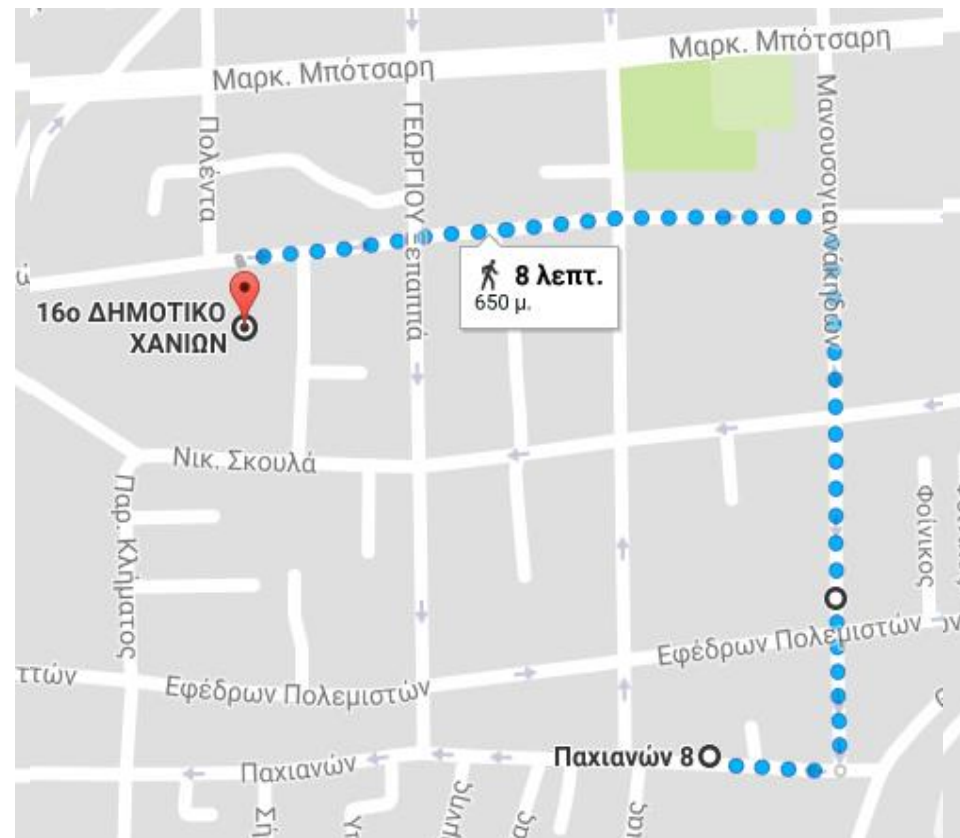
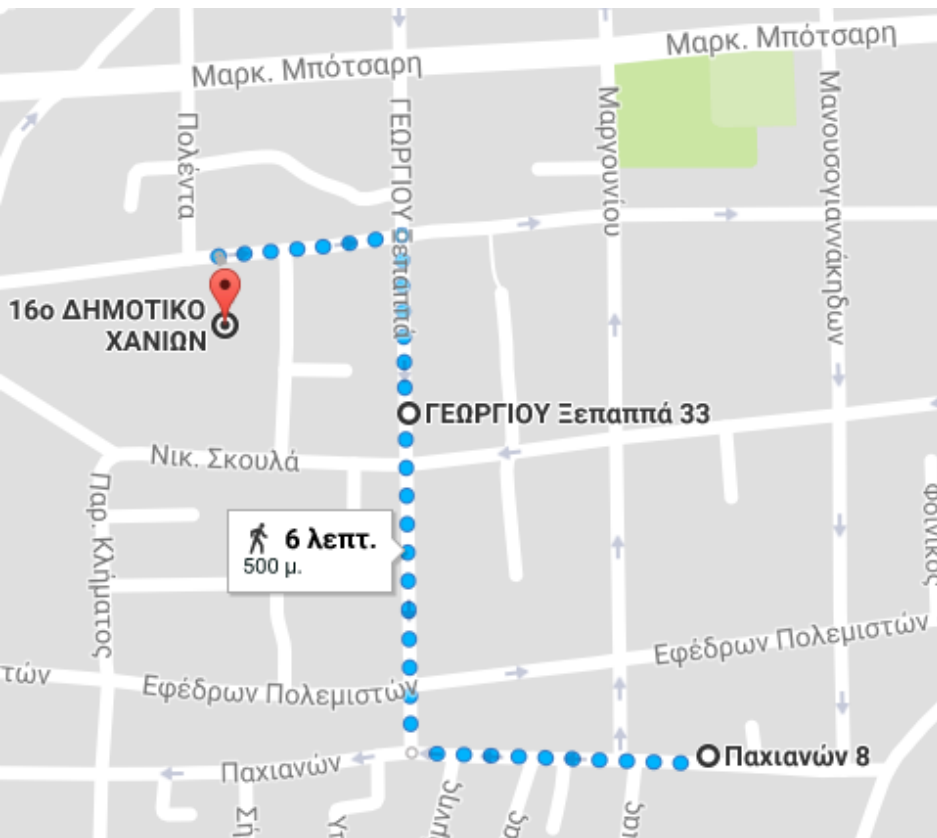
***A. Proestakis, G. Marandola, N. Cerutti,
S. Bearn, S. Caldeira***

