

ACTIVE AND HEALTHY AGEING THROUGH SPORT

Report prepared for the
Australian Sports Commission
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Executive summary

Sport is a form of physical activity which provides an excellent opportunity to be active in an enjoyable way. In addition to personal enjoyment, regular physical activity also improves physical and mental health, which has the potential to improve overall quality of life. Furthermore, club based or team based sport participation has been associated with better social health, particularly due to the social nature of sport participation. Despite the benefits of sport, participation decreases with age. Given Australia's rapidly ageing population, it is important to understand the reasons for this decline and to develop strategies to keep people active through sport throughout the lifespan.

The overall aim of this report is to provide knowledge about sport participation by adults as they age. **For the purpose of this report, the age of 50+ years has been used and will be referred to as 'older adults'**. The specific aims of this report are to provide:

- 1. Knowledge about sport participation by older adults**
- 2. Knowledge about the benefits of and barriers to sport participation in older adults**
- 3. Knowledge about opportunities, strategies and potential modifications to increase sport participation by older adults**

Data were used from two population-based surveys, the 2010 Exercise Recreation and Sport Survey (ERASS) and the 2013 Australian Health and Social Science study (AHSS), to address the first aim. It is important to recognise that these are different survey samples; hence the findings cannot be directly linked. In addition we surveyed 192 National and State/Territory Sporting Organisations (Survey study) and conducted eight focus group interviews with representatives of National Sporting Organisations, sport club members of these organisations and non-sport club members (Focus group interview study) to address the remaining two aims.

Results

Overall, a third of active older adults participate in sport at varying levels of intensity, and older adults play a wide variety of sports. Sport participation is more popular for older men than women. The study results indicate that age in itself is not necessarily a reason to stop participating in sport.

This study confirms that there are many health benefits of sport participation for older adults, provided it is done in a safe manner to prevent injuries. Many older adults participate in sport for social reasons, and enjoy the opportunity to play with other family members across generations.

Sporting Organisations (SOs) currently prioritise participation in their sport for children and adolescents, and not specifically for older adults. This could be related to national sport policy which is heavily focused on elite participation and not on grass-roots participation and specifically not for older adults. Given other priorities, SOs currently lack the resources and/or capacity to develop specific products/programs for older adults. Therefore there is a lack of specific sport products catering to the needs and desires of this rapidly growing population group. It should be acknowledged that older adults contribute greatly to sport clubs not only through their participation, but also by increasing the resource capacity of the club through volunteering, and by being role models for younger participants. Therefore there is a great opportunity for targeted policy and strategies to get more older adults active through sport, which would contribute to the health of the nation.

The key findings of the studies described in this report are detailed below.

1. Sport participation by older adults

- About a **third** (30%) of all older adults who do physical activity for recreation, sport or exercise do this in a **club setting** (ERASS)
- Older adults are less likely than younger adults to participate in club-based activity for recreation, sport or exercise (30% in older adults; 46% in younger adults; ERASS)
- **Golf, lawn bowls and tennis** are the three most frequently played club-based sports by older adults (ERASS, AHSS)
- Of all **health enhancing physical activity** in older adults, 38% is **sport based**. This is less than in younger adults (58%; ERASS)
- Older **men do more physical activity in a club setting** than women (15% vs 9%) and **they do more sport-based health enhancing physical activity** than women (45% vs 30%; ERASS)
- About **one third (34%) of older adults are a current member of a sport club**, association or other type of organisation, just over **one third (37%) used to be a member** and just under **one third (30%) have never been a member** (AHSS)
- Of all sport club members, **90% play the sport** and **20% are involved as a committee member or administrator** (AHSS)
- Almost 90% of current sport-club members agree that **being a member is good for physical and mental health**; almost 80% agree that it is good for **social health** (AHSS)
- **Older sport club members are more likely to meet the physical activity recommendations** of at least 150 minutes of moderate to vigorous intensity per week, than members of other clubs or non-club members (AHSS)
- Of all older adults **interested in becoming a sport club member, most are men** (78%; AHSS)
- Regardless of past membership status or gender, **social reasons, becoming more active and improving physical and mental health are important factors to become a member** (AHSS).

2. Benefits of and barriers to sport participation for individuals and organisations

- Benefits and barriers for **older adults**
 - Main **benefits** are improved **social and physical health**. In addition, there are **intergenerational benefits**, such as the ability to play in the same club with children/grandchildren
 - The most frequently mentioned **barriers** to sport participation are **time constraints, lack of appropriate playing opportunities** and **physical limitations**.
- Benefits and barriers for **SOs**
 - **Main benefits** are that older adults are more inclined to take on **volunteering roles**, which are essential for most sport clubs, and that older members can be **role models for younger players**
 - **Additional benefits** include the opportunity to **increase overall participation numbers** and the **opportunity to engage with their older fan base**
 - Key **barriers for SOs** include a **lack of sufficient resources to manage and develop programs** for older adults, a **focus on increasing participation in younger age groups**, and **risk management** in regard to **insurance**.

3. Opportunities, strategies and potential modifications to increase sport participation by older adults

- There are **formal programs**, such as masters competitions; however sport club members are often unaware of these opportunities
- There are **informal programs that cater for older adults' sporting needs**. These generally follow a '**bottom up approach**', with sport clubs as the primary driver, and are usually situated **outside the traditional sporting organisational structure**
- Most SOs **do not have specific strategies or programs** for older adults, however **sport clubs often informally modify the sport** structure or make minor rules changes to cater for older members
- SOs are interested in the following strategies to increase participation in older adults: **change the way their sport is advertised** for older adults (emphasise **the social aspects, enjoyment**, and the **health benefits** of regular participation) and **collaborate with community and/or senior organisations**
- Potential modifications include the **modification/expansion of existing programs, increasing social/informal playing opportunities, minor rule amendments** and **developing external partnerships**.

