

Research Article

Exploring the reasons why adolescents participate in physical activity and identifying strategies that facilitate their involvement in such activity

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Background: Prompted by the dramatic rise in obesity and the decline in physical activity of adolescents aged 11–15 years, this study explored, from the participants' viewpoints, the influences contributing to the engagement of adolescents in physical activities and the strategies facilitating their participation in physical activities.

Methods: An interpretive qualitative methodology was used involving 13 adolescents in three separate activity-based focus groups.

Results: The findings describe the personal abilities of the participants and the health benefits, psychological, emotional and environmental factors influencing participation in physical activity. Findings endorse the use of supportive, enjoyable and skill-appropriate approaches to physical activity intervention.

Conclusions: Implications for occupational therapy include promoting physical activities as aspects of occupations to improve the health and well-being of adolescents through engagement in such activities.

KEY WORDS adolescents, focus groups, occupational therapy, participation, physical activity.

Introduction

Health, physical activity and occupation

An estimated 1.5 million young Australians, nearly a quarter of our child and adolescent population, are

either overweight or obese (The National Obesity Taskforce, 2003). Over the past 20 years, the proportion of Australian adolescents either overweight or obese has been accelerating (Booth *et al.*, 2003; Magarey, Daniels & Boulton, 2001), while aerobic fitness has been decreasing (Dollman, Olds, Norton & Stuart, 1999). Consequently, public concern about weight gain in childhood has risen substantially during the past decade (Pratt, Macera & Blanton, 1999; The National Health and Medical Research Council (NHMRC), 1997).

This rise in childhood obesity has created health, social and economic concerns. Being overweight and obese caused a wide range of debilitating and life-threatening conditions such as cardiovascular disease, raised blood pressure, high blood cholesterol, type II diabetes and stroke (The National Obesity Taskforce, 2003; World Health Organization, 2003). In addition, obesity can contribute to social discrimination, mental illness and lower self-esteem (The National Obesity Taskforce), burdening both individuals and society as a whole. Furthermore, there is a potential carry-over effect of obesity in childhood into adult life (Pate, Baranowski, Dowda & Trost, 1996; Taylor, Blair, Cummings, Wun & Malina, 1999).

Physical activity is an integral part of a healthy lifestyle and has been extensively documented and associated with health benefits (Sallis, Prochaska & Taylor, 2000; Welk, 2002). Conversely, sedentary behaviours are associated with several chronic diseases and conditions such as cardiovascular disease, diabetes and obesity (Bungum & Morrow, 2000; Sallis *et al.*, 2000). Positive health effects of physical activity for adolescents are less well documented than those for adults but are becoming increasingly apparent. These include improvements in aerobic fitness, blood pressure, body composition and skeletal and psychological health (Bungum, Dowda, Weston, Trost & Pate, 2000; Sallis *et al.*). Research suggests that small positive increases in physical activity could contribute to reducing the risk of chronic conditions and a better quality of life (Bungum *et al.*; Pate *et al.*, 1995). Increased physical activity is therefore recommended by the Department of Health and Ageing (2004) in order to be healthier.

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Many occupational therapists consider their role to extend beyond improving health and well-being following illness or disability. Occupational therapists have a vital role in the community not only in preventing ill health but also in promoting optimal states of health. Engaging in occupation is a basic human need and is essential for health and well-being (Wilcock, 1998). Townsend *et al.* (1997) describe occupation as the tasks and actions of everyday life that have meaning or value, undertaken by individuals to occupy themselves. Occupational therapy is concerned with the relationship between occupations, health and well-being across the lifespan (Wilcock, 1998) and aims to promote health and well-being by assisting people to engage in occupation. Physical activity is recognised as an important health-promoting aspect of tasks and occupations which maintain normal growth and development for all human beings (Welk, 2002; Ziviani *et al.*, 2006a).

Physical activity is an aspect of adolescents' occupations and has been referred to as bodily movements produced by skeletal muscles, resulting in considerably more energy expenditure than when one is resting (Poulsen & Ziviani, 2004). However, for the purposes of this discussion, physical activity will be used as an umbrella term pertaining to both structured (such as organised sport) and incidental movement experiences of adolescents (such as free time).