Social biking Motivation



- **Peer Pressure:** The more we bike together the higher the probability to earn a reward together
- **Social habits:** Social smoking, social drinking... why not Social Biking
- **Use Social Capital for behavioral change!**

The effect of Social Capital on my walking behaviour when I was 10y

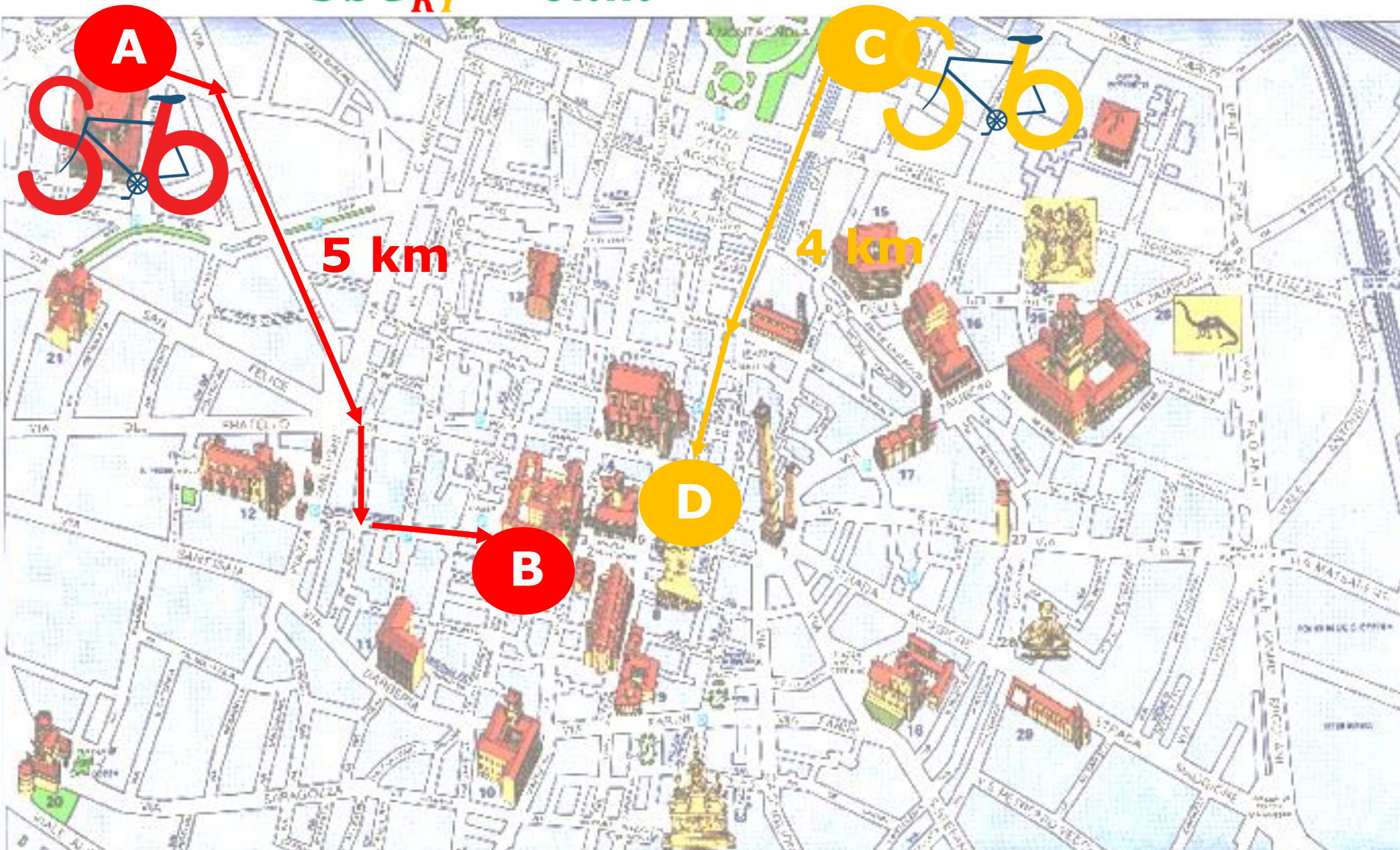


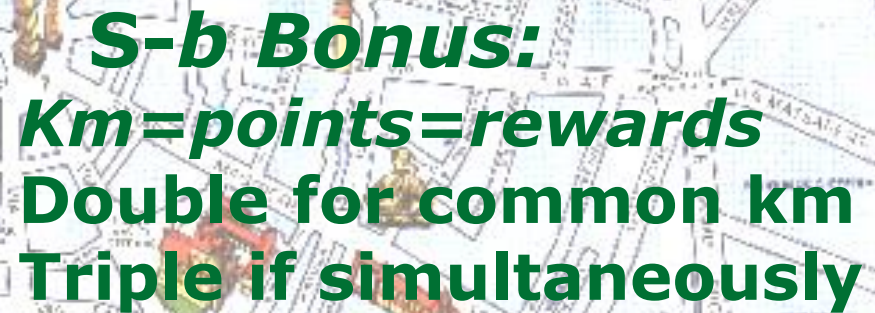
The effect of Social Capital on my walking behaviour when I was 10y



