

**Introduction:** Bibliometrics is a research technique used in information science that describes publication patterns within a given field. This project examined trends in the peer-reviewed literature that were of relevance to 'physical activity and public health' (PAPH). The research question was whether specific events, such as the US Surgeon General's report (USSG, 1996) on Physical activity and health triggered subsequent increases in published research. **Methods:** We defined publication criteria relevant to PAPH [population focus, intervention evidence, epidemiological or prevalence papers], and assessed bibliometric search criteria to identify papers. Medline [and four other databases] were searched, and two independent raters identified patterns of key words with the highest sensitivity and specificity for PAPH. These keywords formed the basis of trend testing {inter-rater agreement, kappa > 0.82 for all combinations}. Analysis of trends was by modelling trend data curves, fitting spline regressions, with five year periods as a covariate. **Results:** There were <100 PAPH publications/year until 1990, and then exponentially increasing periods from 1990-95, 1995-2000 and 2000-2005 [standardized regression coefficients 0.065, 0.127 and 0.080]. Rates of increase were similar in North America, Europe and the Antipodes, and similar for measurement or intervention papers. These were greater than concurrent trends in tobacco or nutrition publications, but smaller than obesity publication trends [obesity coefficients 0.06, 0.15, 0.24 respectively]. **Discussion:** These results suggest increasing trends in PAPH only since 1990, particularly since 1995, confirming the major policy-related impact of the USSG. However, increases in obesity research have vastly overtaken PAPH in the past decade.

### Which features of public open space are associated with children's physical activity?

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Parks and public open spaces (POS) may be important venues for children to engage in active play and other types of physical activity, and may be important venues to which children walk or cycle. However, few studies have sought to investigate relationships between specific features of parks and open spaces and physical activity among youth. The aim of this study was to examine associations between features of public open spaces and physical activity on weekends among children aged 13-15 years. This study used cross-sectional data from the first follow-up of the Children Living in Active Neighbourhoods (CLAN) Study (n=402) conducted in Melbourne. In total, 1497 POS within 800m of participant's homes were audited to examine the presence of features such as amenities, recreation facilities, playgrounds, aesthetics, signage and safety (eg. lighting, surveillance). Children's physical activity on weekends was assessed by accelerometry. Linear regression analyses were conducted. Among boys, having a POS with an amenity, shade structures, signage restricting dogs, signage that dogs could exercise off-lead and signage restricting use of the POS were negatively associated with physical activity on weekends. Among girls, having a POS with an amenity, a playground, surveillance of the POS from surrounding houses and a path suitable for walking within 800m of home was associated with greater physical activity on weekends. The findings suggest that features of parks do influence children's physical activity. Improving the features of parks may be one strategy to increase activity levels among children aged 13-15 years.

### Reducing traffic related congestion and increasing physical activity in children: successes and challenges of school travel plans

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**Purpose:** The School Travel Plan (STP) programme is an initiative developed by Auckland Regional Transport Authority (ARTA) in collaboration with schools, community and local councils to promote carpooling and active transport, combined with Walking School Bus (WSB), cycle training for students, parking restrictions, building of traffic calming measures, and improvement of roads and footpaths. We evaluated children's school-related transport modality changes resulting from a multi-faceted STP and successes and challenges of STP implementation. **Methods:** Six case study primary schools from the Auckland region participated in the study in 2007. Data were gathered using both quantitative (surveys) and qualitative methods (interviews and focus groups). **Results:** Combined results from the case study schools indicated a decrease in the use of family car for school related travel (-4%; range: -12 to 4%) and an increase in walking (4%; range: -2 to 13%). Children were enthusiastic about the STP, and most preferred to walk or cycle to school instead of travelling by car. Principals, parents and lead travel teachers supported the STP initiative. Commonly cited challenges included the length of time between consultation and infrastructural change, lack of parental support, and unclear support for lead teacher travel planner. Overall success was attributed to the initial consultation process, parent involvement and resources provided by ARTA and local Councils. **Conclusions:** Results from the case study evaluation provided an insight into the challenges and successes schools faced. Future policy and strategic planning for ARTA and the wider community may benefit from incorporating recommendations from this evaluation.

### Active transport to school as part of a broader habit of walking and cycling among South Australian youth

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**Introduction:** Recent research suggests that active commuting to and from school is associated with higher daily energy expenditure in children. This study examined whether active commuting to and from school was associated with more frequent walking and cycling to other neighborhood destinations. **Methods:** Parents reported on free-time physical activity and frequency of active commuting among 1643 South Australians (9-15 years) as well as their perceptions of risk associated with active commuting in the neighborhood. Groups were formed on the basis of active and motorized transport to and from school, and compared on the frequency of walking and cycling to other neighborhood destinations. **Results:** Those who actively commuted between home and school were approximately 30% more likely to actively commute to other neighborhood destinations, independent of age, free-time physical activity and neighborhood risk. **Conclusions:** Active commuting to and from school is part of a broader habit of walking and cycling in the neighborhood among school age South Australians. The advantages of promoting active transport between home and school may extend beyond the energy expenditure of that journey alone.