PROXIMITY TO TALENT CLUBS
IN DANISH HANDBALL AND FOOTBALL

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Background: talent development

Worldwide, countries are engaged in a **“global sporting arms race”** (Oakley & Green, 2001, p. 100),

Investments in talent development internationally have increased considerably

Fletcher et al. (2009) have urged a need to explore and work with factors related to the **organizational level of sport**, since this of utmost importance and seemingly unexplored in Europe.

One of these are the role of **athletes’ place of early development**

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Background: Community size & density as predictors?

In the last decade **spatial factors** such as community size and density have been found to significantly influence athlete development (Côté et al., 2006; Hancock et al., 2017).

Community size: Until now, studies have shown that relatively smaller communities (1,000 and 500,000) are superior in athlete development.

However, a recent study reveals that there are ***inconsistencies of these effects*** in a North American sample (Wattie et al., 2017)

Community density:

Until now, studies have shown inconsistencies in the “optimal community density” across sports and countries (Rossing et al. 2016; Hancock et al., 2017)

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Background: Proximity to talent clubs?

We know that **proximity to open play spaces** and recreational facilities are important determinants of the level of physical activity and sport participation

Recent studies **suggest** that athletes' proximity to talent clubs (Rossing et al., 2016) or elite centers (Finnegan et al., 2017) in their early development is important in athlete development.

For instance, Finnegan and colleagues [24] concluded that Irish youth football athletes developed in counties with a national elite center **were 50 % more likely to gain selection** than those developed in counties without a center.

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Aim

***Objective**:*
To investigate the relation between proximity of athletes' place of early development to talent clubs

Place of early development:

The municipality in which an athlete grow up in the first 12 years of their life.

Talent clubs

Highest competitive youth leagues: Football U17-U19, Handball U16-U18

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Danish sport system

The Danish sport structure attempts to **balance mass participation and elite sport development** [26]

and therefore include both **local and elite clubs** in the development process

Handball and football are among some of the most **popular** sports in Denmark.

All Danish children have **access to sport participation** in both handball and football.

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Methods: Sample of male youth players

Football:
579 elite youth league (U17+U19)
85 national youth players (U16-U21)

Comparison sample:
147,221 registered football players

Handball:
311 elite youth league (U16-U18) and
80 national youth players (U18-U21)

Comparison sample:
26,290 registered handball youth players.

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Methods: Data analysis

Data analysis in five steps:

- First, youth players were categorized to the primary municipality they resided **in their first 12 years**.
- Second, **odds ratio analyses** (OR) was performed for each municipality to find the odds for being selected to national youth and elite youth league level compared to the number of youth players.
- Third, we used **Jenks method** to categorize the municipalities into five groups based on their OR.
- Fourth, we linked the five groups with geo-coded data in a geographical information system (GIS) **called QGIS**.
- Finally, we specified the geographical location of the **talent clubs**.

