

# **Physical Activity and Building Stronger Communities**

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# 1 Introduction

This report reviews the role of physical activity in building stronger communities. The review outlines the health benefits of physical activity and how participation in physical activity may help foster social capital and encourage the development of strong and healthy communities.

The evidence regarding physical activity participation and social capital and community development is mixed. Much of the current knowledge is based upon cross-sectional data, although there is some good support that physical activity interventions not only increase participation in physical activity but also have positive effects on the main elements of social capital (participation in networks, social norms, trust, reciprocity, cooperation).

This paper firstly provides an overview of the health benefits of physical activity and describes the concepts of social capital and community development and their relationship with physical activity. This is followed by a discussion of physical activity in different population groups with a particular focus upon two disadvantaged populations, Aboriginal and Torres Strait Islanders and people of non-English speaking backgrounds. The final part of this report examines physical activity programs that have potential to aide community development and delineates elements for effective strategies.

## 2 Importance of physical activity

Being physically active is good for one's health. Physical activity is associated with reduced risk for chronic diseases such as cardiovascular disease, type 2 diabetes, obesity, some cancers and mental ill-health<sup>1</sup>. Evidence also consistently shows that achieving the recommendation of at least moderate intensity physical activity on most days of the week reduces the risk of all-cause mortality<sup>2</sup>.

The National Physical Activity Guidelines for Adults recommend that a person should engage in at least 30 minutes of moderate activity on most, and preferably all, days of the week in order to maintain good health<sup>3</sup>. Nearly half of New South Wales (NSW) adults are not sufficiently active. According to the NSW Population Health Survey, 51.9% of NSW adults aged 16 years and over reported participating in sufficient levels of physical activity in 2005 (i.e., they accumulated at least 150 minutes of moderate to vigorous physical activity in the past week over at least 5 occasions)<sup>4</sup>. The National Health Survey 2004-2005 found that 35.1% of NSW adults aged 18 years and over were sedentary or did not exercise (i.e., they did not do any exercise, sport, recreation or fitness activity in the previous 2 weeks)<sup>5</sup>. Despite recent work suggesting that more NSW adults are becoming sufficiently active<sup>6</sup>, the prevalence of participation in regular physical activity among the NSW population could be improved.

Given the numerous health benefits of physical activity and the modest prevalence of physical activity, physical activity has been described as a "whole-of-community concern" with the potential to deliver benefits not only to public health but also to other sectors outside of health, including transport, sport and recreation, urban planning and education<sup>7</sup>.

### **3 Physical activity, community and social capital**

Physical activity is a behaviour that is associated with individual, social and economic factors as well as the physical environments in which individuals live<sup>8-12</sup>. There has been increasing attention given to the relationship between physical activity and community factors and the potential health benefits for individuals within the community as well as the community at large<sup>13-15</sup>.

#### **3.1 What is a community?**

According to Paronen and Oja, there are six main features which characterise a community<sup>14</sup>.

1. A community is typified by membership; that is its members have a sense of identity and belonging.
2. A community consists of common symbol systems, such as similar language, religion and practices.
3. Community members share norms and values.
4. They have a sense of mutual influence, whereby they influence and are influenced by each other (reciprocity).
5. A community is characterised by shared needs and commitment to meeting those needs.
6. Community members typically share an emotional connection, such as common history, mutual support, and similar experiences.

Furthermore, a community may be defined by not only geographical boundaries (e.g., neighbourhood), but also by characteristics like ethnic background, employment sector, lifestyle and age.

A strong community consists of members and stakeholders who understand the community's social, economic and environmental assets and who work together to ensure the sustainability of resources, as well as working with more disadvantaged community populations to achieve minimum standards across the community<sup>16</sup>.

#### **3.2 What is social capital?**

The most common definition of social capital is that coined by Putnam (1993), who conceptualised social capital as “networks, norms and social trust” that enable people to coordinate and cooperate to achieve shared goals<sup>17,18</sup>. Others have described social capital as a measure of social cohesiveness<sup>19</sup>; material or psychosocial resources available to individuals and society through social relationships<sup>20</sup>; the way in which society members may be supported to access other forms of capital, whether it be economic, cultural or symbolic<sup>21</sup>. Common aspects of social capital that may be drawn from its varied definitions include participation in networks, trust, cooperation, social norms and reciprocity<sup>13,21</sup>.

