



THE NUMBERS GAME



**A description of organised sport and physical activity
participants in Australia**

Published by the Australian Sports Commission
Canberra
March 2000

THE NUMBERS GAME: A DESCRIPTION OF ORGANISED SPORT AND PHYSICAL ACTIVITY PARTICIPANTS IN AUSTRALIA

PREFACE	4
INTRODUCTION	5
SECTION 1:A SUMMARY OF DEMOGRAPHIC CHARACTERISTICS OF ORGANISED SPORT AND PHYSICAL ACTIVITY PARTICIPATION IN AUSTRALIA	
INTRODUCTION	7
AGE AND GENDER	7
TABLE 1. PARTICIPATION IN ORGANISED SPORT AND PHYSICAL ACTIVITY (OSPA)- BY AGE AND GENDER	9
TABLE 2. TOTAL NUMBER OF PARTICIPANTS IN THE 41 MOST POPULAR OSPA - INCLUDING GENDER BREAKDOWN	12
STATES AND TERRITORIES	13
TABLE 3. PARTICIPATION IN OSPA – BY STATE AND TERRTORY.....	13
TABLE 4. PARTICIPATION RATES IN THE 41 MOST POPULAR OSPA BY STATE AND TERRITORY	14
BIRTHPLACE	15
CAPITAL CITY VERSUS NON-CAPITAL CITY	16
TABLE 5. PARTICIPATION RATES - BY CAPITAL CITY VERSUS NON-CAPITAL CITY	16
MARITAL STATUS	17
TABLE 6 - PARTICIPATION IN OSPA BY MARITAL STATUS	17
EDUCATIONAL QUALIFICATIONS.....	18
TABLE 7 – PARTICIPATION IN OSPA– BY EDUCATIONAL QUALIFICATION	19
EMPLOYMENT STATUS.....	20
TABLE 8 - PARTICIPATION IN OSPA BY EMPLOYMENT STATUS.....	20
OCCUPATION	21
TABLE 9 - PARTICIPATION IN OSPA BY OCCUPATION.....	21
INDUSTRY.....	22

TABLE 10 - PARTICIPATION IN OSPA BY INDUSTRY	23
INCOME	25
TABLE 11 - PARTICIPATION IN OSPA BY INCOME	25
TYPES OF ORGANISED SPORTS AND PHSICAL ACTIVITIES PLAYED..	26
INDOOR AND OUTDOOR SPORTS	27
SECTION 2:DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS IN	
41 INDIVIDUAL SPORTS	
INTRODUCTION	27
CONCLUSION	30
BIBLIOGRAPHY	30

PREFACE

This report is the outcome of a collaborative arrangement between the Australian Bureau of Statistics (ABS) and the Australian Sports Commission (ASC). The ABS provided the tabulated data and descriptive commentary on the demographic characteristics of participants in organised sports and physical activities. The ASC collated and reformatted this information, provided further interpretation, and added opinions and suggestions relevant to the findings. The interpretation of the findings is designed only to prompt the reader; the expressed opinions and recommendations, in many instances are conjectural.

This report provides useful information for individuals and organisations responsible for the delivery and promotion of organised sport and physical activity. Hopefully it will encourage further research that is required to explore many of the issues raised in the commentary.

INTRODUCTION

Active Australia, a national participation framework, has been developed to encourage all Australians to be actively involved in sport, community recreation, fitness, outdoor recreation and other physical activities. The aims of Active Australia are to:

- increase and enhance lifelong participation;
- realise the social, health and economic benefits of participation; and
- develop quality infrastructure, opportunities and services to support participation.

The Australian Sports Commission (ASC), a key stakeholder in Active Australia and the national government agency responsible for sport development, plays an important role in initiating and coordinating sport participation research. This responsibility includes funding annual national adult sport and physical activity data collection via the Australian Bureau of Statistics (ABS) Population Survey Monitor (PSM).

The collection of this data over the past 5 years has allowed the ASC to monitor organised sport and physical activity participation trends. Furthermore, that data collected has allowed a closer examination of various factors that shape and influence participation by Australians.

This report provides both a summary and a commentary on the demographic characteristics of organised sport and physical activity participants over a three-year period. As defined by the ABS, organised sport and physical activity refers to those, which were organised by a club, association or school. Specifically, the information presented is based on an analysis of a dataset created by combining organised sport and physical activity participation findings for 12 quarterly PSM collections from August 1995 to May 1998.¹

The combination of 12 PSM data collections resulted in a sample size of almost 59,000 adult Australians. This permitted the publication of greater levels of detail and the inclusion of more organised sports and physical activities than are available from an annual dataset, because of the improved reliability associated with a larger sample.²

Additional data based on 1997-98 PSM collections is included. This additional information is provided because consistent data was not collected over the three-year period from 1995-1998. During this time new questions were developed and

¹ Some of the data presented is from the 1997-98 PSM collection only as not all data items were collected in each of the 12 surveys.

² For example, for the 1996-97 period, an estimate of 5,000 (at the national level) has a standard error (SE) of 1,600 and a relative standard error (RSE) of 32%. However, for the 3 year combined file, the SE for an estimate of this size is around 1,100 and the RSE is 22.6%

existing questions rephrased in order to obtain a more detailed analysis of participation in Australian sport.

Although this report presents a useful insight into the demographic “make-up” of Australia’s active population, continued research and investigation is needed to further explore participation issues. Such endeavours will provide a greater understanding of past, present and future influences on organised sport and physical activity participation in Australia.

Participation in organised sport and physical activities

The rate of participation in Australian organised sport and physical activity is changing (Australian Bureau of Statistics, 1999). According to McKay (1983) this is directly related to the interaction between sport and society and the way that society impacts on and shapes sport.

Barriers to participation and opportunities for involvement in sport and physical activity were influenced by various personal characteristics as well as global and national trends. Indeed, there are numerous physical, technological, economic, social and cultural factors that impact on the way Australians participate in organised sport and physical activity (McKay, 1983). Some of these factors included:

- the change in Australia’s demographic composition, an ageing society and an increasingly culturally diverse population are ensuring correspondingly diverse attitudes to participation, in a range of activities;
- technology is challenging physical activity as a main source of entertainment for young Australians and resulting in a diversity of lifestyle and leisure patterns;
- the amount of disposable income available for sports participation;
- greater emphasis on access and equity in all areas of life are reflected in attitudes towards sports participation; and
- promotional messages are highlighting the health benefits of leading a physically active lifestyle.

If we are to advance rates of participation, it is important for authorities to consider the influence various factors have on an individual’s involvement in organised sport and physical activity (Hoffman, 1995).