Conclusions and recommendations

There currently is a lack of targeted and specialised sport participation options for older adults. Because of the rapidly ageing society, there is a **major opportunity for Sporting Organisations (SOs) to increase their focus on older adults** in order to **increase overall participation numbers** and to **improve the health of the nation. There is a role for government to set and drive policy advocating that SOs place a greater emphasis on meeting the needs of older adults.** On the basis of the results described in this report, we conclude and recommend the following actions or considerations for those targeting adults aged 50+ years.

1. Knowledge about sport participation by older adults

Conclusions:

1. More older adults participate in physical activity informally than at a sport club
2. Golf, lawn bowls and tennis are the most popular club-based sports for older adults
3. Sport participation is higher in older men than in older women and older men are more interested in becoming a sport club member than older women
4. Past sport club members are more interested in becoming a sport club member than those who have not previously been sport club members
5. Older adults' main motivators to join a sport club are for social reasons, to improve physical health, to become more active, and to improve mental health.

Recommendations:

1. Encourage older adults to participate in physical activity in the sport club setting by **introducing and promoting sport options that meet the needs of older adults**
2. Characteristics of golf, lawn bowls and tennis can inform the development of sport options that meet the needs of older adults
3. **Focus on engaging men initially** to increase membership among older adults and develop **gender specific strategies or products to engage women**
4. Focus on **retaining current sport club members**, and **re-engaging past sport club members**
5. **Emphasise the social and health benefits of sport** and **introduce and promote sport options with a focus on the social aspect of sport, rather than competition.**

2.a) Knowledge about the benefits of sport participation in older adults

Conclusions:

- **Benefits for older adults:**
 1. Older adults emphasise the health benefits of sport participation, particularly social health, in addition to physical health and mental health
 2. Older adults enjoy the opportunity that sport provides to be active with their children/grandchildren and recognise this as a specific benefit of sport over other activity options.

- **Benefits for SOs:**
 3. Engaging older adults can help SOs increase overall participation numbers and there is currently an excellent opportunity to do so given the ageing population
 4. Increasing older adults' sport participation is an additional way for SOs to engage with their older fan base
 5. Older adults contribute greatly to the resource capacity of sport clubs as they are often the primary volunteers at sport clubs
 6. Older adults can be important role models for younger sport club members, teaching them the values of sport, such as sportsmanship.

Recommendations:

1. **Emphasise the social benefits**, in addition to the **physical and mental health benefits** of sport participation
2. Promote **opportunities for intergenerational interaction within sport clubs**
3. **Promote the opportunity for sport clubs to increase participation** in their sport by increasing the number of older adult members
4. **Promote the opportunity for NSOs and SSOs to engage with their older fan base**
5. Develop and implement recruitment strategies that specifically target older adults to **strengthen the capacity of club management** in addition to encouraging older adults to become active members
6. **Promote the benefits of having older members as role models** to sport clubs.

2.b) Knowledge about the barriers to sport participation in older adults

Conclusions:

- **Barriers for older adults:**
 1. Older adults often face time constraints, despite the perception that older adults have more time than younger adults
 2. There is a lack of appropriate sport opportunities, with limited opportunities to play with and against adults of their own age
 3. Older adults are concerned about the impact of sport on their physical health and the risk of developing injuries. They therefore prefer sports that are low impact and low-contact/non-contact.

- **Barriers for SOs:**
 4. NSOs and SSOs appear to prioritise other target groups, specifically 11-15 year olds, and therefore older adults are currently a low priority
 5. NSOs and SSOs report a lack of resources to develop and manage specific sport participation strategies and products for older adults.

Recommendations:

1. **Develop and promote opportunities for intergenerational interaction within sport clubs,** which could help negate time constraints for older adults looking after their children or grandchildren
2. **Develop and promote opportunities for older adults to play sport with and against adults of the same age**
3. **Emphasise existing sport options or develop and promote sport opportunities for older adults that are low impact and low-contact/non-contact**
4. **Set and drive policy that encourages a greater emphasis on meeting the needs of older adults**
5. **Set and drive policy that encourages a greater emphasis on meeting the needs of older adults.**

3.a) Knowledge about opportunities and strategies to increase sport participation by older adults

Conclusions:

1. Most NSOs and SSOs surveyed do not have specific strategies or programs for older adults
2. Whilst there are some formal programs, most sport opportunities for older adults appear to be developed and implemented through a 'bottom-up approach' by sport clubs, resulting in an ad hoc approach to sport participation opportunities.

Recommendations:

1. **Establish and drive policy that encourages and enables NSOs and SSOs to develop, promote and implement strategies and programs that meet the needs of older adults**
2. **Encourage sports to develop national and state participation strategies to develop, promote and implement formal programs and sport opportunities** for older adults. The current 'bottom up approach' can inform these strategies with NSOs and SSOs enabling clubs flexibility to implement these opportunities.