It has been proposed that social capital is not a new discovery, but rather a “re-packaging” of older ideas like community development and empowerment<sup>18</sup>. Nonetheless, the key components of social capacity are useful concepts, which practitioners, researchers and

decision-makers may use to build stronger communities, as there is evidence demonstrating an association between the different aspects of social capital and physical activity. Such an association does not imply a “causal direction” for this relationship, but simply that communities with high physical activity participation also are likely to have high levels of social capital. This evidence, and the research underpinning it, is described in the next section.

### **3.3 Physical activity and social capital**

Much of the evidence relating to physical activity and social capital is based on cross-sectional data and therefore, causal directions cannot be established from such findings. Social capital has been linked with a reduced likelihood of being physically inactive during leisure time<sup>22</sup>. Some evidence indicates that having greater social participation is associated with reduced likelihood of having low levels of physical activity<sup>23</sup>. Having social networks, such as friends or family who are supportive or with whom to participate physical activity, or neighbours with recreational facilities, is associated with being physically active<sup>24-26</sup>.

Neighbourhood crime and safety have been found to be negatively associated with physical activity participation. Adults are more likely to engage in physical activity when they perceive their neighbourhoods to be safe<sup>27 28</sup>. This association appears to have implications for the physical activity levels of children as well. Parents are less likely to allow their children to walk or cycle to school if neighbourhood streets have busy traffic and if there are no pedestrian lights or crossings<sup>29</sup>. Among parents of first grade children, parents of children who are not overweight perceive their neighbourhoods as significantly more safe compared with parents of children who are overweight, whose children also spent less time in structured activities after school<sup>30</sup>. However, having a sense of community cohesion and collective efficacy has been found to partially alleviate fears about neighbourhood crime and safety, suggesting a somewhat mitigating effect of social capital<sup>31</sup>.

In addition, much attention has been given to the physical aspects of social capital, namely characteristics of the built environment and neighbourhoods in which communities exist. Living in walkable neighbourhoods (i.e., those with higher residential density, land use mix, street connectivity, better aesthetics and safety) has been found to be related to greater physical activity engagement compared with living in less walkable areas<sup>32 33</sup>. At the same time, residents of neighbourhoods identified as more walkable have reported feeling more connected with their community, and are more likely to know their neighbours and be engaged with local level government<sup>34</sup>. Nonetheless, there is still debate regarding the relationship between the environment in which individuals live and their physical activity levels. Some evidence suggests that the environment in which people live is an important determinant of participation in physical activity, independent of individual characteristics<sup>35</sup>; while other findings suggest that leisure time physical activity is not determined by neighbourhood characteristics<sup>8</sup>. Having access to community parks and facilities has also been found to have mixed associations with physical activity levels<sup>24 36 37</sup>.

Evidence from community-based physical activity initiatives suggest that providing social support is effective for increasing physical activity levels and the frequency and amount of time spent engaged in physical activity<sup>11 38 39</sup>. Social network characteristics, such as the number of people in the network and the frequency of contact, are associated with participation in physical activity<sup>24 40</sup>.

Furthermore, community-based interventions have been found to facilitate the establishment of new social norms in a community, with participation encouraging health promoting behaviours<sup>41 42</sup>. For example, in an Australian community-based walking group program, walking group members not only increased their physical activity engagement, but also benefited from closer interpersonal relationships with other group members, greater feelings of belongingness and connectedness with their local community and participating in community events like charity drives<sup>41</sup>. In an American intervention, a volunteering program for older adults led to increased physical activity levels in volunteers while improving the academic and behavioural outcomes of elementary school children and encouraging greater social engagement from members of underserved minority groups in the community<sup>42</sup>. Participants in other physical activity initiatives have similarly reported social benefits and increasing their sense of well-being, as well as their physical activity levels, after joining the program<sup>39 43 44</sup>.

Thus, it is apparent that physical activity has the potential to facilitate community building and strengthening by encouraging greater participation and contributing to the social capital in communities. In particular, community-based physical activity interventions show promise in fostering social connections, cooperation, reciprocity, collective identity, and trust in the community. These intervention data suggest that the direction of the relationship may be through promoting physical activity to increasing social capital.