Although the previously mentioned variables have been identified as significant in relation to the rates of participation in organised sports and physical activities in Australia, there are numerous other contributing factors that influence the way Australians choose to spend their leisure time and their reasons for participating or not participating in organised sport. Within Australian society there are numerous minority groups whose needs should be considered and addressed by those people who govern sport and those who provide sport. Awareness of these factors will help to ensure individuals’ needs and wants are met.

Structure of the Report

The report is divided into 2 major sections. Section 1 provides information on the demographic details of organised sport and physical activity participants in general. Section 2 presents information specific to the 41 most popular organised sports and physical activities in Australia.

SECTION 1: A SUMMARY OF DEMOGRAPHIC CHARACTERISTICS OF ORGANISED SPORT AND PHYSICAL ACTIVITY PARTICIPATION IN AUSTRALIA

INTRODUCTION

This section provides a breakdown of the following demographic variables that characterised adult Australian participation in organised sport and physical activity from 1995 to 1998:

- age and gender;
- region (States and Territories, and capital city versus non-capital city);
- birthplace; and
- marital status.

Also included is an analysis of trends inherent in types of organised sports and physical activities played.

Additional demographic variables, outlined below, are based on the 1997-98 Australian Bureau of Statistics data collection:

- employment status;
- occupation;
- industry;
- educational qualifications; and
- income level.

Drawing attention to these characteristics will hopefully provide a greater understanding of factors that influence participation in organised sport and physical activity and allow us to take a step forward towards achieving equal and accessible opportunities for all Australians.

AGE AND GENDER

As outlined in Table 1, of the 13 million Australians aged 18 years or more just over 3.6 million people or 27.9% participate in sport or physical activity organised by clubs or associations. In contrast to the entire population over the age of 18,

where females slightly outnumber males, there were clearly more males participating in organised sport. Fifty-five percent of participants (2.0 million) were male and 45% (1.6 million) were female. In relation to the population in general, 31.1% of males and 24.9% of females participate in organised sport.

The data in Table 1 shows that there are still significant gaps between male and female participation rates in organised sport and physical activity. Within each age group, the participation rate of males was higher than that of females. The difference is smallest for the 55-64 year age group, where the gender disparity is only 1.1 percentage points (20.1% for males compared to 19.0% for females). The most significant gender difference is found in the 18-24 year age group, where 46.9% of males and 38.3% of females participated in sport – a difference of 8.6 percentage points.

A possible reason for the gender difference may be the perceived benefits gained from physical activity. Competition and competence are strong motives for males to participate, whereas females place greater emphasis on body-related and social factors (Koivula, 1999). Also, social stereotyping may be a factor. For example, Table 2 illustrates activities with a greater representation of women compared to men include aquarobics (98%), netball (87%), dancing (83%) and aerobics (81%). Activities high in male participation include Australian rules (98%), outdoor cricket (95%), rugby league (93%) and motor sports (90%). Arguably these activities could conform to what society values as being appropriate behaviour for males and females.

When broken down into age groups, the highest level of participation in organised sports and physical activity was inversely related to age. That is, the younger the person the more likely they were to participate in organised sport and physical activity. The pattern of organised sport and physical activity participation clearly changes over time, with decreases in participation levels, as the age group becomes older. Participation rates were highest for the 18-24 year age group before declining steadily with increased age. The rate for persons aged 65 years and over was 16.8%.

TABLE 1. PARTICIPATION IN ORGANISED SPORT AND PHYSICAL ACTIVITY (OSPA) - BY AGE AND GENDER*

AGE GROUP	TOTAL NUMBER OF PEOPLE IN THE AUSTRALIAN POPULATION (18 YRS +)	PROPORTION OF TOTAL AUSTRALIAN POPULATION (%)	NUMBER OF PEOPLE IN THE AUSTRALIAN POPULATION WHO PARTICIPATE IN OSPA	PROPORTION OF TOTAL AUSTRALIAN POPULATION WHO PARTICIPATE IN OSPA (%)	PARTICIPATION RATE OF AUSTRALIAN POPULATION WHO PARTICIPATE IN OSPA (%)
MALES					
18-24	920,800	14.3	431,800	21.7	46.9
25-34	1,354,300	21.1	530,200	26.6	39.2
35-44	1,339,800	20.9	418,300	21.0	31.2
45-54	1,151,200	17.9	288,200	14.5	25.0
55-64	756,100	11.8	152,000	7.6	20.1
65 +	897,100	14.0	172,900	8.7	19.3
TOTAL MALES	6,419,400	100.0	1,993,400	100.0	31.1
FEMALES					
18-24	893,300	13.5	342,500	20.8	38.3
25-34	1,380,700	20.9	450,900	27.4	32.7
35-44	1,372,600	20.8	330,400	20.1	24.1
45-54	1,125,600	17.0	219,200	13.3	19.5
55-64	746,000	11.3	141,500	8.6	19.0
65 +	1,094,700	16.6	162,700	9.9	14.9
TOTAL FEMALES	6,612,900	100.0	1,647,300	100.0	24.9
TOTAL PERSONS					
18-24	1,814,100	13.9	774,300	21.3	42.7
25-34	2,735,000	21.0	981,200	27.0	35.9
35-44	2,712,400	20.8	748,600	20.6	27.6
45-54	2,276,800	17.5	507,400	13.9	22.3
55-64	1,502,100	11.5	293,600	8.1	19.5
65 +	1,991,800	15.3	335,600	9.2	16.8
TOTAL PERSONS	13,032,000	100.0	3,640,600	100.0	27.9

*Refers to participation in the last 12 months by persons aged 18 years and over, for the period 1995-96 to 1997-98. Data were aggregated and reweighted using February 1997 as the benchmark.

With increasing age, the type of activity appears to influence participation. Popular activities for older people (e.g. people who are aged 55 years and over) tended to be low cost, less formally structured and less physically active. Examples of this include lawn bowls and walking. Again, these activities may conform to what society is likely to perceive as being appropriate behavior for older people, regardless of their physical ability.

Social incentives are valued less by younger adults and by males compared to older adults and females (Koivula, 1999). Combined with a decline in physical ability, social incentives may explain why there were high participation rates for older adults in activities such as lawn bowls and dancing. However the Australian Sports Commission is addressing this issue by implementing programs such as "Active at any Age", "Golden Oldies" and "Physical Activity: You don't have to take it seriously, just regularly". Other events such as the International Year of the Older Persons and the Masters Games specifically target this population group and provide support and encouragement for the older people in Australia to maintain an active lifestyle.