Occupational therapists have conventionally promoted participation in activities for adolescents with disabilities, yet it is becoming increasingly incumbent for them to endorse preventative health measures for all adolescents (Ziviani *et al.*, 2006a). Debate continues over the optimal amount and types of physical activity for adolescents. The Australian Government recommendations suggest a minimum of 60 min of moderate to vigorous physical activity each day for adolescents to keep healthy (Department of Health and Ageing, 2004). Although studies indicate that a majority of adolescents do participate in moderate physical activity, few meet the current guidelines for regular participation in vigorous physical activity (Pate, Long & Heath, 1999; Sallis *et al.*, 2000). It follows that improving the physical activity levels of adolescents is an important public health challenge.

Facilitation of physical activity in adolescents

In order to increase the proportion of adolescents engaging in adequate physical activity and to develop effective physical activity interventions, the influencing factors and correlates of activity levels need to be understood (Sallis *et al.*, 2000). Little is known about why adolescents initiate or maintain physical activity patterns. Identification of these determinants is vital to guide occupational therapists in health promotion and to evaluate progress towards meeting national health objectives.

To date, a wide range of methods exist to evaluate adolescents' physical activity. Trost, Pate, Freedson, Sallis and

Taylor (2000) report that numerous studies have used objective measures such as direct observation, heart rate monitors and accelerometers to quantify physical activity behaviours in adolescents. Similarly, self-reports and surveys are popular subjective methods to assess physical activity (Taylor *et al.*, 1999; Welk, Wood & Morss, 2003) because of their low cost and ease of administration (Sallis, 1991).

Considerable empirical research has documented the psychosocial (Saunders *et al.*, 1997; Taylor *et al.*, 1999; Welk *et al.*, 2003) and environmental factors (Gordon-Larsen, McMurray & Popkin, 2000; Hume, Salmon & Ball, 2005) influencing primary-aged school children's physical activity. In this respect, young children have rated fun, thrill, excitement and skill-building as important influences for activity participation (Taylor *et al.*). The results of other studies have identified self-efficacy (Bungum *et al.*, 2000), parental physical activity (Welk *et al.*), access to equipment and social support (Bungum *et al.*) as factors. In addition, there are well-documented gender differences in physical activity levels (Bungum *et al.*; Poulsen & Ziviani, 2004). Boys report participation in physical activity substantially more than girls (Pratt *et al.*, 1999), but there is a rapid decline in physical activity of adolescents aged 11–15 years (Taylor *et al.*).

Previous studies have quantified adolescent physical activity behaviours. Interpretive studies employing a qualitative approach are less common. Research that has included adolescents as informants is limited (Curtin, 2001). Macdonald, Rodger, Abbott, Ziviani and Jones (2005) suggest gathering qualitative information from children and adolescents regarding their physical activities to increase the knowledge base of their preferences. Previous qualitative studies on perceptions of physical activity have focussed on primary-aged school children (Mulvihill, Rivers & Aggleton, 2000; Ziviani, MacDonald, Ward, Jenkins & Rodger, 2006b). A majority of studies including that by Pate *et al.* (1999) tend to focus only on involvement in sport rather than physical activity as more broadly defined for purposes of this study.

This study therefore focussed on adolescents aged 11–15 years. The project aimed to elicit adolescents' perceptions of their involvement in physical activity and strategies for their involvement in physical activity by using a qualitative approach. Adolescence is a key age group for health professionals (Humphry, 2002), and it is useful for occupational therapists to understand research on adolescents' occupations (Larson, 2004) as a guide to promoting health and development. It is envisaged that a better understanding of adolescents' perceptions of participation in physical activity may inform future approaches to enhance engagement in physical activity.

