This is the author accepted version of:


Published in Journal of Science and Medicine in Sport, Vol. 18, Supplement 18, pp.e49-e50, DOI: 10.1016/j.jsams.2014.11.256

PERMISSIONS
Permission has been granted by the copyright holder to deposit this published version as Open Access in the USC Research Bank. Open Access research is digital, online and free of charge, and is made possible by the consent of the author or copyright holder.

Copyright © 2014. This manuscript version is made available under the CC-BY-NC-ND 4.0 license http://creativecommons.org/licenses/by-nc-nd/4.0/
**Neighbourhood socio-economic disparities in active and sedentary transport**

Cole, R, Sugiyama, T, Thompson, R

2014 Australian Conference of Science and Medicine in Sport, National Physical Activity Conference, National Sports Injury Prevention Conference (Be Active), Canberra, 15-18 October 2014

Journal of Science and Medicine in Sport, Vol.18 (Supplement 1), pp.e49-e50

**ABSTRACT:**

Introduction: Health inequalities are an ongoing societal problem. Research shows that adults in lower socio-economic status (SES) tend to be less active during leisure time. However, mixed findings exist for walking for transport. Little research has examined socio-economic differences in car use. This study used a large household travel survey database to examine how adults living in different SES areas vary in active transport, sedentary transport, and public transport use. Methods: The study examined travel behaviour of 13,877 adults aged 18–64 years, collected in the 2009 South-East Queensland Household Travel Survey (SEQHTS) that uses 24-h travel diaries in 5% of households in SEQ. Households were classified into tertiles using an SES indicator, the Index of Relative Socio-Economic Disadvantage (IRSD), assigned to Statistical Area 1s. Trends across IRSD categories were assessed for the prevalence of active (walking), sedentary (car use as a driver or passenger) and public transport use separately (versus not using each mode), and for the mean duration of active, sedentary and public transport travel among those who reported using each mode. Results: Overall, 9.2%, 85.2% and 6.6% of adults reported using active, sedentary and public transport, respectively. Of those who reported using each transport mode, the mean daily travel time was 30.1 (95%CI = 29.1–31.2) min for active, 59.6 (95%CI = 58.7–60.5) min for sedentary, and 57.3 (95%CI = 54.6–59.9) min for public transport. No overall significant trends across IRSD categories were found for the prevalence of active, sedentary and public transport. No overall trends across IRSD categories were found for active transport time among adults who reported using active transport. However, sedentary transport time was positively associated with SES, and public transport time was negatively associated with SES. Adults residing in the lowest SES areas reported 6.5 (95%CI = 6.3–6.6) min less time per day in sedentary transport than adults residing in the highest SES areas. Adults residing in the lowest SES areas reported 8.0 (95%CI = 7.4–10.6) min more time using public transport per day than adults residing in the highest SES areas. Discussion: Overall, we did not find differences in the prevalence of active, sedentary and public transport among adults in lower and higher SES areas. However, time spent in sedentary transport was lower among adults in lower SES areas, suggesting that the distribution of sedentary transport may not contribute to widening the health inequalities. Increasing active transport in lower SES areas may narrow the gap in health inequalities.