Although physical limitations are likely to be an important factor in participation rates among older people, there is also a stigma attached with old age that could influence an older person's decision to participate in organised sport and physical activity. Ageing has been seen as a process involving increasing dependency and incapacity. Sports have always emphasised youth, so it would not be surprising if older people face certain forms of exclusion in sports organisations (Coakley, 1994). However, these beliefs and trends may be changing with the achievements of older athletes.

Masters athletes contribute to the notion that getting old does not automatically mean becoming incapable (Coakley, 1994). Masters sport is defined as sport conducted with a minimum age qualification, i.e. over 35 and is typically organised for those beyond the age usually associated with mainstream sports participation (Burns, 1992). Further study needs to be undertaken with regard to the demographics of Masters athletes. Are these people simply former elite athletes unable to abandon the lifestyle they enjoyed in their youth? Is it allowing those who were recreationally active while younger to continue to compete and participate in their sport? Or, is promotion of physical activity reaching and converting the elderly?

Participation rates based on gender and age were very much determined by social trends and stereotypes (Del-Rey, 1991). To increase the rates of participation among females and older people, it is important to understand the links between social, political, economical and cultural manifestations of gender and age inequality in society at large if there is to be any change to be made within organised sport (Hoffman, 1995). By providing opportunity for females and older people to participate in sport, and by encouraging them to challenge the stereotypes within society. Hopefully a greater number of women will overcome

the stigmas associated with gender and age and sports participation, enabling more women to enjoy the benefits of organised sport and physical activity.

The Australian Sports Commission is assisting sports organisations, schools, local councils and other organisations to make their activities more appropriate and relevant for its female participants. By promoting inclusive practices, welcoming facilities and non-competitive activities, and encouraging organisations to address access and equity issues, the sporting environment in Australia will become more accommodating and inviting for women participants. In turn the participation rates of women should increase. Examples of such strategies can be found in the “National Policy on Women and Girls in Sport, Recreation and Physical Activity: 1999-2002”.

Another target group of the Australian Sports Commission is people with a disability. In 1995 the Willing and Able program was developed to assist teachers and community leaders to include young people with a disability in active sessions in the most appropriate manner. This program, combined with The Disability Education Program, delivers education and coaching programs across Australia in an attempt to eliminate some of the barriers to participation in organised sport and physical activity confronted by people with a disability.

TABLE 2. TOTAL NUMBER OF PARTICIPANTS IN THE 41 MOST POPULAR ORGANISED SPORTS AND PHYSICAL ACTIVITIES - INCLUDING GENDER BREAKDOWN*

SPORT	PARTICIPANTS		
	TOTAL	MALES	FEMALES
AEROBICS	600,600	111,900	488,700
GOLF	442,800	344,900	98,000
TENNIS	317,000	136,000	181,000
LAWN BOWLS	280,600	105,900	280,700
NETBALL	278,800	37,400	241,400
SWIMMING	166,600	67,400	99,200
OUTDOOR CRICKET	164,300	156,100	8,200
MARTIAL ARTS	163,700	90,500	73,200
BASKETBALL	161,200	94,300	66,900
TENPIN BOWLING	152,400	67,700	84,700
TOUCH	141,600	105,400	36,200
SOCCER	128,800	114,300	14,500
AUSSIE RULES	119,900	117,900	2,000
SQUASH	108,300	66,500	41,800
INDOOR CRICKET	93,100	76,200	16,900
FISHING	88,900	72,900	16,000
VOLLEYBALL	82,100	44,200	37,900
WALKING	77,800	25,200	52,600
DANCING	77,500	13,300	64,200
MOTOR SPORTS	72,700	65,600	7,100
SAILING	70,900	49,000	21,000
HORSE RIDING	69,100	21,600	47,500
SHOOTING	68,700	61,500	7,200
CYCLING	61,600	44,100	17,500
RUGBY LEAGUE	58,200	54,300	3,900
HOCKEY	57,700	27,900	29,700
WEIGHT TRAINING	56,200	34,300	21,900
DARTS	51,300	32,800	18,500
CARPET BOWLS	47,400	17,000	30,400
ICE/SNOW SPORTS	46,200	24,800	21,500
RUGBY UNION	42,100	37,300	4,800
BADMINTON	40,600	18,900	21,700
SNOOKER/BILLIARDS	40,400	33,500	6,900
AIRSPORTS	39,200	31,200	8,000
SOFTBALL	38,200	9,100	29,100
AQUAROBICS	37,100	900	36,200
SCUBA	34,600	22,600	12,000
BASEBALL	34,500	31,500	3,000
WATERSKI/POWERBOAT	30,500	21,300	9,200
RUNNING	27,500	17,400	10,100
ATHLETICS	26,300	10,600	15,700

*Refers to participation in the last 12 months by persons aged 18 years and over for the period 1995-96

to 1997-98. Data were aggregated and reweighted using February 1997 as the benchmark.

STATES AND TERRITORIES

Table 3 illustrates that the number of people participating in organised sport and physical activity in each State and Territory was relative to the size of the population in each region. The number of participants ranged from 1.14 million in New South Wales to 30,100 in the Northern Territory. However, when analysed by the rate of people participating, proportionally more adults participated in sport in the less populated regions of Australia. The Northern Territory and the Australian Capital Territory had the highest rates of participation (34.7% and 34.4% respectively) whilst only 25.6% of the population participates in organised sport in New South Wales.

TABLE 3. PARTICIPATION IN ORGANISED SPORT AND PHYSICAL ACTIVITY
– BY STATE AND TERRITORY*

STATE	NUMBER OF PERSONS WHO PARTICIPATE IN OSPA	PARTICIPATION RATE (AS A % OF STATE/TERRITORY POPULATION)	CONTRIBUTION OF EACH STATE TO PARTICIPATION IN ALL OSPA (%)
NSW	1,145,300	25.6	31.5
VIC	922,800	28.0	25.3
QLD	664,000	28.7	18.2
WA	389,200	31.2	10.7
SA	316,300	29.4	8.7
TAS	106,500	31.6	2.9
ACT	66,300	34.4	1.8
NT	30,100	34.7	0.8
ALL PERSONS	3,640,500	30.5	100.0

*Refers to participation in the last 12 months persons aged 18 years and over for the period 1995-96 to 1997-98. Data were aggregated and reweighted using February 1997 as the benchmark.

On a percentage of population basis, Table 4 shows that the Northern Territory had the highest participation rates for 13 sports, followed by the ACT (10 sports), Tasmania (7), Queensland (7), SA (4), WA (2), Vic (1) and NSW (1). This corresponds with the participation rate data, which clearly shows declining participation as the region's population gets larger.