## **4 Physical activity participation in different community groups**

Certain groups within communities are less likely to participate in sufficient physical activity. The prevalence of engaging in physical activity has been identified as being lower among females, older adults, people with lower socioeconomic status, people from culturally and linguistically diverse (CALD) backgrounds and Aboriginal and Torres Strait Islander (ATSI) people<sup>5 6 45-50</sup>.

Barriers to physical activity range from the personal to the environmental. Personal barriers that have been named include lack of companions with whom to engage in physical activity, lack of social support, lack of time, lack of enjoyment, having children, having health problems and feeling self-conscious<sup>44 51-55</sup>. Environmental barriers that have been identified involve perceptions of the neighbourhood as being unsafe, lack of access to facilities, traffic volume, footpaths being in poor condition, and less aesthetically pleasing neighbourhood features<sup>28 29 54 56</sup>. If urban form (built environment) is a barrier, then improvements to the built environment could facilitate both increases in physical activity and increases in social capital.

It is therefore important that the disparate needs and concerns of different community groups be taken into consideration when planning community physical activity initiatives. People are more motivated to engage in physical activity in a friendly environment, when there are opportunities to socialise, and when the activity is enjoyable and personally rewarding<sup>41 54 56</sup>. This highlights the importance of the social environment. Here, it is hypothesised that a socially connected environment (high social capital) will lead to physical activity opportunities through social interactions.

## **4.1 Focus on two population groups**

The following section describes two population groups that warrant particular attention. Available data from health surveys suggest that ATSI people and people from CALD backgrounds are less active than their non-Indigenous and English-speaking counterparts. However there is little scientific evidence regarding the effectiveness of physical activity promotion programs among these communities <sup>57</sup>.

### **4.1.1 Aboriginal and Torres Strait Islander people**

In their review of physical activity among ATSI people, Shilton and Brown (2004) argue strongly for harnessing the potential of physical activity programs to benefit ATSI people and their communities <sup>58</sup>. ATSI people and their communities may benefit from physical activity initiatives through reduced chronic disease and improved physical and mental health, as well as profiting from increased social capital, such as community cohesion and cultural pride.

The prevalence of sufficient physical activity among people of Aboriginal and Torres Strait Islander (ATSI) backgrounds in NSW is slightly different to that of the general NSW adult population. The 2005 NSW Population Health Survey found that 69% of ATSI males and 44% of ATSI females living in urban areas reported sufficient levels of physical activity. The prevalence for ATSI males and females living in rural areas was 51.8% and 46.7% respectively. Also, the prevalence of sufficient physical activity decreased with age <sup>4</sup>. These NSW data are somewhat higher than findings from the 2004-06 National Aboriginal Torres Strait Islander Health Survey (NATSIHS) which indicates that 75% of Indigenous people in non-remote areas had been sedentary or engaged in low level exercise in the previous two weeks. However, it should be noted that the NATSIHS only measured exercise undertaken for sport, recreation or fitness and so, survey results do not reflect total physical activity.

In addition, relative to non-Indigenous Australians, there is a higher prevalence of non-communicable disease and injury among ATSI Australians. This includes chronic conditions such as musculoskeletal diseases, cardiovascular problems and type 2 diabetes. ATSI Australians also have higher rates of unemployment, lower income, lower educational levels, higher rates of imprisonment and lower life expectancy than the Australian population as a whole. The median age for ATSI people is 21 years, compared with 36 years for the general Australian population. The largest population of ATSI people live in NSW (134,000; 27% of the Australian ATSI population), with 54% living in rural areas of the state. ATSI people living in remote areas are more likely to report long term health conditions than their urban counterparts, indicating disparities between urban and rural-dwelling ATSI communities <sup>50 59</sup>.

It is agreed that research to provide evidence of the effectiveness of physical activity programs on ATSI people and communities is a priority <sup>58 60 61</sup>. Although there is currently limited knowledge regarding the impact and effectiveness of physical activity programs on ATSI people and communities, work is underway on identifying priorities, developing evaluation indicators and designing programs. In one instance, consultations with 3 rural ATSI communities in the Northern Territory identified youths as a priority group in developing sport and recreation programs. Youth sport programs in this setting may foster broader community engagement and participation among ATSI youth. Community members named relief from boredom, poverty, hunger, overcrowding, peer pressure, family problems and substance use as reasons for focusing on young people. Sustainability of programs was also found to be lacking due to the remote nature of the communities' locations. There was a high turn-over rate amongst sport and recreation officers, who were often of non-Indigenous

backgrounds, and felt isolated and unsupported in the remote communities<sup>60</sup>. Some have also suggested that programs targeting ATSI people should focus on benefiting the family and community rather than the individual due to cultural values and that it would be worthwhile to draw upon Indigenous values of connection with the land, and with family, elders and role models<sup>7 62</sup>.

