

# Participation in physical activity and sport: Associations with socio-economic status and geographical location

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## Aim

- Investigate for small geographical areas in Australia, the ecological relationship of participation rates, frequency of participation, and participation in specific contexts to socio-economic status (SES) and remoteness.

## Methods

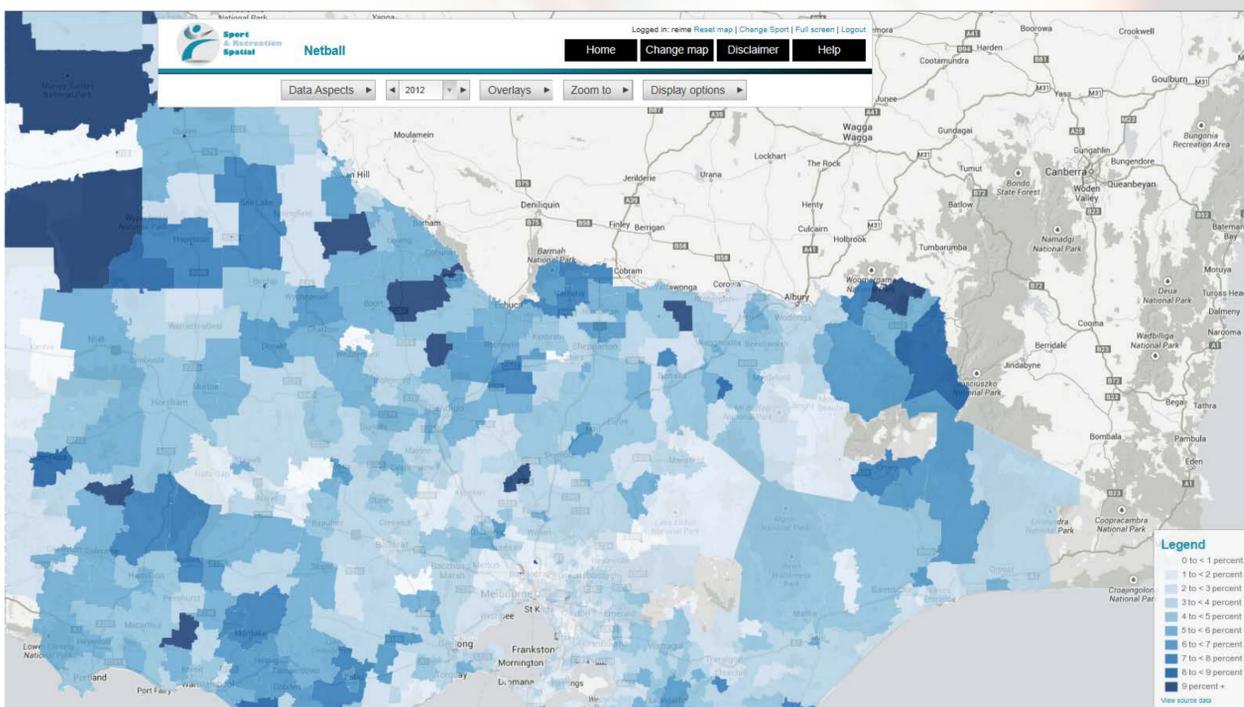
- Participation in physical activity (PA) data were obtained from the Exercise, Recreation and Sport Survey (2010).
- Australia-wide sample of 17,510 persons aged 15 years and above.
- Dependent variables were (for each of the 95 PA types/sports):
  - Participation in last 12 months (yes/no)
  - Frequency of participation (<12 times, 12+ times)
  - Context of participation (unorganised, organised, club)
- SES and remoteness were measured using quintiles of the Socio-Economic Indexes for Areas (SEIFA) Index of Relative Social Advantage and Disadvantage (IRSAD), and the five ordered categories of the Accessibility/Remoteness Index for Australia (ARIA+).
- The geographical unit of analysis was postcode area.
- Statistical analysis was by logistic regression with polynomial contrasts, and by analysis of concordances using Goodman and Kruskal's gamma coefficient.
- The two figures show the geographical distributions of netball participation rate and SES level (SEIFA IRSAD) by postcode, for the Australian state of Victoria.