TABLE 4. PARTICIPATION RATES IN THE 41 MOST POPULAR ORGANISED SPORTS AND PHYSICAL ACTIVITIES - BY STATE AND TERRITORY*

SPORT	AUST	NSW	VIC	QLD	WA	SA	TAS	ACT	NT
AEROBICS	5.3	4.0	4.8	4.0	6.6	4.8	4.3	6.3	7.8
GOLF	3.5	3.7	2.9	3.5	3.3	2.9	4.8	3.1	3.4
NETBALL	2.6	1.5	2.2	2.2	2.8	3.3	2.9	2.6	3.2
TENNIS	2.2	2.1	3.2	2.3	2.2	2.5	1.8	1.5	1.8
LAWN BOWLS	2.0	2.2	2.0	2.1	2.2	2.7	2.2	1.0	1.4
MARTIAL ARTS	1.5	1.2	1.5	0.9	1.5	1.3	1.2	1.4	2.7
BASKETBALL	1.5	0.8	1.6	0.8	1.7	2.0	1.5	1.5	1.7
TOUCH	1.3	1.6	**	2.2	0.3	0.3	0.7	2.2	2.1
OUTDOOR CRICKET	1.3	1.1	1.6	0.9	1.1	1.3	2.0	1.3	1.1
SWIMMING	1.3	1.3	1.2	1.5	1.3	1.0	1.1	1.3	1.7
AUSSIE RULES	1.3	0.2	1.6	0.3	1.5	2.2	2.1	1.8	0.6
TENPIN BOWLING	1.2	0.9	1.1	1.8	1.1	1.1	0.9	1.4	1.2
VOLLEYBALL	1.0	0.4	0.6	0.8	0.7	1.0	0.7	2.9	1.1
INDOOR CRICKET	1.0	0.6	0.7	0.9	0.9	0.5	1.0	2.0	1.0
SOCCER	1.0	1.4	0.7	0.9	0.7	0.9	0.8	1.0	1.2
SQUASH	0.8	0.9	0.6	1.2	0.8	0.5	0.6	1.0	0.7
RUGBY LEAGUE	0.7	0.7	**	0.9	**	**	**	0.9	0.3
SAILING	0.7	0.4	0.5	0.5	0.9	0.6	1.2	0.8	0.6
FISHING	0.7	0.8	0.5	0.7	0.7	0.4	0.8	0.9	0.6
MOTOR SPORTS	0.7	0.4	0.6	0.7	0.5	0.7	0.7	1.2	0.6
WALKING	0.7	0.6	0.6	0.7	0.5	0.6	0.9	0.5	1.0
DANCING	0.7	0.5	0.5	0.7	0.7	0.8	0.6	0.6	0.9
SHOOTING	0.7	0.4	0.6	0.7	0.4	0.4	1.0	1.2	0.5
WEIGHT TRAINING	0.6	0.3	0.4	0.5	0.6	0.5	0.5	1.0	1.2
HOCKEY	0.6	0.5	0.2	0.4	0.6	0.4	0.8	1.0	0.7
BADMINTON	0.6	**	0.5	**	0.8	0.2	1.1	**	0.2
HORSE RIDING	0.6	0.5	0.4	0.8	0.6	0.3	0.7	0.5	0.6
RUGBY UNION	0.5	0.6	**	0.4	0.2	**	**	0.7	0.8
CYCLING	0.5	0.5	0.6	0.2	0.5	0.4	0.3	0.6	1.1
DARTS	0.5	0.3	0.2	0.3	1.0	0.5	0.7	0.9	0.2
CARPET BOWLS	0.5	0.2	0.3	0.6	0.2	0.7	1.2	**	0.2
ICE/SNOW SPORTS	0.5	0.5	0.4	0.2	**	0.2	0.4	**	1.0
SOFTBALL	0.5	0.3	0.2	0.2	0.8	0.3	0.5	0.9	0.4
RUNNING	0.4	0.2	0.1	0.2	0.3	**	0.3	1.3	0.7
SNOOKER/BILLIARDS	0.4	0.2	0.4	0.3	0.4	0.5	0.6	0.5	0.3
SCUBA	0.3	0.2	0.2	0.4	0.5	0.1	0.2	0.5	0.5
AIRSPORTS	0.3	0.2	0.3	0.5	0.3	0.2	0.2	0.4	0.4
AQUAROBICS	0.3	0.2	0.4	0.3	0.3	0.3	0.2	0.3	0.4
BASEBALL	0.3	0.3	0.2	0.3	0.3	0.2	**	0.4	0.3
WATERSKI/POWERBOAT	0.2	0.2	0.3	0.3	0.2	0.2	**	0.3	0.2
ATHLETICS	0.2	0.2	0.3	0.2	**	**	0.3	**	0.2

* Refers to participation in the last 12 months persons aged 18 years and over for the period 1995-96 to 1997-98. Data were aggregated and reweighted using February 1997 as the benchmark.

** Data not reported, as sample size is too small to provide reliable estimates

It is interesting to note the differences in participation in organised sports and physical activity between the regions. The difference may be related to the popularity of certain activities in particular states. The popularity and subsequent participation in certain sports would be influenced by geographic and demographic variables (McKay, 1983). For example, the degree of community integration, climate, provision of facilities, transport access, local promotion, and costs are all likely to impact on the nature of participation in the various states and territories.

Another reason for the difference in participation rates in organised sport and physical activity with regards to States and Territories may be related to differences in age distribution. For example, differences in sport and physical activity levels are observed by State, with highest rates of participation found for the Northern Territory and the Australian Capital Territory. At the same time, Census data show that the average age of adults found in the NT is only 39 and in the ACT, it is only 41. Compared to an Australian average of 44 years of age. This relationship between State and participation is likely to at least be partly related to the differences in the age distribution of adults in various States.

BIRTHPLACE

Australia-born persons represent 72.6% of the population aged 18 years or more (Australian Bureau of Statistics, 1997-98) Almost 3 million of these people (31.4%) participate in organised sport and physical activity³. The participation rate of people born in the United Kingdom and New Zealand (Australia's greatest contributors of migrants, accounting for 10.1% of Australia's population) was slightly lower at 27.8%. The participation rate of all other people whose birthplace was another overseas country was 13.5%.

While migrants arriving on Australian shores have brought with them sporting traditions and conventions from their home countries, only some of these have been put into practice. Sports with Anglo-Celtic origins have flourished to a greater extent in Australia than activities from non-English-speaking countries (Taylor and Toohey, 1999). Was this because of the differences in the established population of these migrants or ignorance and misunderstanding on part of Australian people and sporting organisations?