#### **4.1.2 People of culturally and linguistically diverse backgrounds**

People from CALD backgrounds are less active than the general Australian population. The prevalence of sufficient physical activity is lower among Australians who speak a non-English language at home<sup>63</sup>. In the 1997 NSW Health Survey, people who spoke a language other than English at home reported less participation in adequate physical activity compared with people who spoke English at home (except for those who spoke French, German or Croatian at home)<sup>64</sup>.

People born in non-English speaking countries also have lower participation rates in sport and physical activity than people born in main English-speaking countries<sup>65</sup>. Participation rates decrease with age regardless of country of birth, with people born in non-English speaking countries having lower participation rates across all age ranges compared with people born in main English-speaking countries. Participation rates in non-organised sport or physical activity are higher than the rates for organised sport and physical activity regardless of country of birth, although there are differences within groups. For example, people born in the Middle East or North Africa have the lowest participation rates in organised sport and physical activity (17%) but have high participation rates in non-organised sport and physical activity (88%). Also, people born in other than main English-speaking countries have lower levels of participation in community and social activities compared with people born in main English-speaking countries, except for church and religious activities.

In their detailed update of the state of physical activity promotion in Australia, Bauman and colleagues describe several physical activity programs in CALD communities that have been conducted in recent years<sup>57</sup>. These were limited in several ways, particularly with respect to the small sample sizes and lack of long term intervention and follow-up periods. The lack of long term evidence regarding the effectiveness of physical activity interventions in CALD communities is further highlighted by the apparent absence of current projects that target members of these communities specifically.

It is noteworthy that the NSW Physical Activity Project Database for 2006<sup>66</sup>, which comprehensively outlines the physical activity projects being conducted by Area Health Services and other organisations in the state, does not contain information on any programs that target CALD groups or issues explicitly. In contrast, other groups with lower participation in physical activity, such as women and older people, do form the focus of several targeted programs. It is possible that CALD communities may constitute targets within larger initiatives or that ongoing programs have not been mentioned (although many were). Nonetheless, CALD people may have been somewhat overlooked as main targets of physical activity promotion work in recent times. It is, therefore, important that research be carried out on programs to encourage greater physical participation in CALD populations. As for ATSI people, initiatives targeting CALD groups should be culturally specific and sensitive to the values and traditions of the participants to have the largest impact. Programs may involve CALD people engaging in community activity that does not require expending energy or, they may involve specific physical activity, such as youth soccer for refugee populations.



## 5 Physical activity programs for community development

The following elements have been identified as important aspects of programs that aim to build stronger communities<sup>67-69</sup>:

1. Connecting the social, cultural, environmental and economics spheres in the community.
2. Improving the quality of life of community populations and gaining mutual benefit among community members.
3. Creating opportunities and encouraging community members to participate in community activities, from employment to social events to civic duties.
4. Empowering communities, helping them to take advantage of opportunities and to take shared responsibility for their wellbeing.
5. Recognising the diversity of interests within a community and how that may affect capacity building.
6. Engaging people from the community, government, and private sectors to work together to address community issues, solve problems in their community and achieve common goals.

The literature suggests that schemes to promote walking and sport participation have the potential to make positive contributions towards community development, especially through elements 1, 2 and 3 described above.

### 5.1 Programs that promote walking

Walking is the most popular sport and recreation physical activity in Australia<sup>70</sup>. No special skills or equipment are required to walk and it can be done almost anywhere and with little cost. Walking programs have been conducted with older adults, women, new mothers, people from non-English speaking backgrounds, as well as low income populations across Australia and have generally shown promising results with respect to promoting physical activity participation and fostering social capital like social networks and support, cooperation, and community involvement<sup>39 41 43 71 72</sup>. There is good evidence showing that community-based walking programs effectively increasing people's physical activity levels and strengthen the communities in which the programs are run.