3.b) Knowledge of the potential modifications to increase sport participation by older adults

Conclusions:

1. There is a need for more appealing marketing approaches for older adults, for example through the use of appropriate images in promotion materials
2. NSOs and SSOs are interested in the following resources to help increase older adults' sport participation: a website with advice on attracting older adults into sport; a report on the issues surrounding older adults and sport; and marketing guidelines for promotion materials
3. There appears to be limited collaboration between NSOs and SSOs with community or senior organisations
4. Few NSOs, SSOs and sport clubs reported an interest in modifying equipment or substantially modifying the rules to increase participation in older adults. However, some SOs reported an interest in:
 - Modifying/expanding existing programs
 - Increasing social/informal play opportunities
 - Minor rule amendments

Recommendations:

1. Provide and implement **specific marketing guidelines** for SSOs and sport clubs to inform the development of promotion materials to increase participation in older adults
2. **Provision of a resource to support NSOs and SSOs** in increasing sport participation for older adults
3. Encourage sport clubs to **develop partnerships with community or senior organisations**
4. **Identify NSOs interested in increasing participation** in older adults and investigate **specific opportunities to modify those sports through a pilot program** in order to test the feasibility of increasing older adults' sport participation through potential modifications.

Glossary

- **Australian Health and Social Science study (AHSS)**

The AHSS is initiated and funded by the Institute for Health and Social Science Research at CQUniversity Australia, and is administered by the Institute's resident Population Research Laboratory. The aim of the study is to examine the unique issues affecting Australians now and into the future through targeted and regular research using a randomly selected national group (panel) of participants. This panel, with members from all states and territories, provides regular input via the completion of web-based surveys on key issues such as all aspects of wellbeing, activity levels, nutrition and behavioural risk factors.[1] The panel study in 2013 included a series of questions about sport participation which were developed by the research team at Victoria University for the Active and Healthy Ageing through Sport project.

- **Exercise Recreation and Sport Survey (ERASS)**

The ERASS was a joint initiative of the Australian Sports Commission and State and Territory Departments of Sport and Recreation, conducted on an annual basis between 2001 and 2010. ERASS collected information on the frequency, duration, nature and type of activities participated in by persons aged 15+ years for exercise, recreation or sport during the previous 12 months. Participation refers to active 'playing' participation, and does not include coaching, refereeing, being a spectator or activities related to work, household or gardening duties.[2] Data from the 2010 ERASS survey were used in this report. In each quarter in 2010, approximately 3,400 community dwelling adults aged 15+ years, representing all states and territories, were sampled and interviewed using computer-assisted telephone interviewing.

- **Exercise**

Exercise is a subset of physical activity that is planned, structured, and repetitive and has a final or an intermediate objective; the improvement or maintenance of physical fitness.[3]

- **Physical Activity (PA)**

PA is defined as any bodily movement produced by skeletal muscles which results in energy expenditure.[3] PA is an umbrella term including more specific forms of activity, such as exercise or sport.

- **Leisure Time Physical Activity (LTPA)**

Adults can do PA in different settings, the most common settings are occupational activity, domestic activity, transport related activity, and **Leisure Time Physical Activity (LTPA)**. [4] LTPA is activity for exercise or recreation. [4]

- **Health Enhancing Leisure Time Physical Activity (HELPA)**

LTPA that is of at least moderate intensity is referred to as **Health Enhancing Leisure Time Physical Activity (HELPA)**.

- **Sport**

A human activity capable of achieving a result requiring physical exertion and/or physical skill which, by its nature and organisation, is competitive and is generally accepted as being a sport. [5]

- **Health**

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. [6]

List of abbreviations

AHSS	Australian Health and Social Science study
ATSI	Aboriginal and Torres Strait Islander
ASC	Australian Sports Commission
CA	Cricket Australia
CALD	Culturally And Linguistically Diverse
ERASS	Exercise Recreation And Sport Survey
HELPA	Health Enhancing Leisure Time Physical Activity
ISEAL	Institute of Sport, Exercise and Active Living
LTPA	Leisure Time Physical Activity
NSO	National Sporting Organisation
PA	Physical Activity
SO	Sporting Organisation
SSO	State/Territory Sporting Organisation
TA	Tennis Australia
vs	versus
VU	Victoria University

Introduction and aims

Sport is a form of physical activity (PA). There is a myriad of sports that adults can choose from, including individual sports, team sports, sports ranging from low to high intensity, sports that require tactics and specific skills, sports that you can do without specific skills, or competitive or social sports. Sport therefore provides a great opportunity for adults to engage in PA in an enjoyable way. However, it is not only important to be physically active for personal enjoyment, but also for health and wellbeing. Regular PA leads to better physical health, including decreased risks of chronic conditions such as diabetes, cardiovascular disease and certain cancers,[7, 8] but also to improved mental health, such as decreased risks of depression or anxiety.[7] Current public health guidelines indicate that adults should engage in 150-300 minutes/week of moderate intensity activity, 75-150 minutes/week of vigorous intensity, or any combination, for health benefits.[7] Despite these health benefits, less than half (43%) of all Australian adults engage in sufficient PA for health benefits and this proportion decreases with age.[9]

The sport sector can play an important role in increasing PA levels and contribute to improved health and wellbeing.[10] The literature on sport and health suggests that participation in sport is not only associated with a considerable reduction in all-cause mortality compared with non-participation,[10] but there is also evidence that sport has specific benefits for social health.[11] However, as with overall PA, sport participation declines with age.[12] Sporting Organisations (SOs) have an opportunity to respond to this decline by helping older adults experience the numerous health benefits of sport participation. This is recognised by key health promotion organisations. For example, the National Heart Foundation of Australia suggests in their recent Blueprint for an Active Australia to “encourage better use of existing infrastructure /organisations (e.g. sport clubs) by older adults, with attention to increasing social support for activity”.[13]

Most current research on activity options for older adults focuses on PA rather than sport, so understanding the role that sport, and SOs, can play to promote active and healthy ageing, will enable the development of useful strategies to increase participation in this rapidly growing population group.