**300 extra meters daily, 30% increase!
3 years relationship, about 48km only for Maria!**

$$SbC_{RY} = 0km$$

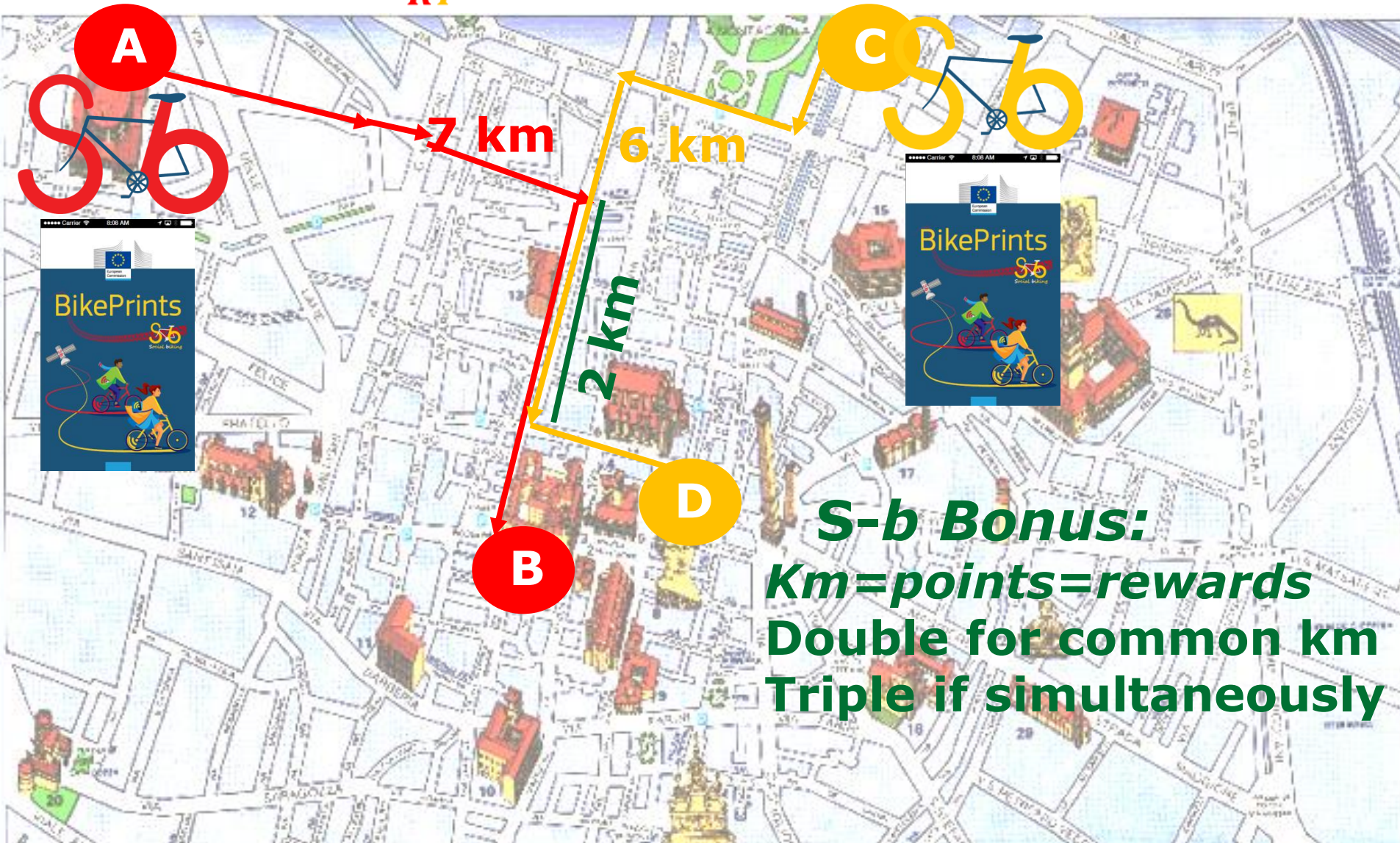






European
Commission

$$SbC_{RY} = 2km$$





Carrier 8:08 AM



European Commission



BikePrints



Carrier 8:08 AM



Social biking

Country

Language



Need help?

3 stages (weeks) challenge

Individual Stage: Individual points

Pair Stage: Individual points + Pair Bonus

Group Stage: Individual points + Group Bonus

Local Awards

Individual Stage: Best individual+10 random prizes

Pair Stage: Best Pair (2 prizes)+ 10 rand. prizes

Group Stage: Best group (4 prizes)+ 10 rand. Prizes

Organised and awarded by local organisers

Local Awards Athens S-b Challenge



Καλύτερη ομάδα Βραβείο

2 Scott shirts + 2 pairs of sunglasses (Cymbal and Fader Gloss)

Καλύτερος ποδηλάτης Βραβείο (Ατομικό Στάδιο)

1 Helmet Lazer CE FULL FLASH

Καλύτερο ζευγάρι Βραβείο

Helmet ISODE MAT TI GIRO + helmet MAT BK GIRO

Τα ακόλουθα βραβεία θα απονεμηθούν στους 30 συμμετέχοντες (10 από κάθε στάδιο), οι οποίοι θα επιλεγούν ανάμεσα στους καλύτερους της κάθε φάσης, ύστερα από τον τερματισμό (οι πιθανότητες για βράβευση, είναι ανάλογη με τους πόντους που συλλέγονται σε κάθε στάδιο).



European Awards (EC)

Individual Stage: 1 bike

Pair Stage: 2 bikes

Group Stage: 4 bikes



*Organised and awarded by EC (BeActive Gala,
Budapest in 2019)*

Organisation of the local S-b Challenges

- *European Mobility Week (EMW) by DG MOVE*
- *European Week of Sports (EWoS) by DG EAC*



SOCIAL BIKING

Cycle with your friends and win a prize!

[European Commission](#) > [EU Science Hub](#) > [Social Biking](#) > [START](#)

WELCOME TO THE SOCIAL BIKING CHALLENGE

Download the app now and sign up!



ARE YOU A CYCLIST?

You can now sign up to the S-b Challenge of your city.

Cyclist

ARE YOU A CITY OR LOCAL ORGANISATION (ASSOCIATION)?

Organise a Social biking challenge in your town or city and motivate people to cycle with their friends.

Register your town or city



SOCIAL BIKING

Cycle with your friends and win a prize!

European Commission > EU Science Hub > Social Biking > LCO-INSTRUCTIONS

Would you like your city or town to be part of the project?

The European Commission is seeking **local coordinators** to promote and organise the Social Biking Challenge in their city. The local coordinator who organises the most successful local Social Biking Challenge will be rewarded at the [BeActive Awards Gala](#) in Budapest on 18 October 2019. The evaluation of the local organizers will be based on three criteria:

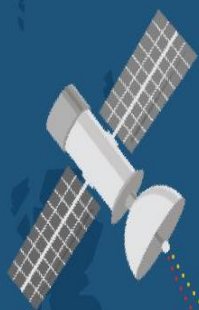
1. Active participation per capita (number of active participants/population)
2. Total number of "social bonus" points collected by all bikers participating in the local challenge
3. Quality and effectiveness of the promotional campaign.

