

Participation and life-long participation

The two main concerns of the research in this section are (i) the relationship between childhood and adolescent participation in sport/physical activity and 'life-long participation' and (ii) factors that facilitate or constrain participation, especially among young people.

The material on life-long participation contains four reviews of research (Shephard and Trudeau; Daley; Malina; Bocarro et al), 13 longitudinal tracking studies (Thompson et al; Tammelin et al; Vanreusel et al; Beunen et al; Trudeau et al; Perkins et al; Kraut et al; Telema et al; Papaioannou et al; Scheerder et al; Richards et al; Beuer and Wicker; Kjonniksen et al), two retrospective studies (Taylor et al; Curtis et al) and one combined retrospective and prospective study (Hirvensalo et al).

In general, these studies find some relationship between adolescent participation and continued adult physical activity. The aspects of adolescent sport/physical activity which correlate with adult participation vary because of differing methodologies, definitions and measurement of the nature and level of sport/physical activity, age at which adult measures are taken and differing cultural contexts. For example, authors variously identify the significant aspects of adolescent participation as intensive endurance sports and those which encourage diversified sports skills (Tammelin et al); competitive inter-school sports (Curtis et al; Hirvensalo et al); time spent on activities (Vanreusel et al); participation in pre-teen sports and perceived experience of choice (Taylor et al; Richards et al); inclusive intramural sports opportunities rather than competitive extramural sports promote a wider culture conducive to involvement in physical activity (Fuller et al); high levels of adolescent participation (Perkins et al; Schreeder et al); the importance of organised activity and club sport (Taylor et al, Tammelin et al; Richards et al; Kjonniksen et al) extra-curricular school-aged sport (Kraut et al; Telema et al); importance of more frequent and longer lasting participation for adolescent females (Tammelin et al); adolescent physical characteristics and fitness scores (Beunen et al); the inclusive philosophy of intramural sports and the diversity of activities (Bocarro et al; Lubans and Morgan); an emphasis on perceived competence, task orientation and intrinsic motivation especially for girls (Papaioannou et al; Schreeder et al); the use of behavioural modification strategies such as goal setting and activity monitoring (Lubans and Morgan). However, in most cases, because of a range of complex intervening variables, the correlations are often weak to moderate and decline with age (Malina; Shepard and Trudeau; Richards et al). Richards et al illustrate that there is considerable within-person variation and a high degree of movement in and out of club sport between the ages of seven and 21, but conclude that sports participation at 21 would be reduced by 13 per cent if children did not participate in sport at the age of seven. Dodge and Lambert conclude that adolescent participation in sports predicts physical activity and subjective health in young adulthood, independent of engaging in general physical activity during adolescence and that positive self-beliefs are partially responsible. They suggest that more research is needed to explore the development of initiative, positive self-beliefs and the value placed on the body.

The general conclusion is that childhood and adolescent participation in sport and physical activity makes adult participation much more likely than non-participation (Malina; Hirvensalo et al). However, because of a wide range of, often unexplored, intervening variables (e.g. post school education; social status of parents; gender; life course changes), it cannot guarantee it. Nevertheless, there is a general agreement that the potential for adult participation can be increased by ensuring choice, increasing opportunities for the development of self-efficacy, selecting activities for their potential for post-school participation and addressing the needs of young women. In this regard Vilhjalmsson and Kristjansdottir illustrate that girls' lower sports participation is almost wholly accounted for by their lower levels of enrolment in sports clubs. Kirk offers a more fundamental analysis by emphasising the importance of early learning experiences and arguing that only certain sections of the community are in a position to access relevant experiences. Referring to the work of Cote, he emphasises the importance of the 'sampling years' and the importance of variety and 'deliberate play' and a task environment for the establishment of motivation, physical self-concept and perception of competence which affect future performance. MacPhail and Kirk use an ethnographic approach to explore the 'specialising phase' in which young people (13-16) begin to concentrate on specific sports. They suggest that the basis for enjoyment and engagement shifts from friendship relationships to success, skill development, the ability to perform, structured and deliberate training and parental and coach relationships. They argue that these progressions must be recognised and supported to enable the transition to the socialising phase and suggest the use of the long term athlete development model. Voss et al illustrate that although boys and girls from lower-income families attend significantly fewer sessions of structured out-of-school activity they are not less physically active. Kjonniksen et al illustrate that participation in organised youth sport predicted later physical activity in young adult males, but attitude to PE was the only significant predictor in young adult women. The authors speculate that this may reflect the gendered nature of sports, although other factors are involved.

These general themes are also present in most of the research on factors that either facilitate or constrain participation. However, Sallis et al's review illustrates the difficulties in identifying the definitive correlates of physical activity among young people, largely because of methodological limitations on comparison and cumulative understanding. Biddle et al's review of systematic reviews of the correlates of physical activity in youth concludes that, beyond age and gender, correlates are likely to have only small or small-to-moderate effects in isolation and may work best in interaction with other influences. Psychologists need to incorporate a wider range of variables beyond individual psycho-social constructs if they are to contribute fully to the understanding of participation in physical activity among young people.

Breuer and Wicker question the traditional assumption of age-related decline in sports participation and argue that the traditional cross-sectional analysis is inadequate because it fails to distinguish between 'age' and cohort effects. Their analysis found that although sports participation declined with age, age-specific rates increased significantly over the years, especially for women. The authors suggest that this reflects women's higher health awareness; more targeted offers; changes in social norms and values and new ideals of body slimness; higher average income and education; changes in work times more flexible provision..