This report on Active and Healthy Ageing through Sport has been developed under the umbrella of the Strategic Partnership Agreement between the Australian Sports Commission (ASC) and Victoria University (VU). The overall aim of this report is to provide knowledge about sport participation by adults as they age. For the purpose of this report, the age of 50+ years has been used and will be referred to as ‘older adults’. The specific aims of this report are to provide:

1. Knowledge about sport participation by older adults
2. Knowledge about the benefits of and barriers to sport participation in older adults
3. Knowledge about opportunities, strategies and potential modifications to increase sport participation by older adults

The first aim is addressed by analysing the data of two population based surveys, the 2010 Exercise Recreation and Sport Survey (ERASS) and the 2013 Australian Health and Social Science study (AHSS). The remaining two aims are addressed in a Survey study with National and State/Territory Sporting Organisations (NSOs/SSOs) and a Focus group interview study with representatives of National Sporting Organisations (NSOs), sport club members of these organisations and non-sport club members.

Study 1 - Sport participation by adults aged 50+ years: participation, types of sport and contribution to physical activity (ERASS data)

This study describes the results of analysis of the Australian Exercise Recreation and Sport Survey (ERASS). The aim of this study is to describe patterns of sport participation by older adults, defined as aged 50+ years, and to examine the contribution of sport to health enhancing PA levels.

Data source

Data used in this study were collected in 2010 as part of the ERASS. Data were obtained from the ASC. The aim of this survey was to collect population based data about participation in PA and sport, as well as details about the context and type of activities adults participate in. Quarterly survey samples for ERASS were selected from adults aged 15 years and over, living in occupied private dwellings, using computer-assisted telephone interviewing. In each quarter, approximately 3,400 persons were sampled Australia-wide, representing all states and territories.

After explaining the purpose and format of the ERASS questionnaire, interviewers asked respondents if they had participated in any leisure time PA (LTPA) for exercise, recreation or sport in the last 12 months (as opposed to PA associated with work, household or garden chores). If the response was 'yes', respondents were then asked to report what types of activity they had participated in during this period. Respondents were then requested, for each reported activity type, to indicate whether any of the activity had been organised by a club, association or any other type of organisation. If the activity had been organised, a further question then inquired as to what type of club, association or organisation had organised the activity (fitness, leisure or indoor sport centre that required payment for participation; sport or recreation club or association that required payment of membership, fees or registration; work; school; other).

From responses to the above questions three dichotomous measures were derived indicating: (1) whether there was **any participation in PA for exercise, recreation or sport** in the past 12 months (yes/no); (2) for each type of activity, whether any of the **activity was organised** (yes/no); and (3) if so, was the **activity organised by a sport or recreation club or association that required payment of membership fees or registration (herein referred to as club)** (yes/no). As a person can engage in a particular type of PA in more than one setting, these three dichotomies are **not mutually exclusive**.

Participation in physical activity – non organised/organised/club

Most adults, regardless of age or gender, participated in any PA for recreation, sport or exercise in the past 12 months. Almost four out of five older adults (76%) participated in any PA, which includes both non-organised and organised PA. About two out of five older adults (41%) participated in any organised activity (including but not limited to club-based PA) and one in three older adults (30%) participated in club-based organised PA (**Table 1, page 15**).

The percentage of adults under 50 years participating in any PA was higher (86%) than the percentage of older adults (76%). The difference between these groups was greater for organised and club based activities. The proportion of younger adults participating in organised activity was 1.8 times higher than the proportion of older adults (72% vs 41%, respectively). Although the difference was smaller for club-based activities, the proportion of younger adults participating in club-based activity was still 1.5 times higher than the proportion of older adults (46% versus 30%, respectively).

The proportions of older women and men who did any PA, any organised activity or any club-based activity were similar. Overall, of all older adults who did PA in the past year, 30% did this in a club setting and 11% in an organised setting other than a club.

Table 1: Participation in physical activity by age and gender*

	Younger than 50 years**			50 years or older**		
	Women N=6,495	Men N=6,512	Total N=13,007	Women N=4,422	Men N=4,174	Total N=8,596
Any physical activity	85%	88%	86%	76%	77%	76%
Any organised activity	71%	74%	72%	42%	40%	41%
Any club-based activity	43%	50%	46%	29%	32%	30%

* Includes adults 15+ years who participated at least once in the past 12 months

** Column percentages do not add up to 100%, as adults can be included in more than one category (i.e. any physical activity includes any organised and any club based; any organised activity includes any club-based)

Which club-based sports do older adults engage in?

Adults were asked to list up to 10 activities for recreation, sport or exercise they participated in the last 12 months and if these were non-organised, organised in a setting other than a club, or organised in a club-setting. Activities were categorised into 95 types. Of the 95 activities in ERASS, 57 activities, administered by a NSO and/or SSO recognised as such by the ASC, were classified as sport.[14] Sport activities that were organised in a club-setting are referred to as club-based sport. Overall, larger proportions of men than women reported participation in club based sport. Of the 1,316 men aged 50+ years who did an activity at club level, 890 (67%) played a sport. Of the 1,287 women aged 50+ years who did an activity at club level, 521 (41%) played a sport.

The top **three most frequently played club-based sports were golf, lawn bowls and tennis** for both older men and women. These sports were played by more than 5% of older adults who did club-based activities. Adults reported a wide variety of sports. The 25 club-based sports older men and women most frequently participated in are reported in **Table 2 (page 17)**. Eighteen of these 25 sports were reported by both men and women.