## Results

- Of the 95 types of PA/sport examined, the majority exhibited no statistical significant relationships between the participation and measures of SES or remoteness.
- Substantial minorities showed significant relationships (positive, negative or non-linear) between SES and participation (40%), frequency of participation (17%), and context of participation (20%).
- There were some significant relationships between remoteness and participation (32%), frequency of participation (8%), and context of participation (19%).

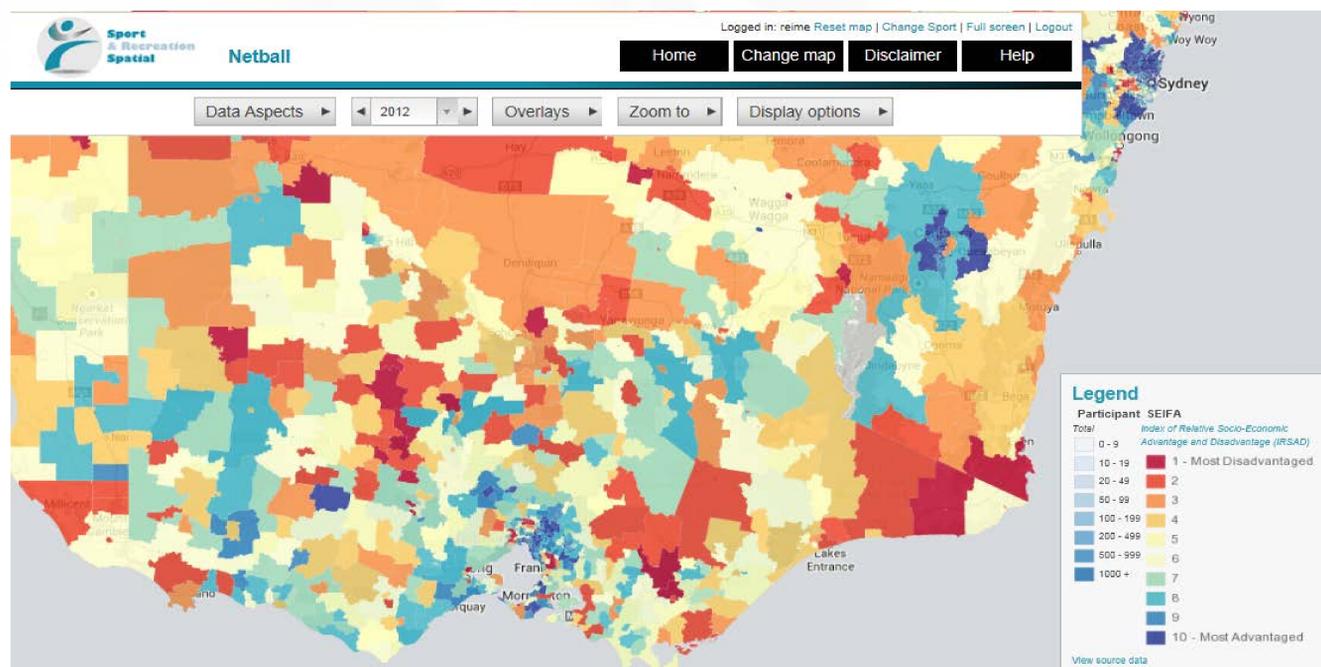
## Discussion

- Few PA/sports had an SES-prohibitive association whereby as SES decreased, participation significantly decreased.
- There were many team sports for which the relationship between participation and SES was negative within the 'organised' context. Eg Australian rules football, basketball, football (soccer), hockey, netball and tennis.
- There were only two activities (canoeing/kayaking, cycling) that were consistently associated with higher SES and lower participation across the 'participation', and 'organised' contexts.
- PA/sports that require indoor facilities and/or require access to water or snow were more likely to be associated with higher SES.
- Unexpectedly some activities that can have very low costs participation costs (running and cycling) were associated with higher SES with regard to 'participation,' and to a lesser extent, 'organised' context.
- There were no types of PA/sport for which participation decreased as remoteness increased. Participation in some activities increased as location became more remote. These activities included fishing, lawn bowls, touch football, swimming, squash/racquetball, netball and outdoor football.



## Conclusion

- It is positive that few PA/sports were SES- or remoteness-prohibitive in terms of participation. SES was a more significant influence on participation than was remoteness.
- As remoteness increased and SES decreased, participation in team sports increased. This may be indicative of fewer opportunities for a wider range of activities in the remote areas.



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