Just Walk It is a community-based physical activity program that aims to increase regular participation in physical activity through promoting walking as an activity<sup>72 73</sup>. The Just Walk It program illustrates a physical activity initiative that has mobilised community members to take action for their health, as well as building partnerships between different community and government organisations. It encourages people to participate in physical activity in an enjoyable, positive and non-competitive environment. The program also encourages community ownership of their local walking group, with trained community volunteers maintaining each group and local support from shops and facilities as meeting points. Furthermore, the program has been evaluated with pilot results informing the development of a state-wide program, which eventually became an Australia-wide program.

The Just Walk It program started as 35 walking groups based in several communities in southeast Queensland in 1995. Each walking group had an average of 6 people. Volunteers were recruited from the community and trained to become walking guides. They were provided with education resources and a guide to developing a walking group in their neighbourhood. Support was also provided by a centrally based coordinator at the National Heart Foundation Brisbane office. Participants reported their main reasons for joining were

for socialising (48%) and for improving or maintaining their fitness (46%). The researchers concluded that the combination of the guides' enthusiasm, the homogeneity of the walkers, the perceived social support received from friends and family were major factors that contributed to the maintenance and cohesion of the Just Walk It walking groups. It was determined that Just Walk It was an inexpensive approach to reaching large sections of the community and the program expanded to include the entire state of Queensland with support from health, sport and recreation, and local government agencies<sup>72</sup>. The National Heart Foundation now runs this program in most states and territories of Australia using this partnership approach. Evaluation of the program showed that Just Walk It is a popular and acceptable program with over 4000 participants in 75 communities and 350 volunteers organising over 300 different groups. The 6 month retention rate was 80% and the proportion of participants was predominantly female and more than half were over 50 years of age. There were significant increases in physical activity in walking group participants 6 months after the program compared with before joining the program (from approximately 50% pre-joining to 63% after 6 months)<sup>73</sup>.

The Lockridge Walking Group (LWG) is another good example of a sustained and enduring program<sup>41</sup>. The LWG has existed since 1993 in a more disadvantaged suburb of Perth, involving members from a range of language and cultural groups. The primary goal of this program was to increase levels of physical activity of adults and women in a low socioeconomic status area in Perth. Group members have reported numerous physical and mental health benefits from participating and the program has also resulted in enhanced social capital in the communities in which the walking groups are based, including improved social and support networks, increased community cohesiveness and trust, greater sense of belonging and augmented community image. Walking group members became more engaged in the community, participating in local government consultations regarding services and facilities, fundraising for charities and planting trees. The health centres where walking group members met before walks also became welcoming places and part of community life.

In the Concord area of Sydney, the local council and health promotion unit carried out a successful whole-of-community initiative to promote walking in women living in the area<sup>39</sup>. Focus groups with women and interviews with key informants were conducted to inform the development of the intervention. Most importantly the entire Concord community was involved in the project. In addition to organising walking groups, the local council sponsored community walking events, constructed maps of walking itineraries, mobilised community networks and resources, and conducted an awareness campaign for physical activity, its associated health benefits and pleasant locations for walking in the area. Partnerships were formed between different council departments and government agencies, leading to improved communication channels. Women participating in the walking group increased their levels of physical activity post-intervention, while results from telephone surveys of the broader community suggested that fewer women were sedentary and more had begun to engage in low levels of physical activity. The community-wide campaign resulted in health and physical benefits for women in the walking groups as well as for women in the general community. The sense of community in Concord was strengthened, local resources and facilities (e.g., parks, walking tracks) were improved, and the capacity of the local council to support and promote physical activity in the community was augmented.

In addition, there is some evidence showing that participating in walking groups leads to more satisfying social contacts although there may be no changes to physical activity participation. For example, Watson and colleagues<sup>74</sup> evaluated a pram walking program for new mothers in Western Sydney. The program was of a prospective cohort design and consisted of an intervention group and a control group, where intervention mothers participated in a pram walking group, while control group mothers were placed on a waiting list. The pram walking intervention had no significant effect on the proportion of women undertaking sufficient physical activity and there was no significant difference between the

intervention and control group with respect to physical activity participation. Despite this, intervention group mothers reported being more satisfied with their social contact than control group mothers at the 6-month follow-up. Qualitative feedback indicated that women who attended the walking group valued the meetings and had formed new friendships with other group members.