More older men than women played the following 11 club-based sports:

- **Golf (26% in men; 8% in women)**
- **Lawn bowls (16% in men; 9% in women)**
- Sailing (4% in men; 0.6 % in women)
- Shooting sports (3% in men; 0.5% in women)
- Cycling (3% in men; 1% in women)
- Motor sport (1% in men, 0.2% in women)
- Outdoor hockey (0.9% in men; 0.2% in women)
- Badminton (0.4% in men; 0.2% in women)
- Bocce (0.6% in men; 0.4% in women)
- Squash/racquetball (0.6% in men; 0.5% in women)
- Swimming (1% in men; 0.9% in women).

More older women than men played the following six club-based sports:

- **Tennis (8% in women; 6% in men)**
- Dancing (3% in women; 1% in men)
- Martial arts (2% in women; 1% in men)
- Tenpin bowling (1% in women; 0.5% in men)
- Canoeing/kayaking (1% in women; 0.6% in men)
- Croquet (1% in women; 0.7% in men).

Women reported seven club-based sports that were not included in the 25 most frequently reported sports by men. These were: netball, horse riding/equestrian/polo cross, rowing, softball, athletics/track and field, boxing and basketball. There were also seven club-based sports in the top 25 for men that were unique to men: cricket, touch football, table tennis, AFL, archery/bow hunting, outdoor football and orienteering.

Older adults played a variety of club-based sports, ranging from light (e.g. shooting sports) to high intensity (e.g. squash/racketball, boxing), as well as individual (e.g. canoeing/kayaking) and team sports (e.g. hockey). Thus, age in itself is not necessarily a reason to stop participating in these activities. However, except for the 11 most frequently played club-based sports by women and 12 most frequently played club-based sports by men, the proportion of older adults participating in each of these sports is typically less than 1% of the older adults who do club-based activities (**Table 2, page 17**). This indicates that most of the 57 ERASS activities classified as sport are not commonly played by older adults.

Using a classification based on metabolic equivalents which is commonly used to establish the energy expenditure of activities and which has been used previously for ERASS data,[15] each of these sports was classified as:

- **'Health Enhancing Leisure Time PA (HELPA)'**: moderate to vigorous intensity sport with an estimated energy expenditure of at least 3.5 times higher than the energy expenditure during rest
- **Non HELPA activity**: light intensity sport with an estimated energy expenditure lower than 3.5 times the energy expenditure during rest.

Of the 25 most frequently reported club-based sport activities in older women and men, only four were non-HELPA activities. These were lawn bowls, croquet, shooting sport and bocce. This means that these sports may be less effective in improving physical fitness and physical health than the other club-based sports in the top 25. However, these sports are likely to be beneficial for other aspects of health and wellbeing, such as mental and social health. Moreover, especially as adults age, these sports may be easier to maintain than the higher intensity sports.

Table 2: Top 25 of club-based sports in adults aged 50+ years by gender*

Women N=521				Men N=890			
	Sport	%*	HELPA		Sport	%*	HELPA
1	Lawn Bowls	9%	No	1	Golf	26%	Yes
2	Golf	8%	Yes	2	Lawn Bowls	16%	No
3	Tennis	8%	Yes	3	Tennis	6%	Yes
4	Dancing	3%	Yes	4	Sailing	4%	Yes
5	Martial Arts	2%	Yes	5	Cycling	3%	Yes
6	Netball	2%	Yes	6	Shooting Sports	3%	No
7	Croquet	1%	No	7	Cricket (outdoor)	2%	Yes
8	Canoeing/Kayaking	1%	Yes	8	Motor Sports	1%	Yes
9	Cycling	1%	Yes	9	Touch Football	1%	Yes
10	Horse Riding/Equestrian/ Polo Cross	1%	Yes	10	Martial Arts	1%	Yes
11	Tenpin Bowling	1%	Yes	11	Dancing	1%	Yes
12	Swimming	0.9%	Yes	12	Swimming	1%	Yes
13	Sailing	0.6%	Yes	13	Hockey (outdoor)	0.9%	Yes
14	Rowing	0.5%	Yes	14	Table Tennis	0.9%	Yes
15	Squash/Racquetball	0.5%	Yes	15	Australian Rules Football	0.8%	Yes
16	Ice/Snow Sports	0.5%	Yes	16	Archery/Bow Hunting	0.7%	Yes
17	Shooting Sports	0.5%	No	17	Croquet	0.7%	No
18	Bocce	0.4%	No	18	Football (outdoor)	0.7%	Yes
19	Softball	0.3%	Yes	19	Bocce	0.6%	No
20	Athletics/Track&Field	0.2%	Yes	20	Canoeing/Kayaking	0.6%	Yes
21	Boxing	0.2%	Yes	21	Orienteering	0.6%	Yes
22	Hockey (outdoor)	0.2%	Yes	22	Squash/Racquetball	0.6%	Yes
23	Badminton	0.2%	Yes	23	Ice/Snow Sports	0.5%	Yes
24	Basketball	0.2%	Yes	24	Tenpin Bowling	0.5%	Yes
25	Motor Sports	0.2%	Yes	25	Badminton	0.4%	Yes

* Percentage reflects proportion of adults aged 50+ years who participated in any club-based activity for exercise, recreation or sport in the past 12 months. HELPA = health enhancing leisure time physical activity

What is the contribution of sport to health enhancing leisure physical activity levels?