Methods

Research design

This exploratory study employed an interpretive qualitative methodology (Crotty, 1998; Miles & Huberman,

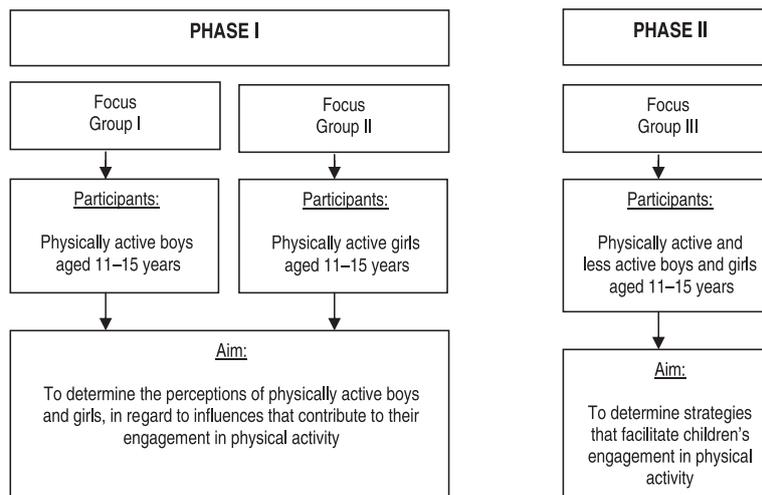


FIGURE 1: The research design illustrating the two phases of the study.

1994) to investigate the perceptions of adolescents as to why they participate in physical activity and strategies that facilitate engagement in physical activity. A qualitative design was chosen to create a picture of the phenomenon, aiming to understand the thoughts, feelings and experiences of individuals.

Three focus groups were used in two phases of this study to address the study's two aims. In Figure 1, the study's phases are represented.

Sampling and recruitment

In Phase 1, purposive sampling was utilised to select participants who have insight into the research question (Patton, 2002). Information-rich physically active adolescents from two private metropolitan Adelaide schools were recruited to participate. They were selected for their homogeneity in respect to gender and physical activity experiences so that their common experience could be studied in depth (Greenbaum, 1998). Teachers from the two schools were trained in, and asked to use, an ordinal visual analog rating scale to identify physically active adolescents. The scale ranged from 0 (not very active either within or outside of school physical activities) to 10 (very active in these activities). This scale was used as it was a convenient, easy and rapidly administered measurement strategy to gauge a subjective phenomenon (Wewers & Lowe, 1990). The lowest of the high end scores was 8 out of 10. Adolescents rating at the high end of the scale were considered 'active' and were therefore potential participants for Phase I. Adolescents rated as 8 or above were invited to participate in the study.

During Phase II, a convenient sampling strategy was used (Minichiello, Sullivan, Greenwood & Axford, 2004). Four adolescents, either physically active or less active, were recruited through contacts of the researcher. A mixed focus group in reference to gender, physical activity

experiences and public and private school attendance was established to increase the variation of responses. Parents rated their adolescents' level of physical activity on the visual analog scale for descriptive purposes only.

Following ethics approval from the University of South Australia, the schools sent recruitment material to the parents of the identified active adolescents. The researcher contacted the parents of potential participants in Phase II and information packages were provided. Recruitment took place between June and September 2005. Adolescents were included in the study if they could speak and comprehend English, met age requirements, and if parents consented and adolescents assented to participation.

Participants

Thirteen adolescents participated in three separate focus group discussions. A description of the adolescents and the focus groups is outlined in Table 1. As can be seen in Table 1, five boys were involved in focus group I, four girls in focus group II and two boys and two girls in focus group III. The age range was between 11 and 15 years with a spread across ages except for focus group I, which did not have a 15 years old, and focus group II, which did not have an 11 years old.

Focus groups

Focus groups were designed to be exploratory and were structured around activities aimed to facilitate adolescents' participation (Heary & Hennessy, 2002). The activities aimed at gaining access to adolescents' views on physical activity (Morgan, Gibbs, Maxwell & Britten, 2002) with accompanying questions designed to elicit discussion. As adolescents are more comfortable conversing with peers than with adults (Levine & Zimmerman, 1996; Mauthner, 1997), activities were designed to allow spontaneous conversation amongst the adolescents, with the researcher acting as an observer and facilitator. Short,