The data raises a number of issues that need to be considered so that the participation rate of non-Australia born citizens is targeted and increased, not only in traditional sports but also in other cultural leisure activities. Some of these

³ Little is known about the participation rates of Australia's Indigenous population. There is evidence to suggest that sport is popular among Aboriginal people, however the small population of Indigenous Australians makes it difficult to accurately estimate the significance of sport in their lifestyle.

issues include lack of information, language and communication barriers, family and cultural tradition, and racism. For example, Taylor and Toohey (1999) found that many sporting organisations do not have the resources, understanding or willingness to accommodate different needs from different cultures.

CAPITAL CITY VERSUS NON-CAPITAL CITY

As can be seen in Table 5, people living in the capital cities throughout the States and Territories account for 64.2% of the Australian population aged 18 years and over. However, people from these areas account for only 60.2% of all participants in organised sport and physical activity. The rate of participation for people living in non-capital cities was higher than that of their capital city counterparts. The figures stand at 31.0% and 26.2% respectively.

TABLE 5. PARTICIPATION RATES IN ORGANISED SPORT AND PHYSICAL ACTIVITIES- BY CAPITAL CITY VERSUS NON-CAPITAL CITY*

	PROPORTION OF TOTAL AUSTRALIAN POPULATION (%)	OSPA PARTICIPATION RATE, AS A PROPORTION OF TOTAL POPULATION (%)	PROPORTION OF ORGANISED SPORT POPULATION (%)
CAPITAL CITY	64.2	26.2	60.2
NON-CAPITAL CITY	35.8	31.0	39.8

*Refers to participation in the last 12 months by persons aged 18 years and over for the period 1995-96 to 1997-98. Data were aggregated and reweighted using February 1997 as the benchmark.

Only ten out of the 41 nominated activities had a higher capital city than non-capital-city participation rate. These include aerobics, ice and snow sports, martial arts, rugby league, sailing, scuba, swimming, walking, soccer and weight training. The water sports may be partly explained by the close proximity to the water, and the evolution from traditional sports to high adventure and adventure based sports.

The high level of participation in martial arts and soccer may be explained through the higher level of multiculturalism in city areas. Soccer and martial arts are predominately linked to European and Asian cultures, and immigrants from these areas have congregated in the capital cities (Australian Bureau of Statistics, 1998). Perhaps there is a need to address the reason for the apparent

insular nature of traditional ethnic sports and the reasons for the lack of diversity of its participants. It has been found that some ethnic associations are quite exclusive with regards to its membership, perhaps in an attempt to preserve part of their own culture (Mosely, 1995). Also, the increase of martial arts may be associated with the increase in participation in of self-defense classes among females.

MARITAL STATUS

As illustrated in Table 6, almost 65% of Australians aged 18 and over were married, 13.3% were separated, divorced or widowed, and 22.1% had never been married (Australian Bureau of Statistics, 1997-98). Within those three groups, the highest participation rate in organised sports and physical activity occurs for people who had never been married (37.3%). Married people had a participation rate of 26.4% while the lowest rate is found within the group who were separated, divorced or widowed (19.7%).

TABLE 6. PARTICIPATION IN ORGANISED SPORT AND PHYSICAL ACTIVITY- BY MARITAL STATUS *

	% OF TOTAL AUSTRALIAN POPULATION	PARTICIPATION RATE IN OSPA	% OF PARTICIPANTS IN ALL OSPA
MARRIED OR DEFACTO	64.5	26.4	61.1
SEPARATED DIVORCED OR WIDOWED	13.3	19.7	9.4
NEVER MARRIED	22.1	37.3	29.5

* Data from ABS PSM statistics 1995-96 to 1997-98

The reason for the high participation rate among persons who had never been married, may be due to the fact that they were most likely to be young people, aged between 18-24 years. Thus the restrictions placed on their time may not be as limiting as for those people who do have partners and families. Middle-aged people may find that their time had become filled with other responsibilities that affect the amount of time they were able to spend participating in organised sport. Factors may include entering the workforce on a more permanent basis, getting married and starting families (McKay, 1983).

The perceived health benefits that result from organised sport and physical activity may be an incentive to get a greater number of separated, divorced and widowed people involved in organised sport and physical activity. Is it that these people have lost the confidence or desire to participate socially in sport or is it the loss of money and support that hinders sports participation?

EDUCATIONAL QUALIFICATIONS

Table 7 illustrates that people who participate in organised sport and physical activity are more likely to have attained a higher educational level than Australians were in general (Australian Bureau of Statistics, 1997-98). The participation rate for people who have educational qualifications beyond secondary school stands at 31.9%. This is 3.8 percentage points higher than the average level of participation when classified by education.

While constituting only 0.6% of organised sport and physical activity participants aged 18 years or over, the participation rate for people still attending school was the highest in Australia, with 44.3% of this group being active Australians. The reason for this may be the fact that most of the population in this group would only be aged in the 18-24 year age group and it is this group for which the highest participation rate of organised sport and physical activity in Australia exists.

TABLE 7. PARTICIPATION IN ORGANISED SPORT AND PHYSICAL ACTIVITY— BY EDUCATIONAL QUALIFICATION *

	% OF TOTAL AUSTRALIAN POPULATION	PARTICIPATION RATE IN SPORT	% OF PARTICIPANTS IN ALL SPORTS
STILL AT SCHOOL	0.6	44.3	0.9
SECONDARY SCHOOL CERTIFICATE OR LESS	51.6	24.6	45.2
TRADE CERTIFICATE/ APPRENTICE	12.3	29.9	13.1
OTHER CERTIFICATE	14.8	31.5	16.5
DIPLOMA	7.2	33.5	8.6
BACHELORS DEGREE OR HIGHER	13.4	32.7	15.5
OTHER	0.2	27	0.2

Data from ABS PSM statistics 1997-98

People, whose highest educational qualification was a secondary school certificate or less, exhibited the lowest participation rate (24.6%), most likely because many of the elderly, whose participation rate was lowest, would fall into this group. Also, low levels of education may be associated with low socioeconomic status (Alexandris and Carroll, 1997) which may also influence participation among this age group.

There are notable differences between sports and educational attainment. While 15.5% of all sportspeople and 13.4% of all Australians have bachelor degrees or higher, sports where the participation rate of people with bachelor degrees or higher exceeds the Australian average include sailing (35.8%), squash (29.8%), horse-riding (27.3%), tennis (24.7%), walking (22.6%), soccer (23%) and aerobics (21.5%). Perhaps this is the result of a direct educational influence (e.g. type of sport played at school). However, income, which is linked to educational qualifications, is also likely to be an influence. For example, involvement in potentially expensive sports such as sailing and horse riding may be dependent on personal or household revenue.