Others (Biddle; Biddle et al; Allison et al; Dodge and Lambert) concentrate on the psychology of motivation, with a broad agreement that sports providers can learn from generic theories of attitudinal and behavioural change (see also Kahn et al). Reflecting some of these ideas, it is suggested that there is a need to understand more about a range of factors that may reduce non-participation (and their implications for sports provision) – self-perceptions (efficacy; competence; control; choice), task-orientation and entity and incremental beliefs about athletic abilities. MacPhail et al reinforce some of these theoretical ideas via group interviews with over 600 young people, concluding that the climate of youth sport needs to be diverse, inclusive and task oriented, rather exclusionary and competitive (ego) oriented (Papaioannou et al). Allender et al provide a systematic review of reasons for participation and non-participation in sport and physical activity among young children, teenagers and young women, adults and older adults. Although they identify a range of well-known factors, they note that a lack of theoretical frameworks limit a more systematic understanding of participation/non-participation, especially regarding life-course changes. In small qualitative study Snape and Binks suggest that dominant western concepts of sport are insensitive to the cultural diversity within South Asian and Muslim communities and that an emphasis on health and community rather than competition and display is a better approach. Dagkas et al conclude that good practice in encouraging Muslim girls to take part in PE and school sport includes: an open ethos of celebrating cultural diversity; whole-school agendas committed to health and well-being; clear policies in terms of expectations and organisation in physical education; stability with the local community; regular opportunities for school/home/community links and local sports facilities providing all-female spaces for school use; teachers were confident about Islamic requirements; pupil involvement in problem-solving.

Payne et al's research review of sport role models also illustrates the importance of social learning theories and illustrates that, to be effective, role model programmes must be long-term and integrated into wider programmes of support and development. Vescio et al report that high performance sport role models are not significant for most adolescent girls and suggest that family and family members (especially mothers) should be involved in sports initiatives.

Others adopt a more environmental approach, suggesting that increased participation is best achieved via holistic approaches – either a 'whole school' approach (Rees et al) or a 'whole community' approach (Kahn et al). Prins et al found that the availability of sports facilities was not associated with adolescent sports participation, although availability moderated the intention-sports participation association and the intention-behaviour relationship was stronger where facilities were available. The authors propose that the environment is a relevant, but not sufficient, prerequisite for promoting physical activity.

Hart et al illustrate a wide variation in the relative effectiveness and efficiency of eight different models of intervention to increase community sports participation. They identify a range of success and risk factors which they argue provides a basis for planning for more effective sport development interventions. Regarding mass participant sports events, Funk et al conclude that events' potential to promote health outcomes as a stand alone intervention is limited. A more realistic perspective is that

events can produce incremental changes over time by promoting positive attitudes to exercise among the least active and by strengthening activity interest for all individuals. A unique configuration of intrinsic motives, event characteristics and physical activity involvement can direct participation over time.

Taylor et al conclude that an emphasis on local authority financial performance does not seriously constrain access performance and vice versa. However there is a need for greater targeting of subsidies, specifically targeted activity programming and promotion and more outreach provision, strengthening the accountability of local authorities to access objectives and facility location decisions to be made with a remit for socially inclusive access.

The researchers included in this section tend to stress particular policy responses required to increase and sustain participation. However, some also identify the need for additional research.

- In terms of increasing childhood and adolescent sports participation, there is a need to explore the extent to which greater choice, non-competitive provision, adapted activities, sense of self-efficacy and the social aspects of sport and exercise can increase participation (especially among young women) and develop on-going commitment.
- There is a need to explore the behavioural factors associated with exercise and physical activity and to view them as dynamic behavioural processes in the context of stages of change and life-cycle changes.
- As no single theoretical model is likely to be successful in predicting physical activity, there is a need to explore how behavioural issues may differ between different social and cultural groups.
- Research into the long-term effects of different types of adolescent participation, the importance of different skill levels and sense of self-efficacy.
- There is a need to explore adult participation in so-called 'life-long sports' and the extent to which these reflect childhood/adolescent experiences.
- The relative importance of adolescent participation in school and/or community sport for adult participation.
- Longitudinal studies which explore how childhood/ adolescent participation is mediated by such factors as gender, occupation, social status, ethnicity in adulthood.
- Research is required into the implications of broader issues such as changing age and gender norms and the temporal movement of culturally based obligations such as work and family.

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Added to the Value of Sport Monitor in January 2012:

Biddle, S., Atkin, A., Cavill, N. and Foster, C. (2011) Correlates of physical activity in youth: a review of quantitative systematic reviews, *International Review of Sport and Exercise Psychology*, 4(1), 25-49

Fuller, D., Sabiston, C., Karp, I., Barnett, T. and O'Loughlin, J. (2011) School sports participation opportunities influence physical activity in secondary schools and beyond. *Journal of School Health*, 81(8), 449-454

Funk, D., Jordan, J., Ridinger, L., and Kaplanidou, K. (2011) Capacity of mass participant sports events for the development of activity commitment and future exercise intention *Leisure Sciences* Vol.33 No.3. 25--268

Taylor, P., Panagouleas, T. and Ping Kung, S. (2011) Access to English public sector sports facilities by disadvantaged groups and the effect of financial objectives, *Managing Leisure*, 16, 128-141