TABLE 1: *Description of participants and focus groups*

Phase	Focus group	Number of children participating	Ages of children	Frequency of age within each group	Frequency of gender F = Female M = Male	Score on rating scale†	Frequency of school sector G = Government P = Private
I	I	5	11	2	M = 5	10, 8	P = 5
			12	1		10	
			13	1		9	
			14	1		10	
I	II	4	12	1	F = 4	9	P = 4
			13	1		10	
			14	1		10	
			15	1		9	
II	III	4	11	1	F = 2	5	G = 2
			12	1	M = 2	3	P = 2
			15	2		10, 2	

†Visual analog rating scale from 0 to 10, ranging from not very active to very active.

open-ended questions were developed, piloted and revised (Heary & Hennessy, 2002; Morgan *et al.*) to clarify and ensure that adolescents responded appropriately to the questions. Each focus group was semistructured and lasted approximately 60 min.

Procedures for Phase I focus groups

An activity whereby a collage of pictures and words, obtained from magazines, was used to describe and explain engagement in physical activities. A collage was chosen as it allows each person to represent their perception of a theme (Remocker & Sherwood, 1999). Towards the end of this activity, the picture cards from the Paediatric Activity Card Sort (PACS) were presented as another choice of images to describe participation in physical activity not provided by the magazines. The PACS is the only existing card sort tool with photographic pictures that establish young people's participation in activities (Mandich, Polatajko, Miller & Baum, 2004). A series of questions was then used to promote discussion (see Table 2). The intrinsic and extrinsic factors involved in participating in physical activity and fundamental discussion points were documented on a whiteboard.

Procedures for Phase II focus group

A brainstorming activity was used in Phase II to consider useful strategies for engaging in physical activities. Pens and poster boards were provided and participants were asked to write down three things that could be done to encourage adolescents to participate in physical activity. Upon completion, participants were asked to highlight their best suggestion. The researcher collected the brainstorming posters and based the discussion initially on the highlighted ideas and, subsequently, all

TABLE 2: *Questions used during focus groups in Phase I*

Tell me about [physical activity]?
Are there other group members who also do this activity?
For those of you who do this activity, where do you do this? (e.g. school grounds, local oval)
What time of day do you do this? (e.g. before school, on weekends)
Who else does this activity? Tell me a bit more about these people.
How often do you participate in this activity? (e.g. every Monday)
How long do you do this activity for? (e.g. 1 h)
What do you like/dislike about [physical activity]?
Why do you do [physical activity]?
How good are you at this activity?

suggestions were discussed. A series of questions was used to promote conversation and further discussion. Trigger questions included: 'Tell me about [suggestion]' and 'How would this help adolescents participate in physical activities?' Fundamental discussion points were documented on a whiteboard.

At the completion of each of the three focus groups, the accuracy of the fundamental points on the discussion board was verified by summarising the issues presented and asking for confirmation and additions or changes to the summary from group members. Focus group discussions were audiotaped and written records of the focus group discussions were kept, including notation of responses and non-verbal behaviours.

Data analysis

Data analysis took place simultaneously throughout and after data collection. Primarily, a content analysis occurred utilising the summaries from the whiteboards, the collages from Phase I, the brainstorming posters from Phase II and the audiotapes. An inductive thematic approach to the analysis was then employed, as recommended by Patton (2002), with key comments being read and re-read several times before being grouped into categories. From each focus group, the researcher coded key ideas, comments, summaries and observations and then grouped those of similar content. These codes were clustered into categories which informed the development of themes. The researcher and research assistant referred themes back to the original audiotapes to determine the comprehensiveness of the identified themes.

Strategies as suggested by Streubert Speziale and Carpenter (2003) were applied to establish rigour and trustworthiness and hence enhance the credibility of this study. Opportunities for member-checking were provided during data collection both informally, during the discussions, and formally, when gaining group consensus and summarising key ideas. The researcher used the process of bracketing to set aside personal beliefs before and during data collection and during data analysis. The research assistant independently reviewed the codes, comments and themes with a 100% level of agreement obtained between the researcher and the research assistant following discussion. In addition, a journal was kept, as recommended by Krefting (1991), to document decisions made in the research process.