People with trade and other certificates are more likely to participate in organised sports or physical activities such as indoor cricket, cricket, golf, soccer, dancing, swimming and ten pin bowling.

EMPLOYMENT STATUS

As shown in Table 8, in general, people involved in organised sport and physical activity were more likely to be employed full-time than non-participants are (Australian Bureau of Statistics, 1997-98). It was found that one-third of employed people had participated in organised sport and physical activity in the previous twelve months compared to approximately one-quarter of unemployed people, and just under one-fifth of those not in the labour force. Based on these figures, addressing the lower rate of participation among non-employed groups is needed. Studies reveal that people who participate in organised sport and physical activity benefit both physically and mentally. People involved in positive sporting environments: are healthier and fitter; are more physically competent; often have good social skills; develop leadership, teamwork, and cooperative skills; and learn better lifelong leisure skills (Stoddart 1986). An example of a program directed at increasing the level of participation amongst younger people and the unemployed is the Youth in Sport Program, which is run by the New South Wales Department of Sport and Recreation in conjunction with Police and Citizen Youth Club. This program looks at increasing motivation and developing confidence among those young people who are not employed.

TABLE 8. PARTICIPATION IN ORGANISED SPORT AND PHYSICAL ACTIVITY - BY EMPLOYMENT STATUS*

	% OF TOTAL AUSTRALIAN POPULATION	PARTICIPATION RATE IN OSPA	% OF PARTICIPANTS IN ALL OSPA
EMPLOYED FULL TIME	43.8	34.2	53.3
EMPLOYED PART TIME	17.9	31.0	19.8
UNEMPLOYED	4.5	25.7	4.1
NOT IN THE LABOUR FORCE	33.8	19.0	22.8

Data from ABS PSM statistics 1997-98.

A high percentage of participants in lawn bowls and dancing, both popular with older people are not in the work force. In contrast participants in sailing (95%), hockey (92%), soccer and indoor cricket (90%) all have very high levels of employment about 30% higher than the national average.

Women have a higher rate of part-time employment than men do. There is a high rate of part-time employed participants in sports such as aerobics, netball, and tennis, and many of these participants are female. The top four sports for female participation are aerobics, lawn bowls, netball and tennis. Perhaps there are positive relationships between the amount of time women have for sports participation and the sports that cater for that amount of time. Those who provide sport may benefit by offering a more flexible range of sporting activities at times that suit the lifestyle of those working at unconventional times.

OCCUPATION

The Australian Bureau of Statistics data (1997-98) shows a clear relationship between occupation status and organised sport and physical activity participation. The participation rate in sport based on occupation can be seen in Table 9 below. Associate professionals (as classified in the Australian Standard Classification of Occupations, 2nd Ed.) observed the highest participation rate (38.7%) in organised sport and physical activities by any group. Advanced clerical/services workers and professionals achieved the second and third highest rates of participation (35.8% and 35.5% respectively). Laborers and related workers (25.3%) and intermediate production and transport workers (26.8%) had the lowest rates. Do these findings suggest that the often-strenuous nature of work performed by laborers impacts on their motivation to participate in sport or other physical activity? Similarly, do the hours worked by transport and production personnel hinder participation in organised sport and physical activity? Or, perhaps people from these occupation groups believe they do enough physical activity during their employment and, therefore, do not need to participate in further activity outside of work hours. These are important issues for sporting organisations to consider in relation to attracting people from different occupational groups and the options they provide to them. Taking into account the work demands of all people will allow sporting organisations to better cater to the large cross-section of the community who may be searching for more suitable activity arrangements or who need to be educated about the benefits of participating in organised sport and physical activity.

TABLE 9. PARTICIPATION IN ORGANISED SPORT AND PHYSICAL ACTIVITY - BY OCCUPATION*

OCCUPATION	% OF TOTAL AUSTRALIAN POPULATION	PARTICIPATION RATE IN OSPA	% OF PARTICIPANTS IN ALL OSPA
MANAGERS AND ADMINISTRATORS	5.8	34.0	4.8
PROFESSIONALS	14.5	35.5	11.4
ASSOCIATE PROFESSIONALS	8.1	38.7	5.8
TRADES PERSONS/ RELATED WORKERS	10.8	33.3	9.1
ADVANCED CLERICAL/ SERVICE WORKERS	4.0	35.8	3.1
INTERMEDIATE CLERICAL/ SERVICE WORKERS	14.9	33.6	12.4
ELEMENTARY CLERICAL/ SERVICE WORKERS	56.0	26.8	5.2
INTERMEDIATE PRODUCTION/ TRANSPORT WORKERS	5.5	33.5	4.6
LABOURERS/ RELATED WORKERS	4.7	25.3	5.2
N/A	26.9	19.8	38.3

*Data from ABS PSM statistics 1997-98.

Some sports were especially popular among professionals. These include sailing (where 31% of participants are professionals), squash (26.5%), tennis (22%), aerobics (19.3%), walking (19.2%) and soccer and netball (both 19%). As mentioned previously, involvement in sailing may be due to the higher income levels of professionals as they are likely to have more money to spend on potentially expensive activities. However, it may also be that these types of sports are popular as a way of socialising with clients or co-workers.

A number of ABS sources (e.g., 1999-Year Book & 1998 Australian Social Trends), demonstrate a close link between gender and occupation in the Australian population. This relationship was also evident in organised sport and physical activity participation. The more male dominated sports of indoor cricket,

cricket, soccer, and golf (plus other codes of football, although the data was too small to be desegregated accurately) have higher trade representation. Similarly, sports with higher female participation, such as hockey, horse riding and netball, figure more prominently in intermediate clerical sales and service.

INDUSTRY

Just over 73% of people who participate in organised sport and physical activities were employed (Australian Bureau of Statistics, 1997-98). As can be seen in Table 10, the highest participation rates were observed for those working in the Mining industry (40.0%), Personal and other services (39.5%), Education (39.4%) and Cultural and recreational services industries (38.8%). Among the industries where employees had the lowest participation rates in sports and physical activities were manufacturing (27.9%), Agriculture, forestry and fishing (28.1%) and Health and community services (28.6%).