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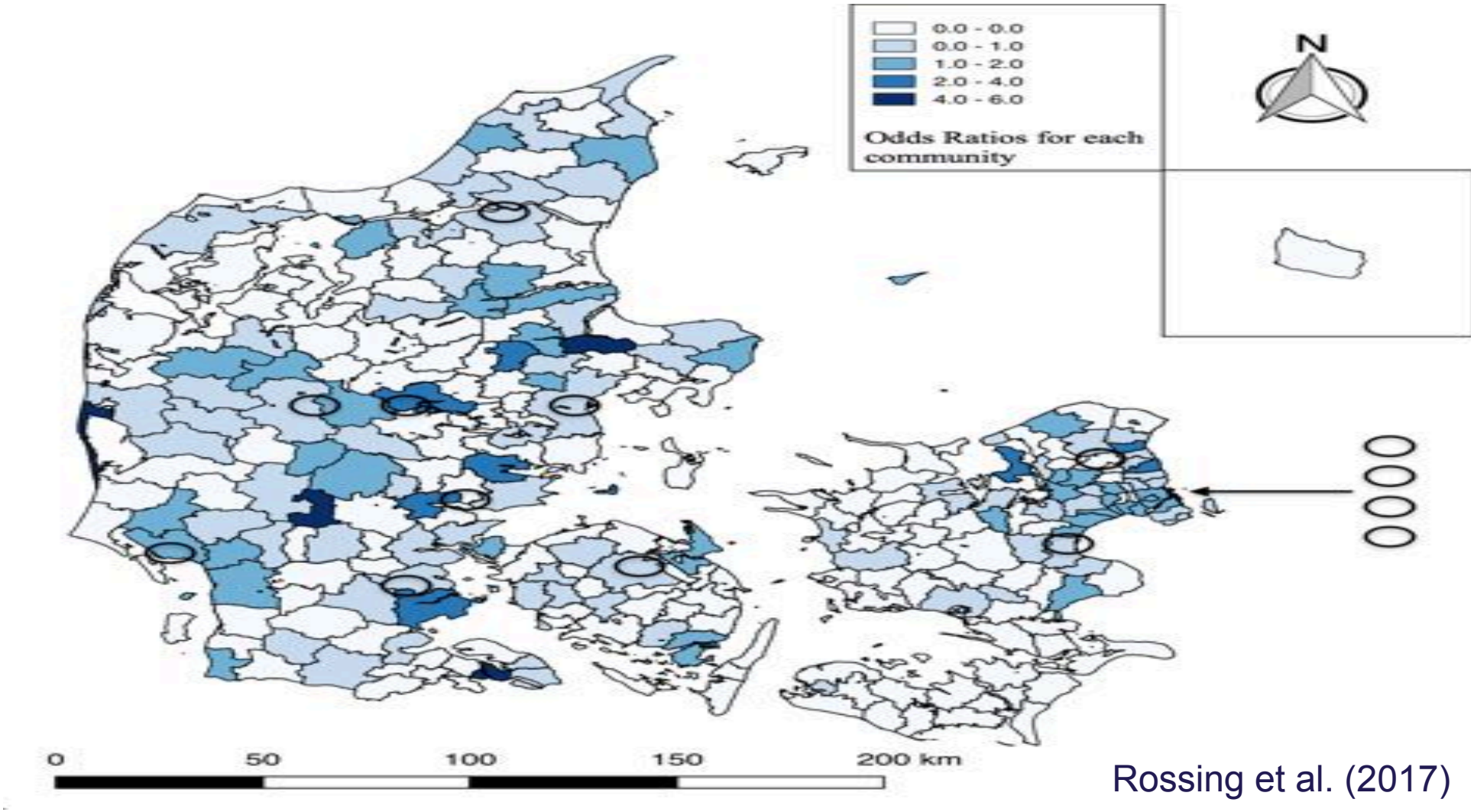
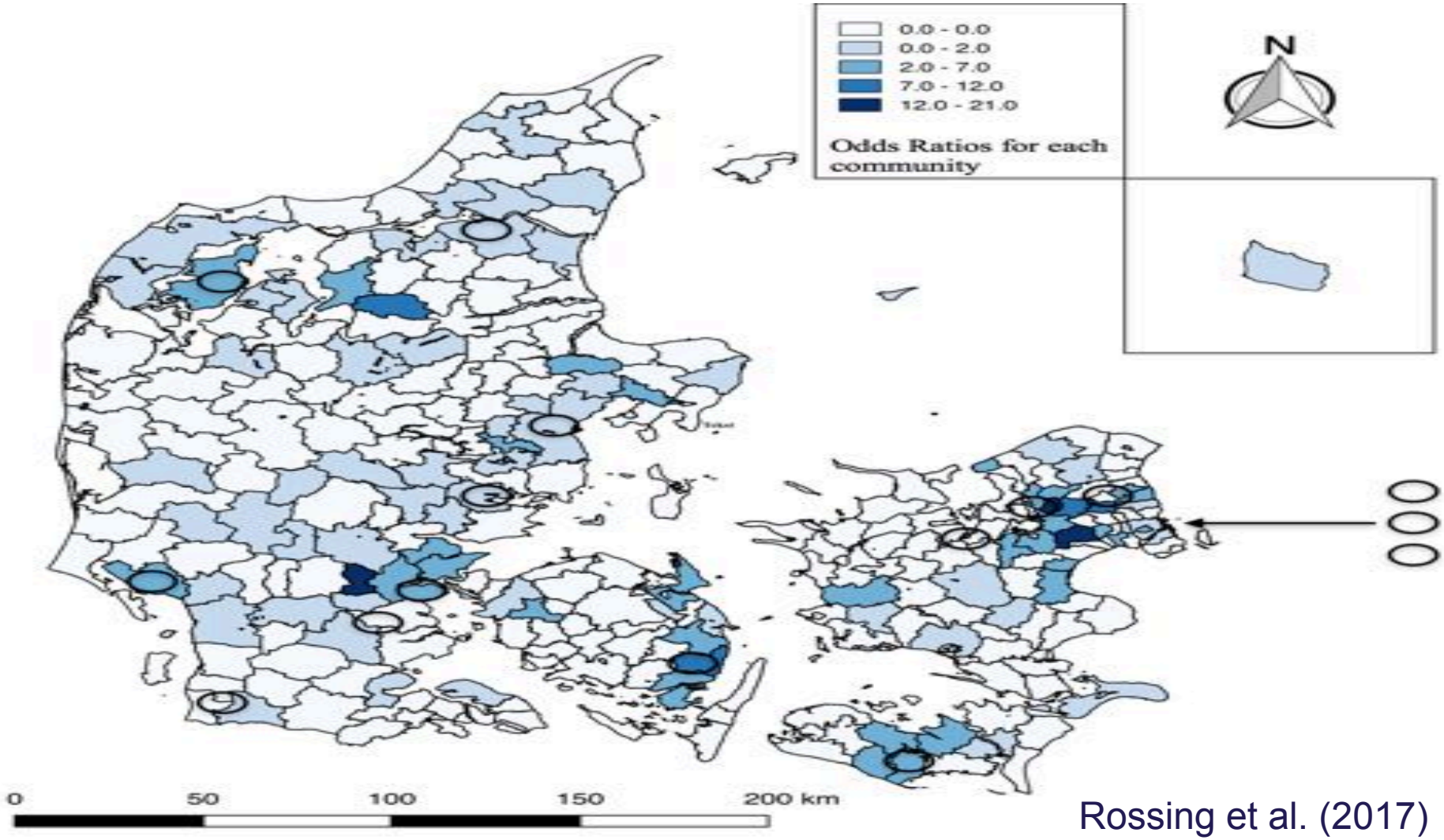
Results: Football, U17-U19 elite league players