Results

The findings from this study illustrate the complexity of participating in physical activities from the viewpoints of adolescents. These findings are presented for Phase I followed by Phase II. It is noteworthy that participants in Phase I mostly viewed physical activity as sport. Adolescents reported on their involvement in activities such as soccer, lacrosse, water polo, working out in the gym, bike riding and golf, to achieve health, physical, psychological, social, emotional and self-developmental benefits. In Phase II, participants referred to physical activity as both non-sporting actions, such as walking to school, as well as sport. Participants in this phase provided several strategies for communities to increase physical activity among adolescents. The findings from Phase I are presented below and provide insight into the benefits of engagement of active adolescents in physical activities.

Acknowledging health benefits

Adolescents in Phase I identified physical activities as a means to be active, fit and healthy. Adolescents discussed the health benefits of physical activity including fitness and fat reduction. Boys and girls equally reported they 'like being healthy and fit' and several adolescents

agreed that 'participating gives me a good work out'. Additionally, physical strength was equally reported as an influence on, or a result of, physical activity. Several boys reported that physical activity 'keeps me strong' and both boys and girls remarked that 'strength and stamina is needed' to participate.

Emotional benefits

Nearly all the adolescents said that they participate in physical activities because it is enjoyable and fun. This was highlighted by several comments such as 'I like it because it's fun'. One child enjoyed physical activity as it allowed 'living life to the fullest and enjoying it'. Participants agreed that the 'main thing is to have fun'. Excitement and jubilation were emotional factors related to engaging in physical activities. For instance, 'getting pumped with friends before a game is a great feeling'. Several adolescents engaged in physical activity to decrease tension and one participant said, 'It's good for getting rid of anger'.

The value of socialising

Several participants mentioned that they engaged in physical activities to socialise. Adolescents stated that they were able to enjoy time with friends, build relationships and to meet new people. This was illustrated by the comments 'you make new friendships along the way' and 'you make friends from participating'. Participants also commented that they engaged in physical activities because it involved teams, as illustrated by the statement 'because it's a team game'.

Psychological gains and self-development

Many adolescents mentioned the psychological benefits of participation in physical activity, such as increased self-confidence and achieving a sense of mastery. A key message from both groups of active adolescents was that engaging in physical activity 'helps with confidence' and builds self-esteem. The all-female focus group agreed that the 'other main thing is to build self-esteem'. Some adolescents commented that skill development was a reason for engaging in physical activity. They liked the challenge of mastering skills and stated that 'it's good to keep trying to improve'. Participants felt a sense of mastery when overcoming obstacles and achieving personal goals in physical activity. Several adolescents stated that they aspired to and liked 'winning'. The adolescents relayed that they felt physical activities provided opportunities to test their abilities. The boys established that 'when goals are achieved, satisfaction develops' and one child commented that 'there may be hard times but you get back up again and keep going'.

The following ideas evolved from the Phase II focus group. The views of active and less active participants are presented and their comments included suggestions about strategies for facilitation of physical activity among adolescents. Participants in this focus group agreed with the health benefits obtained from physical activity as acknowledged in Phase I.

Phase I		Phase II
Acknowledging health benefits		
Emotional benefits	↔	Fun, interesting and choice
The value of socialising	↔	Encouragement and support from others and the environment
Psychological gains and self-development	↔	Encouragement and support from others and the environment Be active, not competitive

FIGURE 2: Combined findings from Phases I and II.

Fun, interesting and choice

The adolescents stated that physical activities ought to be presented in more appealing ways. Participants discussed that adolescents need to enjoy what they are doing and that activities need to be interesting. Several participants agreed that 'to make adolescents play in games you need to make it interesting', and one girl stated that 'if physical activity is boring, you might not want to play'. There was consensus that physical activity needs to be fun and one child said that adolescents 'need to enjoy what they are doing and have fun', and another commented that 'you need to make it fun for everyone'. Another key message was to provide more choice in participating in physical activities. The adolescents exclaimed that providing choice 'makes it more fun'. The group agreed that adolescents should be able to choose what they want to do. One member stated that 'adolescents need to make up their own mind and not be forced to do an activity. They need to choose to do it'. One boy proposed that adults could facilitate this idea by 'letting adolescents vote on what physical activity to do', for example, in the classroom environment.