If you are a local and/or sport organization (municipality, NGO, cycling club, etc.) and you would like to organise the Social Biking Challenge in your city/area, you can express your interest by 31 July 2019 by contacting us at: eu-socialbiking@ec.europa.eu

Here are the participation requirements:

1. **Organize a local advertisement campaign for the Social Biking Challenge** by publishing relevant information in your local website and social media or by organizing a promotional campaign in the local media, etc.. Note that participation details and the general information of the Challenge are available in the Social Biking website and BikePrints mob app. You need to provide us with some evidence of your local campaign (advertising material, press releases, websites and social media publications, etc.) as the effectiveness of your campaign will be one of the criteria for winning the prize of the best local organizer.
2. **Purchase the 30+7 prizes for the local winners and coordinate how to award them** at the end of the Social Biking Challenge. You need to provide thirty prizes (ten per stage) which will be given randomly to ten persons in each one of the three stages. These random prizes can be sport or bike equipment (e.g. helmets, bike light kits, etc.) or any symbolic prize (e.g. stickers, t-shirts, etc.). Additional to these random prizes, you also need to organise seven prizes for the best winners in your city/area. These 7 prizes need to all be the same (or of a similar value) and of a bigger value as compared to the 30 random prizes (e.g. seven bikes). You should inform the European Commission well in advance (by 10 August) about the prizes and provide the corresponding images so the European Commission can publish these on the Social Biking website. You will be responsible for distributing the prizes at the end of each stage and may optionally choose to organise a closing event to award the seven big local prizes. In addition to these prizes, the European Commission will award 7 bikes to the best winners at European level.
3. **Make adjustments in the final texts (translations).** Final instructions to Social Bikers will be already translated (by the European Commission) in most European languages. However, minimal adjustments (names of Local Social Biking Organizers names, dates, prize collections points, etc.) are needed ahead of the Social Biking Challenge. You should be ready to make these adjustments –translations if necessary.

Once you have taken these three steps, the European Commission will publish your Social Biking Challenge on the Social biking website (and on the BikePrints app) so that bikers from your city are able to register and participate in your local Social Biking Challenge..



- *Social biking* puts together
social media and **biking with friends**
for active and healthy lifestyle