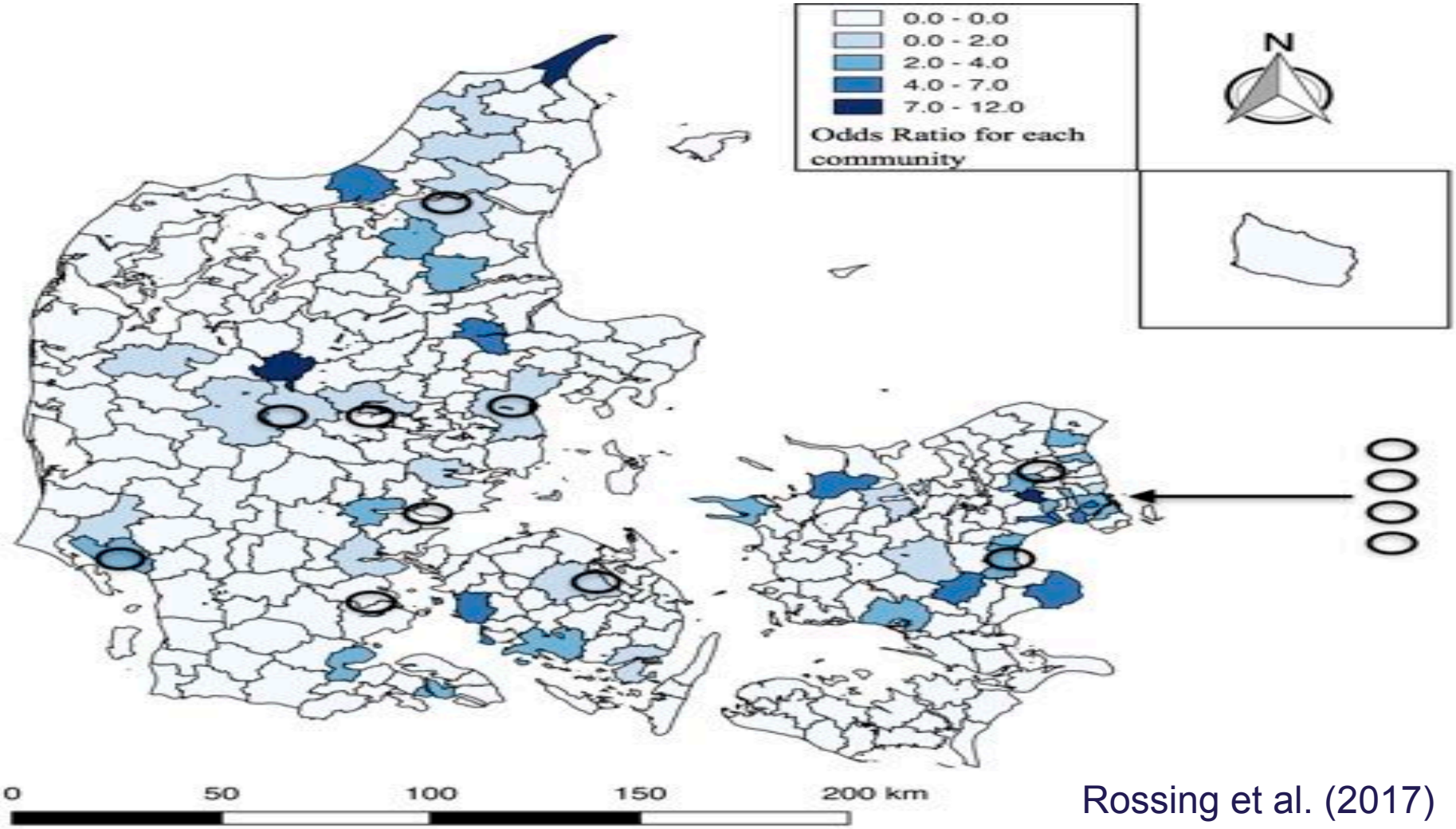
Rossing et al. (2017)