Encouragement and support from others and the environment

Several participants suggested that environments for physical activity need to be more supportive. A recommendation was to put people of the same ability together when participating in physical activities. One child suggested that this would provide support 'because if you're not as good as others you feel bad and you might get a shot at it', while another member stated that this was a sound idea 'otherwise those good at it will stomp all over those that are rubbish at it'. Adolescents suggested that more chances to participate in physical activity would facilitate participation. One child said that 'schools could provide after school teams and events'. The role of adults was also mentioned in needing to set a good example and one boy stated that adults need to 'go and do it themselves'. Adults could also be supportive and encourage adolescents to improve at physical activity.

Comments include 'if you get better at it you may go back and do it again' and 'adults can make participating fun and casual and not criticise effort'.

Be active, not competitive

Some adolescents were concerned about competition as this diminishes enjoyment of an activity. One child suggested 'not making everything a competition because if you don't do well it makes you feel really bad'. Participants' comments included that physical activities should 'be less threatening' and 'if kids lose at what they try, they may not want to try at all'. It was also stated that 'physical activity should not just be about traditional sports', and all participants concurred that physical activity programs should concentrate on adolescents being active rather than playing sports.

Discussion

This study has presented valuable descriptive information from adolescents on the reasons why they engage in physical activity, together with strategies to facilitate participation in physical activities. The preliminary findings provide insight into some of these factors and they support previous studies that suggest that childhood physical activity is a complex phenomenon related to a number of personal, social and environmental variables (Poulsen & Ziviani, 2004; Sallis *et al.*, 2000).

An illustrative representation of the combined findings from both phases of the project is shown in Figure 2. It is noteworthy that there are similarities in themes from both phases despite the topic of physical activity being explored from different angles in the two phases of the study. These similarities are also interesting when considering the differences in composition of the focus groups in terms of gender, physical activity experiences and school sectors.

Participants in the three focus groups acknowledged that health benefits can be gained from participating in physical activity. This supports findings of positive health effects of physical activity by Pate *et al.* (1995),

Sallis *et al.* (2000) and Ziviani *et al.* (2006b). The adolescents indicated an unexpected level of awareness of health benefits from undertaking physical activity within their occupations. This may be due to educational programs and advertising related to physical activity at school or in the community. Adolescents stated they liked being fit and healthy for a variety of intrinsic and extrinsic reasons. Boys and girls both reported wanting to be physically and mentally fit.

Second, similarities can be found between the Phase I theme of 'Emotional Benefits' and the Phase II topics of 'Fun, Interesting and Choice'. Adolescents from both phases reported that having fun and enjoying physical activities was of paramount importance, supporting the findings of Taylor *et al.* (1999), who found that thrill, excitement and fun are influences on activity participation. These factors can make physical activity meaningful behaviour in occupations for adolescents. It has been suggested that negative experiences may contribute to lifetime avoidance of physical activity (Locke, 1996). Taylor *et al.* suggest encouraging enjoyment of physical activity rather than presenting it as prescribed exercise if lifelong activity behaviours are to be realised. Previous research has also indicated that there is a strong association between interests and participation. Garton and Pratt (1991) suggest that a greater amount of interests usually leads to increased participation in activities. Participants in this study claimed that they would engage in physical activity if it were fun, interesting, not boring and if it involved having choice, highlighting core occupational beliefs that engaging in activities fulfils a source of meaning, purpose, choice and control.

A number of adolescents in this study declared that they wanted choice in the type of physical activity to take part in, especially in relation to school activities. Choice in activities encourages development, motivation to learn and the experience of pure enjoyment (Csikszentmihalyi, 2000). Moreover, Law (2002) states that choice or control over activities provides meaning and encourages involvement.