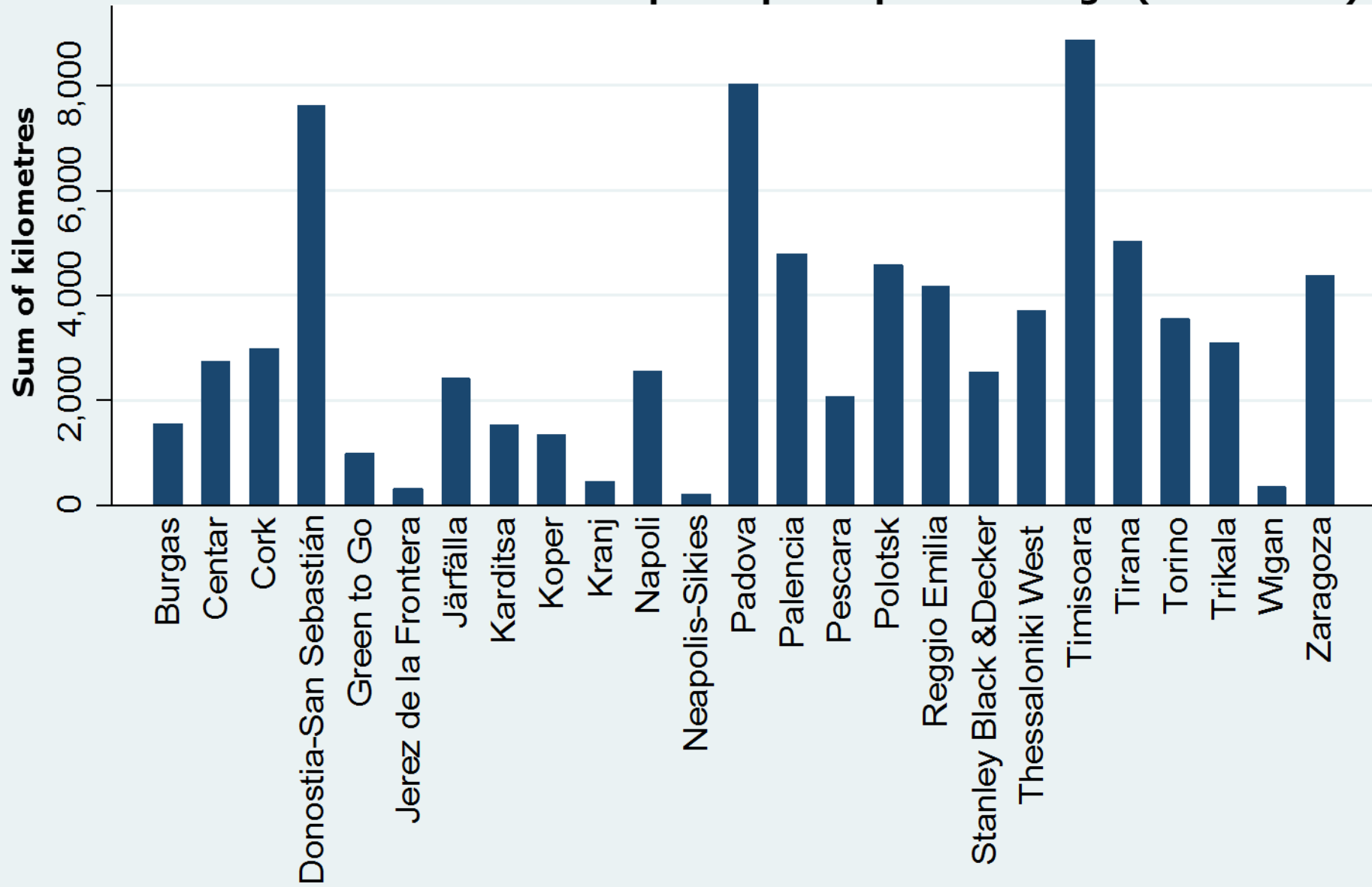


16 September – 6 October 2018 #MixandMove #BEACTIVE