The following elements have been identified as important for developing successful and sustainable walking groups that make positive contributions to the community<sup>41 71 73</sup>

- Having walking group leaders who are organised, enthusiastic, understanding, caring and encouraging of group members.
- Providing walking group leaders with training and support, so that walking groups may be self-reliant and empowered to manage their own activities.
- Taking a partnership approach and encouraging collaboration between organisations (government agencies, local government, community organisations and businesses) to ensure that the walking group is supported.
- Having a local facility to meet before and after the walk. This also promotes the presence of the walking group in the community and develops its identity.
- Being part of a larger program so that walking group members have a sense that they are part of a bigger project and identify with the broader program.
- Identifying opportunities for participating in other social and community activities; e.g. fundraising for charity.
- Intermittently survey or hold focus groups with participants and stakeholders for feedback and suggestions regarding walking group activities and related events.

These elements are also likely to contribute to other aspects of community cohesion, interaction and therefore, social capital.

## **5.2 Sport programs**

The evidence regarding the benefits of sports participation to the community is weaker due to the cross-sectional nature of much of the data. Studies of sports participation typically are based on self-report information from individuals and stakeholders involved with sport programs, who are likely to have a belief in the power of sport, and from participants in programs, without reference to a comparison group. However, qualitative data from focus groups suggest that sport is important for building social capital, particularly in rural and Indigenous communities. Given that 83.8% of the Australian population aged 15 years and over participated in physical activity for exercise, recreation and sport in the past year in 2005 (83.5% in NSW)<sup>70</sup>, it makes good sense to further explore the potential for sport and recreation activities in building stronger communities.

Participants in sport and recreation report many social benefits, including improved self-esteem, self-confidence, community identity and greater community cohesion, pride and ownership. Reductions in anti-social behaviour, crime and social isolation have also been reported<sup>75-78</sup>. In a survey of 7 country towns in northern Western Australia, the majority of respondents indicated that sport was a way for them to maintain social interactions<sup>78</sup>. Sport was seen as an important way to keep in contact with others in the community and helped to promote a sense of community identity. Sport was also a means to welcome newcomers to the area. Work with focus groups conducted with residents of two small rural Victorian towns with dwindling populations found that sport and recreation were crucial to the viability and sustainability of the communities<sup>79</sup>. Sport and recreation activities provided the communities

with a sense of identity and unity, while also fostering trust and cooperation between people. As well, competition with other clubs allowed networks to develop between towns.

In rural communities, sport is considered an important source of social interaction and support, especially in times of change and hardship<sup>78 79</sup>. Sporting clubs and events provide places and opportunities to meet and sporting organisation-run mentoring programs for children and youth encourage greater respect for people and property. Surveys of other stakeholders in sport and recreation, like government representatives, recreation and leisure centre managers and sports officers, yield similar sentiments that sport improved self-esteem and confidence and fostered community cohesion and identity<sup>75</sup>.

There are numerous government and industry schemes to support sport development programs. In a review of policy, Atherley<sup>75</sup> identified several strategies and policies currently in place in Australia. Some strategies and policies aim to promote healthy and active lifestyles among children, adolescents and adults (e.g., the Australian Government's Active After-school Communities program, the Department of Family and Community Services' Stronger Families and Communities Strategy 2004-2008); while others are more targeted and specific, such as aiming to increase ATSI participation in sport and recreation activities (e.g., the Australian Government's Indigenous Sport and Recreation Program). Industry schemes also abound. For example the Australian Football League (AFL) Kickstart Program supports specific development programs for ATSI communities in northern Australia<sup>80</sup>. Kickstart was implemented in 1997 and aims to develop Australian Football and promote healthy lifestyles in ATSI communities. Most program coordinators are of ATSI background and programs include community building aspects such as skills development, encouraging education, mentoring and organising community events like football carnivals. There is however little published material indicating that these programs and strategies have been evaluated for their impact upon individuals and their communities.