Third, 'The Value of Socialising' from Phase I can be linked with the theme of 'Encouragement and Support from Others and The Environment' from Phase II. Brustad (1993) found that socialising agents are associated with increased physical activity. Adolescents in the present study talked about participating in physically active occupations as a means to socialise and make friends, which concurs with findings by Macdonald *et al.* (2005). Masten and Coatsworth (1998) state that social support, such as from peers and good child-adult relationships, promotes skill development in young people. Hume *et al.* (2005) support this idea by suggesting the home environment is an important setting to support socialising and physical activity behaviours. A strategy to increase participation offered by adolescents in Focus Group III was to have adults provide positive encouragement and not criticise effort. Adolescents also suggested

strategies to increase support and encouragement, for example, by engaging in activities with people of similar ability. Participants suggested that support and encouragement would promote achievement, positive experiences and facilitate participation.

Finally, similarities can be identified between the themes 'Psychological Gains and Self-Development' from Phase I, and 'Encouragement and Support from Others and the Environment' and 'Be Active, Not Competitive' from Phase II. In examining the concepts of psychological gains and skill development, Brustad (1993) and Sallis *et al.* (2000) found positive associations between perceived activity competence and young people's decisions to engage in physical activities. The Phase II findings support previous research outcomes by declaring that, if adolescents improved their skills and abilities, with encouragement and support they 'may go back and do it again'. The participants in Phase II also talked about the need for more opportunities to engage in physical activity, such as within the school environment, which supports the view that the school grounds provide adolescents with a setting for physical activity and recreational opportunities for skill development and social support (Sallis *et al.*). Furthermore, active adolescents in this study shared their positive beliefs of self-competence and commented that competition, friendly rivalry and winning were motivators for participation. Interestingly, K. Boshoff and S. Hartshorne (2004, unpublished data) describe the desire for competition as an important element motivating engagement in physical activities for some adolescents. However, a number of participants in Phase II of this project reported that competition is unappealing. In this study, some adolescents saw 'being active' in occupations rather than engaging in traditional sport and competitive occupations as more attractive. This corresponds with the study by Roberts' (1996) that linked greater physical activity participation with the policy of placing less influence on traditional team sports. These issues confirm that to achieve meaningfulness in physical activities, a balance between the challenge in the activity and the skills of the individual is required (Moneta & Csikszentmihalyi, 1996).

In summary, participants in this study supported views on the health and well-being benefits achieved from participation in meaningful activities (Garton & Pratt, 1991; Law, Steinwender & Leclair, 1998). Findings from this study describe the personal skills and experiences of the participants, as well as the physical, psychological and emotional factors that influence participation in physical activity. Additionally, environmental factors such as access to equipment and events, social and supportive attitudes and school experiences were revealed. The findings therefore support the models that propose integration of personal capacities when engaging in occupations within different environments, such as the Person, Environment and Occupation Model (Townsend *et al.*, 1997). In considering this model, participation and

performance occurs at the transaction between the domains of the person, environment and occupation; this model further proposes that a change in any aspect of these areas may affect the participation and performance of the person in a given occupation.

Occupational therapists and other health professionals engaging with the health and welfare of adolescents need to consider their role in health promotion by providing choice in activities and by ensuring that activities are fun and of interest to adolescents. Social opportunities should be considered and incorporated, as well as opportunities for skill development and engagement in physical activity. Participation should occur in a supportive environment, providing the 'just right challenge' for each individual. In addition, thought should be given to whether competition is appropriate for adolescents.

Recommendations for future research

Generalisability of the findings of this study is limited to groups with similar characteristics, that is, adolescents aged 11–15 years from metropolitan regions with mostly private schooling. In addition, the viewpoints from less active adolescents were in the minority, and saturation of data was not achieved. It is recommended that future research include adolescents from culturally diverse, rural and lower socioeconomic groups and adolescents with less active lifestyles as well. Similar studies conducted in other Australian states would be beneficial to add to, validate or refute the findings of this South Australian-based study.

Conclusion

This study has extended insights into the perceptions of adolescents relating to their reasons for participation in physical activities and their viewpoints on strategies that would facilitate their participation in these activities. The unique use of activities during data collection provided tools to allow the participants to portray their experiences and opinions in a way that was meaningful to them. The findings endorse the use of supportive, enjoyable and skill-appropriate approaches to physical activity intervention. Areas of future research have been highlighted to extend this research to other population groups. It is anticipated that this study will contribute to the improvement of health and well-being of adolescents through the promotion of physical activity by occupational therapists and other health professionals.

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