TABLE 10. PARTICIPATION IN ORGANISED SPORT AND PHYSICAL ACTIVITY - BY INDUSTRY*

INDUSTRY	% OF TOTAL AUSTRALIAN POPULATION	PARTICIPATION RATE IN SPORT	% OF PARTICIPANTS IN ALL SPORTS
AGRICULTURE/ FORESTRY/ FISHING	2.5	28.1	2.5
MINING	0.8	40.0	1.1
MANUFACTURING	8.1	27.9	8.0
ELECTRICITY/ GAS/ WATER	0.3	31.8	0.4
CONSTRUCTION	5.1	32.1	5.8
WHOLESALE TRADE	1.8	29.4	1.9
RETAIL TRADE	9.0	32.9	10.5
ACCOMMODATION/ CAFES/ RESTAURANTS	3.0	36.3	3.9
TRANSPORT/ STORAGE	3.4	33.9	4.1
COMMUNICATION	1.3	35.7	1.7
FINANCE/ INSURANCE	2.6	38.1	3.6
PROPERTY/ BUSINESS SERVICE	6.3	35.2	7.9
GOVERNMENT ADMINISTRATION/ DEFENCE	2.7	34.4	3.4
EDUCATION	4.6	39.4	6.5
HEALTH/ COMMUNITY SERVICES	6.0	28.6	6.1
CULTURAL/ RECREATION SERVICES	1.7	38.8	2.3
PERSONAL SERVICES	2.4	39.5	3.4
N/A	38.3	19.8	26.9

*Data from ABS PSM statistics from 1997-98

Manufacturing was closely associated with participation in indoor cricket, soccer, Australian Rules football and tenpin bowling. The other football codes were more inclined to have high participation rates from industries such as agriculture, manufacturing and construction and wholesaling (further information can be found in the breakdown of specific sports in Section 2). This may be due to the dominance of particular sports by different social groups early in the evolution of organised sport. The reality is that from its infancy, Australian sport's social composition was based on class and status considerations (Stoddart, 1986), and that the association between social status and sport has simply reinvented and perpetuated itself based on the developments in both organised sport and society

INCOME

Annual personal income can be divided into deciles or groups each of which contain approximately one-tenth of the number of people who reported their level of income. This is shown below in Table 11.

TABLE 11. PARTICIPATION IN ORGANISED SPORT AND PHYSICAL ACTIVITY - BY INCOME*

INCOME (\$)	% OF TOTAL AUSTRALIAN POPULATION	PARTICIPATION RATE IN SPORT	% OF PARTICIPANTS IN ALL SPORTS
0-5000	11.1	26.7	10.5
5001-8000	7.5	18.5	5
8001-9000	10.5	18.7	7
9001-13000	7.9	28	7.9
13001-19000	8.4	28.9	8.7
19001-25000	9.4	26.8	9
25001-30000	8.6	32.5	9.9
30001-38000	10.3	34.9	12.7
38001-50000	8.3	38.9	11.5
50001 and over	9.7	34.2	11.8
not stated	8.3	20.6	6.1

*Data from ABS PSM statistics from 1997-98.

The highest rate of participation in organised sport and physical activity was observed for people whose annual income was in the ninth decile (38.9%) (Australian Bureau of Statistics, 1997-98). For the period 1997-1998, this equated to an income range of between \$38,001 and \$50,000. At the other end of the spectrum, the lowest participation rates of 18.5% and 18.7% occurred for people whose annual income fell in the second decile (income range of \$5,001 and \$8,000) and third decile (income range of \$8,001 and \$9,000) respectively.

Again this should not be surprising since many older people, and young unemployed people, who participate in sport at a lower rate than the rest of Australians, may have an income of between \$5,000 and \$9,000.

The sports that figure strongly in the top two income brackets (above \$38,000) were squash, sailing, touch football, soccer and golf. The most expensive organised sport or physical activity was motor sports, followed by horse riding, waterskiing or powerboating, and airsports. Costs may be a reason why more people did not take part in these sports. Indeed the participation rate for these sports is only 0.45%.

Some of the organised sports and physical activities whose participants tend to have incomes in the lower end of the range include dancing, lawn bowls, netball, swimming, ten-pin bowling, tennis, basketball, and Australian Rules football (data is not sufficient to confirm other sports and physical activities). This generally aligns with separate ABS data, which shows that these are low participant-cost sports. While lawn bowls and dancing are clearly able to cater for older people not in the work force, and on little or no income, the inclusion of sports such as tenpin bowling, tennis and netball may be explained by the player base which include part-time workers or people not in the work force.

TYPES OF ORGANISED SPORTS AND PHYSICAL ACTIVITIES PLAYED

Some 2.6 million Australian adults or 73.2% of physically active Australians took part in only one organized sport or physical activity (Australian Bureau of Statistics, 1997-98). A further 20% participated in two sports, 5.3% played 3 sports and 1.8% played four or more sports. Many people may have participated in non-organised sports such as jogging or swimming to supplement their organised sports. Sports that are similar in skill requirements are popular second sports. For example, rugby and touch; basketball and netball; and carpet and lawn bowls. It may be that participants also play other sports as a means of developing greater skill levels to enhance their performance in their organised sport.

By far the most common organised sport was aerobics/fitness. This activity was also the second most common sport. As outlined in Section 2, aerobics/fitness was the most popular alternative activity in 19 out of the 41 sports, with netball and golf also rating highly.

There has been an increase in the participation level of so-called “fast food” or “take-away” sports, which may be a reflection of the changes in lifestyle and the need for participants to be able to grab an activity that will fit into their busy lifestyles. Sports such as ten-pin bowling and modified indoor versions of traditional sports, such as cricket and hockey have become extremely popular

because of their convenient nature (i.e., highly organised, provision of equipment, etc.).

INDOOR AND OUTDOOR SPORTS

Enjoyment of the outdoors is of the very essence to some activities, such as golf, walking, fishing and adventure sports. However, the vagaries of the weather may also disrupt the activity in outdoor sports such as cricket and tennis.

Indoor facilities have been an ever increasing dimension of recreation in the last 30 years, as have been the increases in private ownership, and out-sourcing of municipal facilities by Government in the last 15 years. It is worthwhile, therefore, to make some observation about the relationship between indoor/outdoor facilities and participation.

The ABS data does not discriminate between indoor and outdoor activities or participation as such, so the observations drawn are tentative, especially because some sports are only played indoors, while others can be played indoors or outdoors.

About one-third of the sports recorded in this report are primarily indoor activities, for example aerobics, indoor cricket and basketball. This highlights a major trend in organised sport and physical activity over the last 30 years. Indoor facilities offer diversity, flexibility, weather/seasonal control, childcare facilities and a one-stop shop element that participants may find appealing. Thus, the increase in popularity of so-called “fast food” or “take-away” sports.