Correlational data suggest that sport has short term positive impacts on communities. For example, Aboriginal delinquency rates decreased noticeably in rural and remote communities in South Australia during sports seasons, in particular during the AFL season. Delinquency rates increased again when the season ended<sup>81</sup>. Cameron and MacDougall<sup>77</sup> posit that sport may provide an outlet for frustration and provide distraction from boredom, while also encouraging the development of new skills. Sports carnivals in Aboriginal communities, that have been organised and managed by Indigenous people for their local communities, have been successful in eliminating, in the short term, harmful behaviours like petrol sniffing, alcohol consumption and property damage.

Furthermore, sporting clubs and events provide opportunities for other community members to become involved in the sport, despite not being players themselves. Holding get-togethers, fundraising, catering and administration are some of the ways in which non-players may be engaged and contribute to community life<sup>79</sup>. According to the 2000 Voluntary Work Survey, 32% of Australian adults were volunteers; of this proportion 76% volunteered for sport, recreation and hobby organisations<sup>82 83</sup>. When asked why they volunteered, respondents named personal or family in the organisation, personal satisfaction from volunteering, and helping others in the community as reasons for their involvement.

Although the evidence of effectiveness of sporting programs is weak, qualitative research suggest that having sporting clubs and events are beneficial to participants and their communities. It is therefore important that further work be carried out to examine the effectiveness of sport and recreation programs in building social capital and strong communities.

Based on current knowledge, sport and recreation programs with these aims should include the following elements:

- Recognise that not all members of the community desire to or are able to play sport or engage in recreation activities; and provide chances for non-players to be involved with events and activities.
- Identify opportunities for players and non-players to engage in other community activities, such as fundraising, mentoring and organising festivals.
- Have facilities available for sport and recreation gatherings.
- Engage with other sport clubs to increase the sporting network, promote healthy competition and enhance community identity.
- Build partnerships with government and non-government organisations to garner support for sport programs and related events.
- For non-elite sport programs, place emphasis on participation and involvement rather than excellence.
- Periodic surveys or focus groups with participants and stakeholders to help inform the ongoing management and development of programs.

## 6 Conclusion

A strong community consists of members and stakeholders who understand the community's social, economic and environmental assets. They cooperate and collaborate to ensure the sustainability of resources, and work with more disadvantaged community members to achieve minimum standards across the community.

This report on the role that physical activity may play in building stronger communities has found there is evidence to suggest that community-based physical activity programs have the potential to make positive impacts on participants as well on the communities in which they live. Elements of social capital (trust, reciprocity, participation in networks, social norms) may be built through physical activity initiatives and physical activity participation to strengthen communities.

However, it is important to note that much of the evidence regarding physical activity and social capital is cross-sectional in nature and, in such instances, causal direction can not be established. In the cases where research design allowed for causality to be inferred, the findings indicate that physical activity interventions are effective in building social capital and community strength.

Programs to promote walking and sport participation have been identified as showing promise for making positive contributions towards community development. There is good evidence indicating that walking groups are effective for increasing physical activity levels, reducing feelings of stress, increasing socialisation, and fostering a greater sense of community spirit and participation. Evidence supporting the role of sport in strengthening communities is somewhat weaker and based on qualitative research. The evidence suggests that promoting sport and recreation activities in communities is associated with numerous social benefits, including improved self-esteem, greater community identity, increased community cohesion and support among players and non-players. Sport and recreation programs have also been linked with reductions in anti-social behaviour and crime.

In sum, physical activity has the potential to help build stronger communities, encouraging greater participation and contributing to the development of social capital. Further work is needed to elucidate the relationship between physical activity and social capital and community building, with a particular need for intervention studies that allow causal relationships to be established (e.g., randomised controlled trials) and programs targeting ATSI and CALD communities.

When designing and implementing physical activity initiatives for strengthening communities, current evidence suggests that the following elements be taken into account:

- Engage people from the community, and build partnerships between businesses, councils, government and non-government organisations to collaborate and cooperate to promote and participate in physical activity.
- Recognise different interests and abilities in the community and provide opportunities for different types of involvement in programs, including physical, social and cultural activities.
- Empower community members to manage programs to encourage ownership and sustainability.
- Target community groups that are more disadvantaged and less likely to be active (e.g., ATSI, CALD, women, older adults).
- Ensure that programs targeting people of ATSI and CALD backgrounds are culturally specific and sensitive to the values and traditions of participants.
- Provide local facilities as gathering places for activities.
- Conduct periodic surveys or focus groups with participants and stakeholders to help inform the ongoing management and development of programs.

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