As described previously, the activities older adults reported were classified as a HELPA or non-HELPA. This was done for all 95 activities included in the ERASS survey. Of the 95 activity types, 78 were HELPA activities. Moreover, 50 (64%) of these 78 HELPA activities were classified as HELPA *sport* activities, meaning they were administered by an NSO and/or SSO recognised as such by the ASC.[14]

To determine the contribution of sport to health enhancing PA levels, respondents were assigned to one of **three mutually exclusive categories** for each reported activity. **All persons who participated in a club setting were classified as club participants (organised club)**, regardless of whether they also participated in other settings. Of those remaining, **persons who participated in an organised non-club setting were classified as organised non-club participants (organised non-club)**, regardless of whether they also participated in non-organised settings. **Those remaining participated in non-organised settings only (non-organised).**

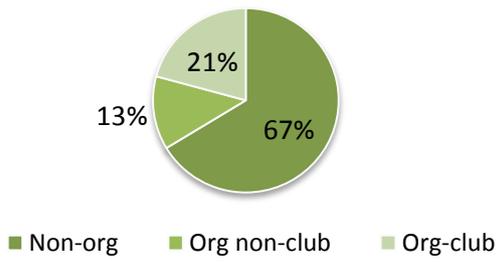
Health enhancing leisure time physical activity by age

Figures 1-4 (page 19) present the context of all HELPA activities, the proportion of HELPA activities that are sport-based, HELPA sport activities by context and HELPA sport activities by frequency, in younger and older adults.

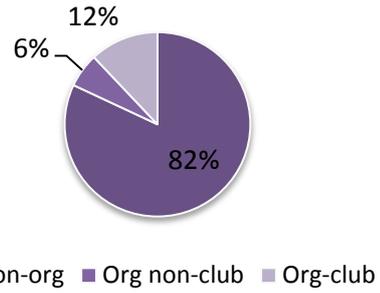
Older adults reported 10,607 HELPA activities in the past 12 months. The vast majority of these activities (82%) were non-organised, 12% were organised in a club-setting and 6% was organised in a non-club setting. The proportions of activities that were organised-club or organised non-club were about twice as high for younger adults than for older adults (**Figure 1**).

In older adults, the proportion of HELPA activities that was sport based was 38%, versus 58% in younger adults (**Figure 2**). Two thirds (67%) of all HELPA sport activities in older adults were non-organised, 29% was organised club and 4% was organised non-club. The proportion of non-organised activities was considerably lower in younger adults (53%), whereas the proportion of organised non-club activities (13%) was markedly higher in younger adults (**Figure 3**). Of all HELPA sport activities, about 80% was done more than 12 times per year in both younger and older adults (**Figure 4**).

These results show that **older adults perform fewer activities within a club setting than younger adults and that a lower proportion of these activities is HELPA sport**. However, **of all HELPA sport activities, older and younger adults perform about the same proportion in a club setting**. Also, most of the HELPA sport activities are performed at least 12 times per year, regardless of age.

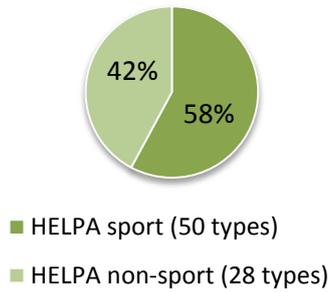


a. Younger than 50 years (24,174 activities)

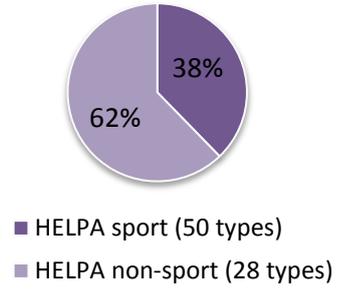


b. 50+ years (10,607 activities)

Figure 1: Health enhancing leisure time physical activity (HELPA) by context and age

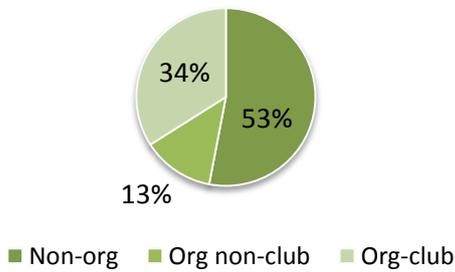


a. Younger than 50 years (24,174 activities)

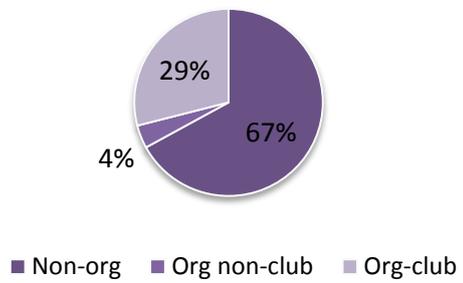


b. 50+ years (10,607 activities)

Figure 2: HELPA activities by sport category and age

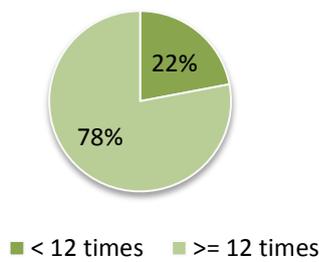


a. Younger than 50 years (13,981 activities)

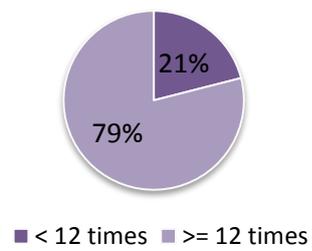


b. 50+ years (4,006 activities)

Figure 3: HELPA sport activities by context and age



a. Younger than 50 years (13,927 activities)



b. 50+ years (3,992 activities)

Figure 4: HELPA sport activities by frequency and age

Health enhancing leisure time physical activity in older adults by gender

Figures 5-8 (page 21) present the context of all HELPA activities, the proportion of HELPA activities that are sport-based, HELPA sport activities by context and HELPA sport activities by frequency, in older adults by gender.

Older women and men reported similar numbers of HELPA activities. The proportions of older women and men who participated in non-organised, organised club-based and organised non-club based HELPA activities were also similar. About 20% of all HELPA activities in older adults were organised. However, men reported a slightly higher proportion of organised activities in a club setting than women (15% in men vs 9% in women). Conversely, women reported a higher proportion of organised non-club activities than men (**Figure 5**).