Results: Handball U16-18 elite league players



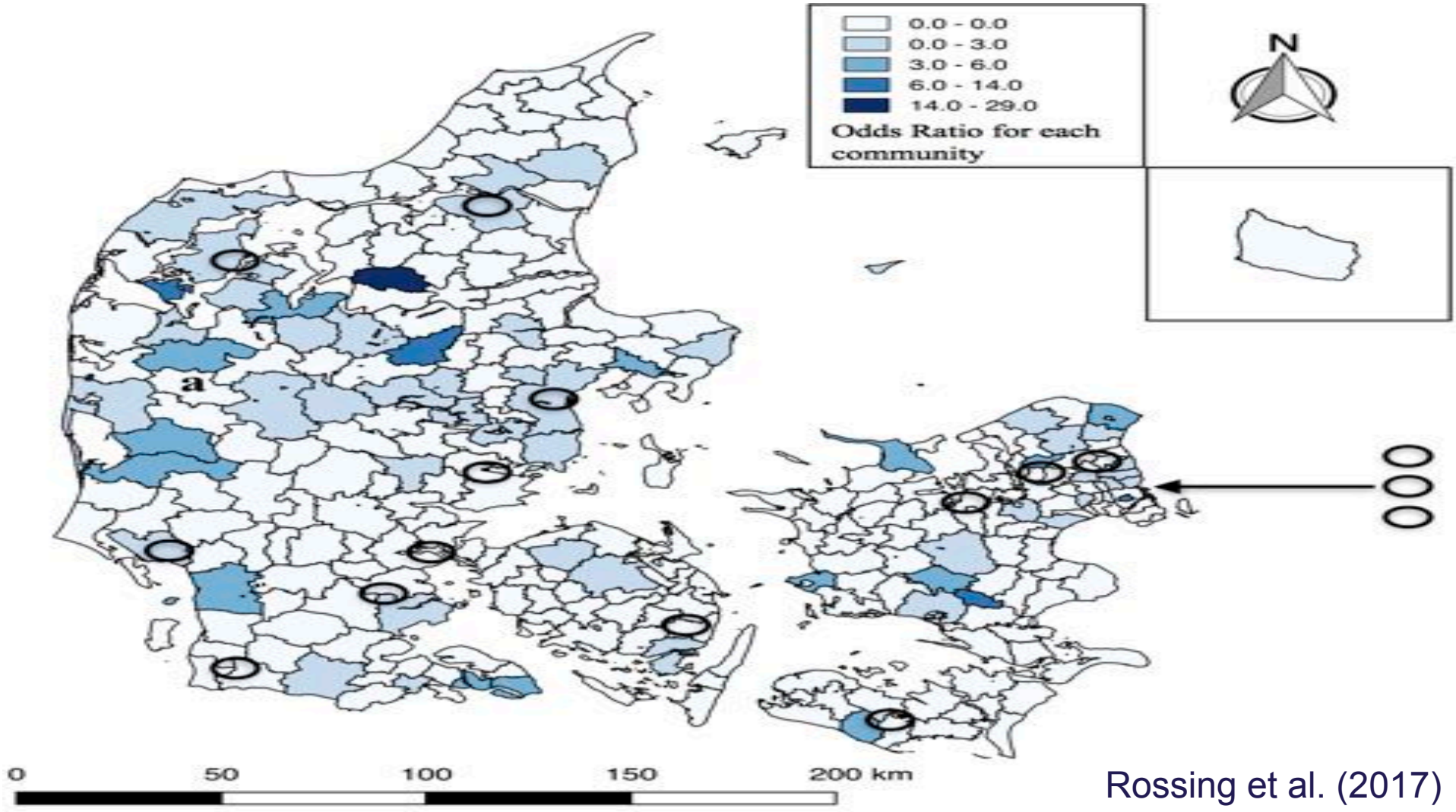
Rossing et al. (2017)