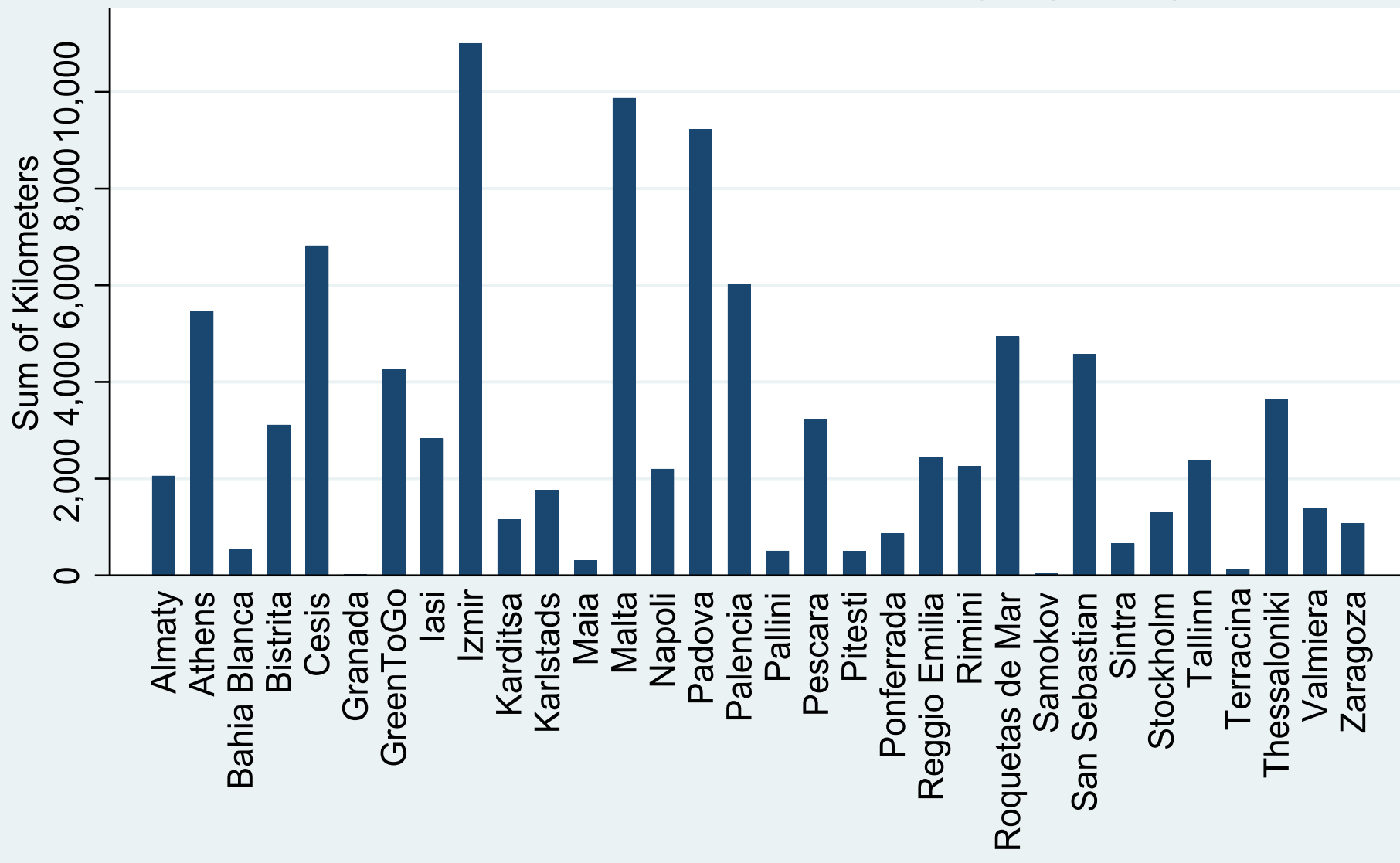


Total kilometres of all active participants per Challenge (in 3 weeks)