The proportion of all HELPA activities that were HELPA sport activities was 1.5 times higher in men than in women (45% in men vs 30% in women; **Figure 6**). Although men reported more HELPA sport activities, the proportions of non-organised, organised non-club and organised club HELPA activities were similar in men and women. Just over a quarter of HELPA sport activities (30% in men vs 26% in women) were done in the organised club setting (**Figure 7**). About 80% of these activities were performed at least 12 times per year (**Figure 8**).

Thus, **older men perform more activities within an organised club setting and they do more HELPA sport activities than older women**. However, there is **little difference in the context and frequency between women and men who participate in HELPA sport activities**.

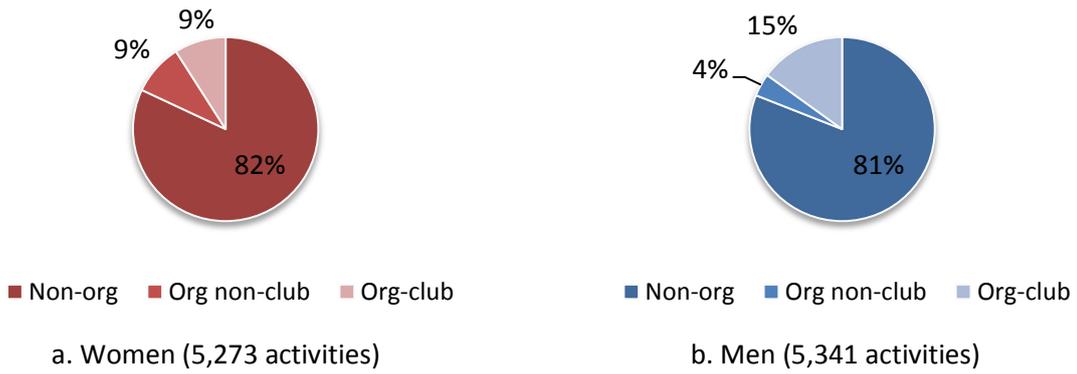


Figure 5: Health enhancing leisure time physical activities (HELPA) in adults aged 50+ years by context and gender

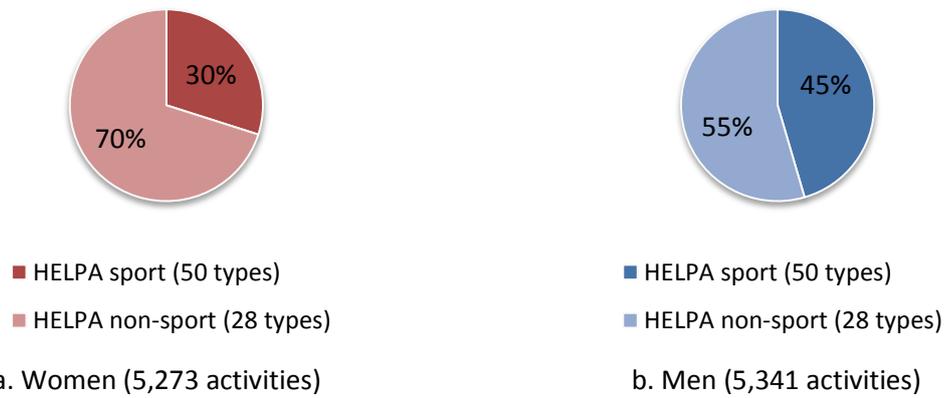


Figure 6: HELPA activities in adults aged 50+ years by sport category by gender



Figure 7: HELPA sport activities in adults aged 50+ years by context and gender

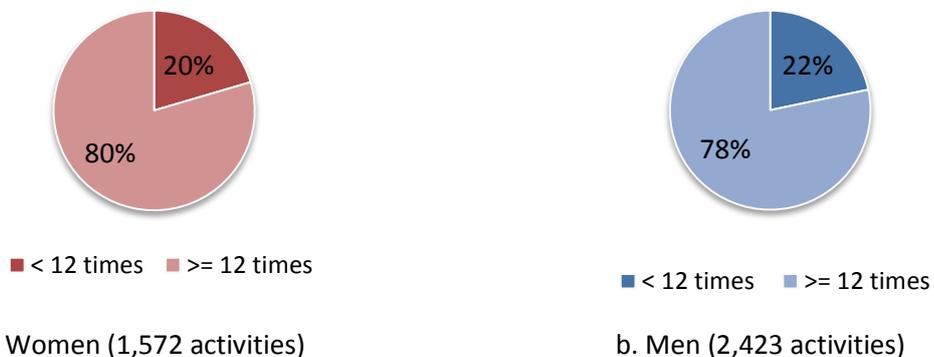


Figure 8: HELPA sport activities in adults aged 50+ years by frequency and gender

Study 2 - Sport participation by adults aged 50+ years: memberships, involvement in organisations, perceived benefits and health (AHSS data)

The aim of this study is to provide more in depth information about sport participation in older adults, defined as 50+ years, including their involvement in organisations and perceived benefits of sport. Furthermore, physical activity (PA) levels, socio-demographic characteristics and health and wellbeing of club members, members of other organisations and non-members will be compared. As this information was not available in the ERASS dataset, questions specifically developed by the research team at VU were included in the Australian Health and Social Science study (AHSS).