Results: National youth football players



Rossing et al. (2017)

Results: National youth handball players



Rossing et al. (2017)

Results

1. Proximity to talent clubs **strongly influence** the development to elite youth level, **especially national youth level**.

2. Proximity to talent clubs seem to be a **predictor** in the development to sport excellence – at least in a Danish context.

Do the results indicate good practice within the sport system?

Talent waste?

Equality in talent pipeline (Karen & Washington, 2015)

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Discussion

Talent development stage:

Everyday transportation issues

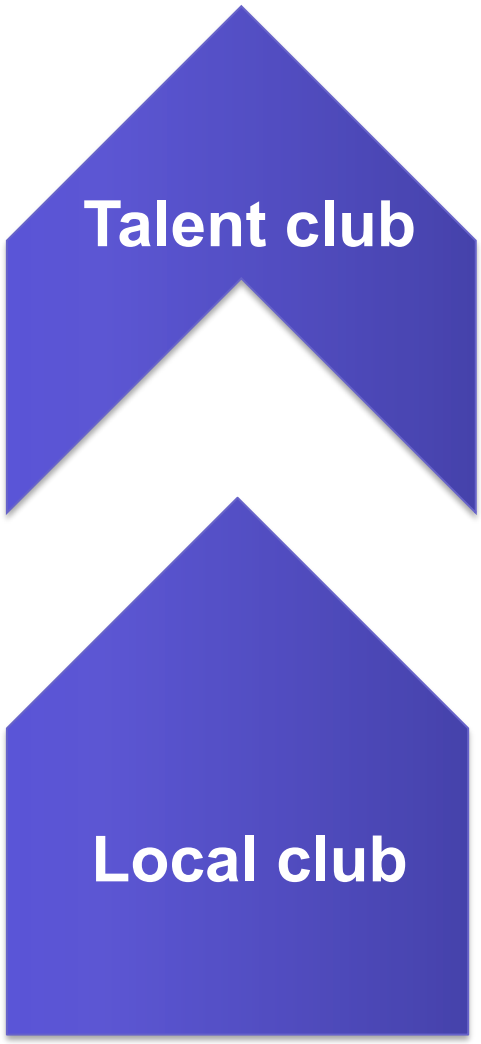
Talent identification stage:

Identification bias

Early development stage:

Community pride & local role models

(Henriksen et al. 2010; Balish & Côté, 2014)



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Research Perspectives

Research:

1. *Generalizability* – other countries, sports and sport systems

2. *Qualitative* studies: to *understand* the mechanisms creating the effect of proximity

Applied:

Practitioners need to reflect on the possible *talent waste* within the talent pipeline

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