Total kilometres per Challenge (2019)

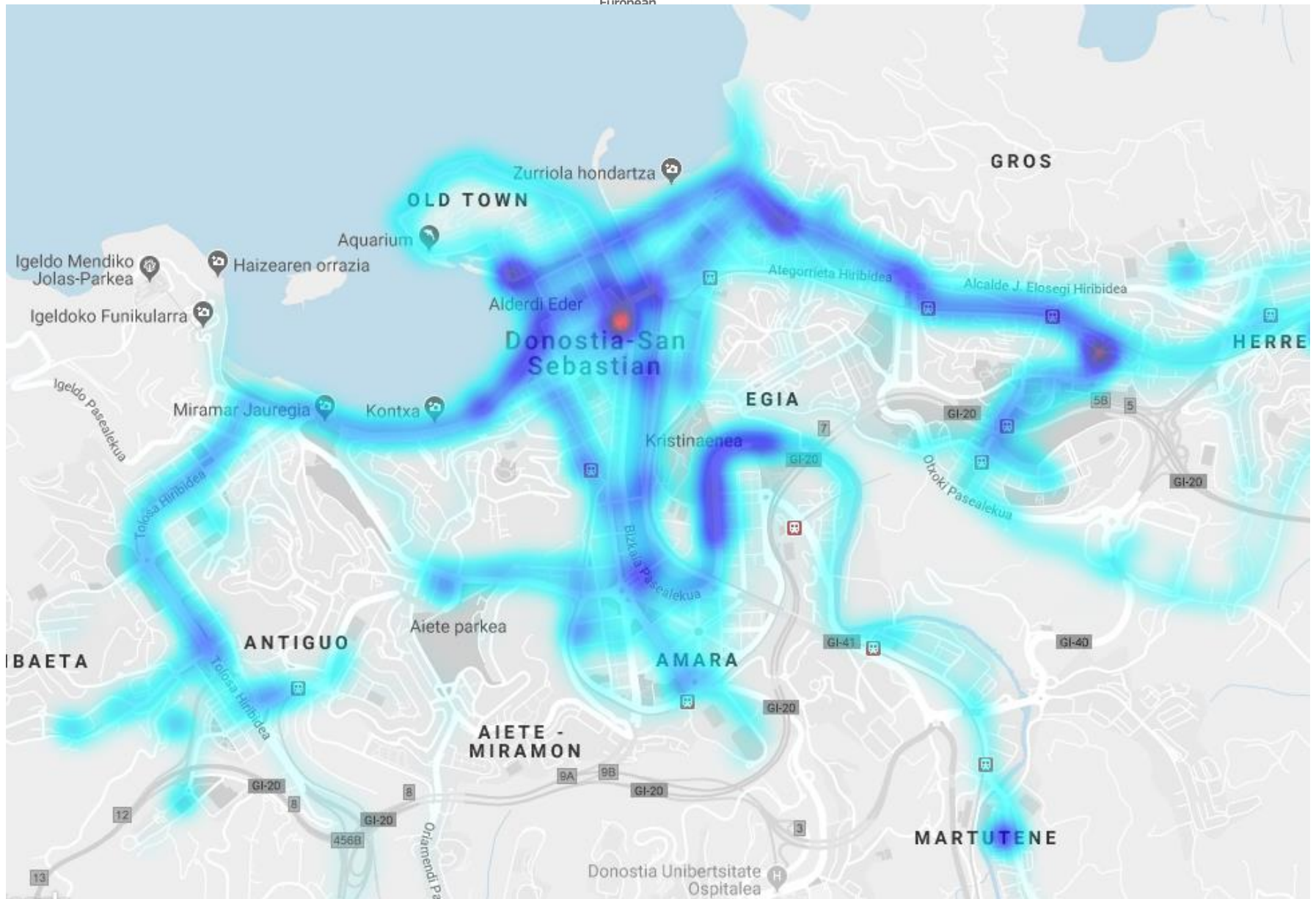




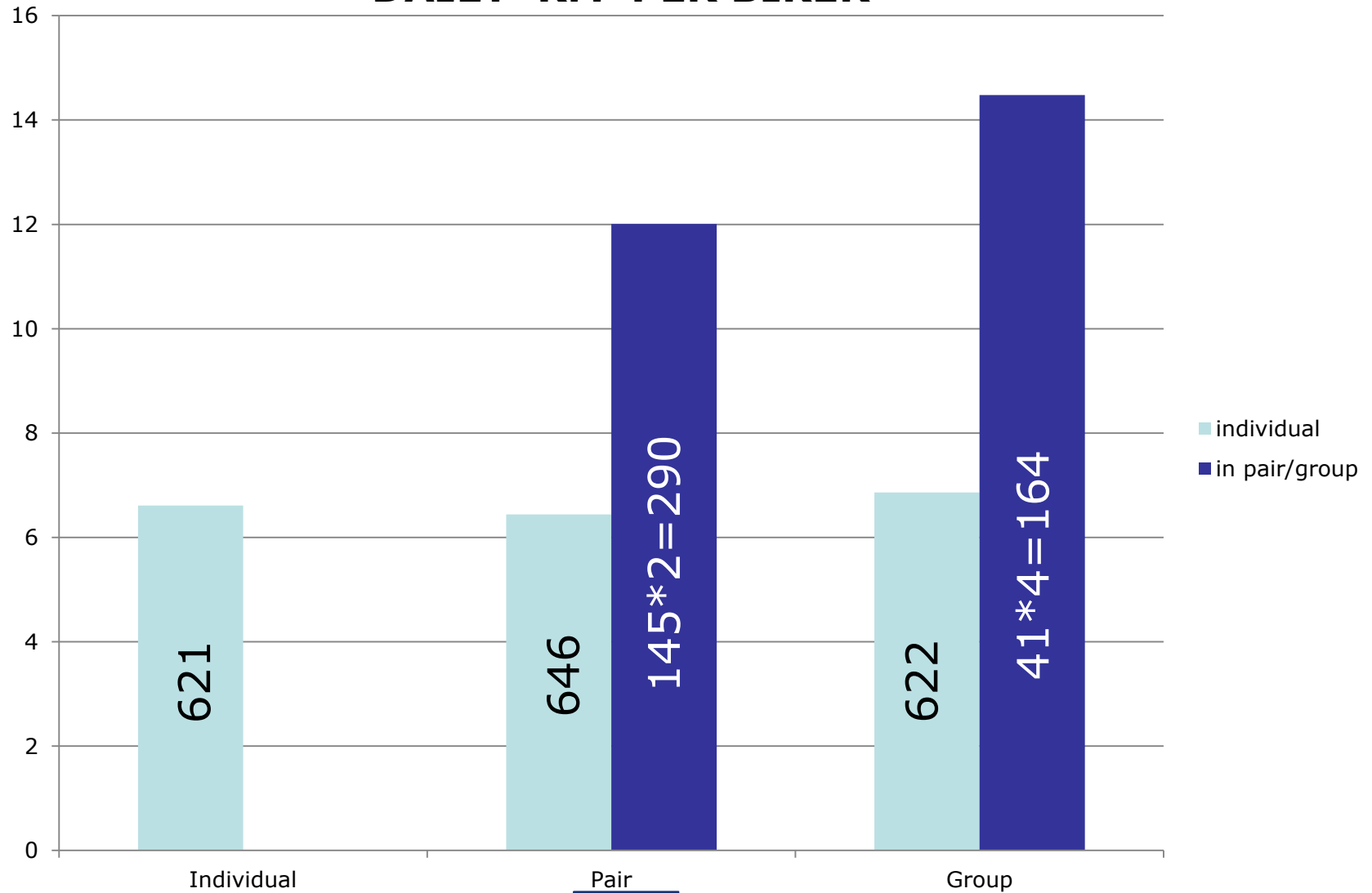
#BEACTIVE
EUROPEAN WEEK OF SPORT **5 YEARS**

AWARDS GALA

HUNGARY, BUDAPEST
18 OCTOBER 2019

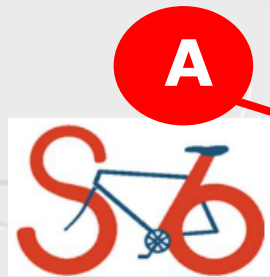


DAILY KM PER BIKER





Conclusion:



Short Term

B

Social Capital

A

Long Term



B

- **Attract local organisers**
- **Increase number of Bikers**
- **Direct bikers to bike routes**

- **Urban planning**
- **Transportation**
- **Environmental effect**
- **Healthier lifestyle**



European

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