SECTION 2: DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS IN 41 INDIVIDUAL SPORTS

INTRODUCTION

This section provides a breakdown of the demographic data of participants in 41 sports. For each activity where reliable estimates are available, a summary text is provided on:

- age and gender;
- residence;
- birthplace;
- marital status;
- labour force status;
- occupation and industry;
- educational qualification;
- employment status; and

- other organised sports and physical activities undertaken.

Although the text provides a useful summary, the data provided in the tables and graphs provide more specific details which should be used to inform planning strategies and decision-making processes.

SPORTS INCLUDE:

AEROBICS AND FITNESS
AIRSPORTS
AQUAROBICS
ATHLETICS AND TRACK AND FIELD
AUSTRALIAN RULES FOOTBALL
BASEBALL
BADMINTON
BASKETBALL
BILLIARDS
CARPET BOWLS
CYCLING
DANCING
DARTS
FISHING
GOLF
HOCKEY
HORSE RIDING
ICE AND SNOW SPORTS
INDOOR CRICKET
LAWN BOWLS
MARTIAL ARTS
MOTOR SPORTS
NETBALL
OUTDOOR CRICKET
OUTDOOR SOCCER
RUGBY LEAGUE
RUGBY UNION
RUNNING
SAILING
SCUBA DIVING
SHOOTING SPORTS
SOFTBALL
SQUASH
SWIMMING
TENNIS
TENPIN BOWLING
TOUCH FOOTBALL
VOLLEYBALL

WALKING
WATERSKIING AND POWERBOATING
WEIGHT TRAINING

CONCLUSION

This report was designed to provide a brief analysis and commentary on the demographics of participants in Australian sport, based on Australian Bureau of Statistics data collected via 12 Population Survey Monitors. The aim of this report was to prompt the reader into questioning participation in their sport. What are the factors that inhibit sports participation? What factors contribute to sports participation? Do the factors discussed influence physically active Australian adults attitudes towards sport?

Research on demographic characteristics of participants in organised sport and physical activity is limited. Further research and analysis of participants in Australian sport and in particular of the participation of those in minority groups is needed. Greater knowledge and understanding of the enabling and inhibiting factors influencing sport participation would be beneficial from planning, marketing, organisational and development perspectives. Also the implementation of Active Australia initiatives may attract a greater number of people to organised sport and physical activity.

In this report, a number of issues have been raised that researchers in sport and sporting organisations should continue to investigate. Such factors that influence sports participation include demographic, social and economic variables. By looking at different aspects of Australian life, we are trying to achieve a broader understanding of the barriers to participation and why some people are more inclined to participate in some sports than others. Further understanding of why these factors impact on attitudes towards sport would assist sports providers in accommodating minority groups and those people for whom sport is not a viable pastime.

An issue that should be further explored includes reasons for lack of participation among minority groups, such as Indigenous populations and migrant populations. There is little understanding of the needs of these populations. Social variables such as role models, general attitudes and stereotypes are possibly significant with regards to participation in sport by minority groups, and these areas should also be addressed in future studies. Strategies need to be developed to increase awareness of the needs of these groups of Australian adults.

One initiative attempting to address low participation and inequality in Australian sport is Active Australia. Through its numerous programs, Active Australia is encouraging all Australians to be actively involved in sport and physical activity. One of the goals of Active Australia is to have all Australians actively involved in sport, community recreation, fitness, outdoor recreation and other physical activities. Developing strategies to quell the inequalities in Australian sport is one step toward achieving this aim.

Participation rates in organised sport and physical activity are a reflection of the perceived constraints and boundaries within the realms of society. While a number of factors inhibiting sport participation have been identified, there needs to be greater awareness and consideration of the needs of various groups and individuals. Jackson (1988) suggested that the identification of people who are disadvantaged in regards to participation in organised sport and physical activity should be of particular interest to those responsible for the delivery of sport services. If sport equity is to be achieved, disadvantaged groups and individuals need to be specifically targeted in order to increase their participation rates (Alexandris and Carroll, 1997). Furthermore, clubs and organisations need to improve the way they do things in order to capture a greater number of participants. Failing to target these people could lead to Australia having a small, perhaps even elitist section of society very healthy and active, while the remaining population struggles to enjoy the benefits of organised sport and physical activity. By focusing on access and equity, enjoyment, diversity, choice and quality of sport, more of the population is likely to become involved in regular organised sport and physical activity.

BIBLIOGRAPHY

- Alexandris, K. and Carroll, B. (1997). Demographic differences in the perception of constraints on recreational sport participation: Results from a study in Greece. *Leisure Studies*, 16 (2), 107-125
- Australian Bureau of Statistics (1999). *1999 Year Book Australia*. ABS Catalogue No. 1301.0.
- Australian Bureau of Statistics (1998-99). *Participation in Sport and Physical Activity Australia*. ABS Catalogue No. 4177.0.
- Australian Bureau of Statistics (1998). *Australian Social Trends*. ABS Catalogue No. 4102.0.
- Australian Sports Commission (1999). *Active Women, National Policy on Women and Girls in Sport, Recreation and Physical Activity: 1999-2000*.
- Burns, R. (1992). *Play On! The report of the Masters Sport Project on Mature Aged Sport in Australia*. The Australian Sports Commission and the Confederation of Australian Sport.
- Coakley, J.J. (1994). *Sport in Society- Issues and Controversies (5th Ed)*, Moby Publishing, 275-300.
- Del-Rey, P. (1991). Women, physical activity and sport: Issues related to empowerment G. Tenenbaum, and D. Eiger, D. (eds.). *Coach Education: Proceedings of the Maccabiah-Wingate International Congress*. Netanya, Wingate Institute, the Emmanuel Gill Publishing House, 68-72.
- Hoffman, A. (1995). Women's access to sport and physical activity. *Avante*, 1(1), 77-92.
- Jackson, E. (1988). Leisure constraints: A survey of past research. *Leisure Sciences*, 10, 203-215.
- Koivula, N. (1999). Sport participation: Differences in motivation and actual participation due to gender typing. *Journal of Sport Behavior*, 22 3, 360-380.
- McKay, J. (1983). The democratization of Australian sport: Some preliminary observations of a national survey. *International Review of Sport Sociology*, 3 18, 91-111.

Mosely, P. (1995). *Ethnic Involvement in Australian Sport: A History 1950-1990*. Australian Sports Commission, 9-18, 73-88.

Stoddart, B. (1986). *Saturday Afternoon Fever, Sport in Australian Culture*. Angus & Robertson, 33-55.

Taylor, T. and Toohey, K. (1999). Sport, gender and cultural diversity: Exploring the nexus. *Journal of Sport Management*, 13 1, 1-17.