Data source

Data used in this study were obtained from the AHSS study at CQUniversity. The AHSS panel is a group of Australian adults who were recruited from 2009-2013 and consented to participate in online surveys. The AHSS study is not longitudinal. The data were collected in November 2013. Of all 1,856 adults who responded to the sport participation questions, 30% were younger than 50 years and 70% were 50+ years. Mean age of the younger respondents was 39 (SD 7.9; range 18-49) and 59% were female. Mean age of the older respondents was 63 years (SD 8.2 years; range 50-92 years) and 49% were female.

Memberships and types of organisations

See **Figure 9** for memberships of sport clubs, associations and other types of organisations by age and gender. There were some differences between age groups:

- Past member – last 10 years: 16% in older adults vs 28% in younger adults
- Never been a member: 30% in older adults, 22% in younger adults.

Twice as many older women as men had been a member of any organisation in the last 10 years (21% vs 10%). This indicates that organisations could use **gender specific strategies** to encourage older adults to become a member of a sport club, association, or other type of organisation.

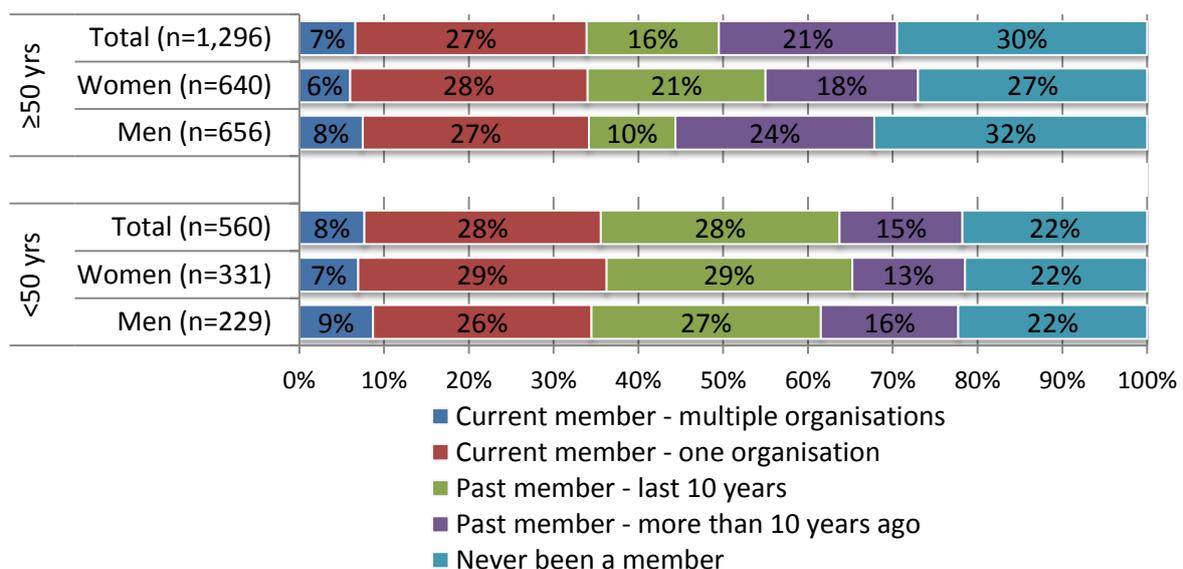


Figure 9: Membership of sport clubs, associations or other type of organisations by age and gender

Current members were asked what type of organisation they were a member of. Adults who were a member of more than one organisation were asked to report at which organisation they spend most of their time. Results are presented in **Table 3**. Two types of organisations clearly stood out in terms of the proportion of older adults. Of the 440 older adults who were a current member:

- **44%** were a member of an association that required payment of fees, membership or registration, hereafter referred to as ‘**club**’
- **39%** were a member of a **fitness, leisure or indoor sport centre** that required payment for participation.

Compared to younger adults, **older adults were more likely to be a member of a:**

- **Club** (44% vs 40% in younger adults)
- **Recreation club or association** (5% vs 1% in younger adults)
- **Community fitness program** (3% vs 1% in younger adults).

Younger adults were more likely to be a member of a:

- **Fitness, leisure or indoor sport centre** (47% vs 39% in older adults).

Table 3: Types of organisations adults are a member of by age and gender

	Younger than 50 years			50 years or older		
	Women n=120	Men n=79	Total n=199	Women n=216	Men n=224	Total n=440
Club	33%	51%	40%	30%	58%	44%
Fitness, leisure or indoor sport centre that requires payment for participation	53%	38%	47%	51%	28%	39%
Recreation club or association	-	3%	1%	5%	6%	5%
Community fitness program	3%	-	1%	4%	1%	3%
Physical activity courses	2%	-	2%	3%	0.9%	2%
Other	10%	9%	10%	8%	6%	7%

Possible reasons for the slightly higher proportion of club members among older adults could be the relatively high proportion of older adults who play golf, lawn bowls and tennis. Furthermore, older adults may be more interested in the social nature of club sport. Another reason could be that the average age of the younger adults was 39 years, which may mean that family and career investment may be a barrier to participation in club sport.

There were marked **gender differences**. In **older adults:**

- **Twice as many males were a member of a club** (58% in men vs 30% in women)
- **A higher proportion of women was a member of a fitness, leisure or indoor sport centre** (51% in women vs 28% in men).

What sports do older club members play?

Figure 10 shows what sports older sport club members play and the proportion of men and women participating in these sports. The **top three sports** were:

- **Golf** (43% of men vs 23% of women)
- **Lawn bowls** (14% of men vs 6% of women)
- **Tennis** (14% of women vs 9% of men).

Older club members play a variety of other sports, ranging from light (e.g. croquet) to high intensity (e.g. squash, triathlon), but the number of members reporting these sports was generally low, indicating that these sports are not commonly played by older members.

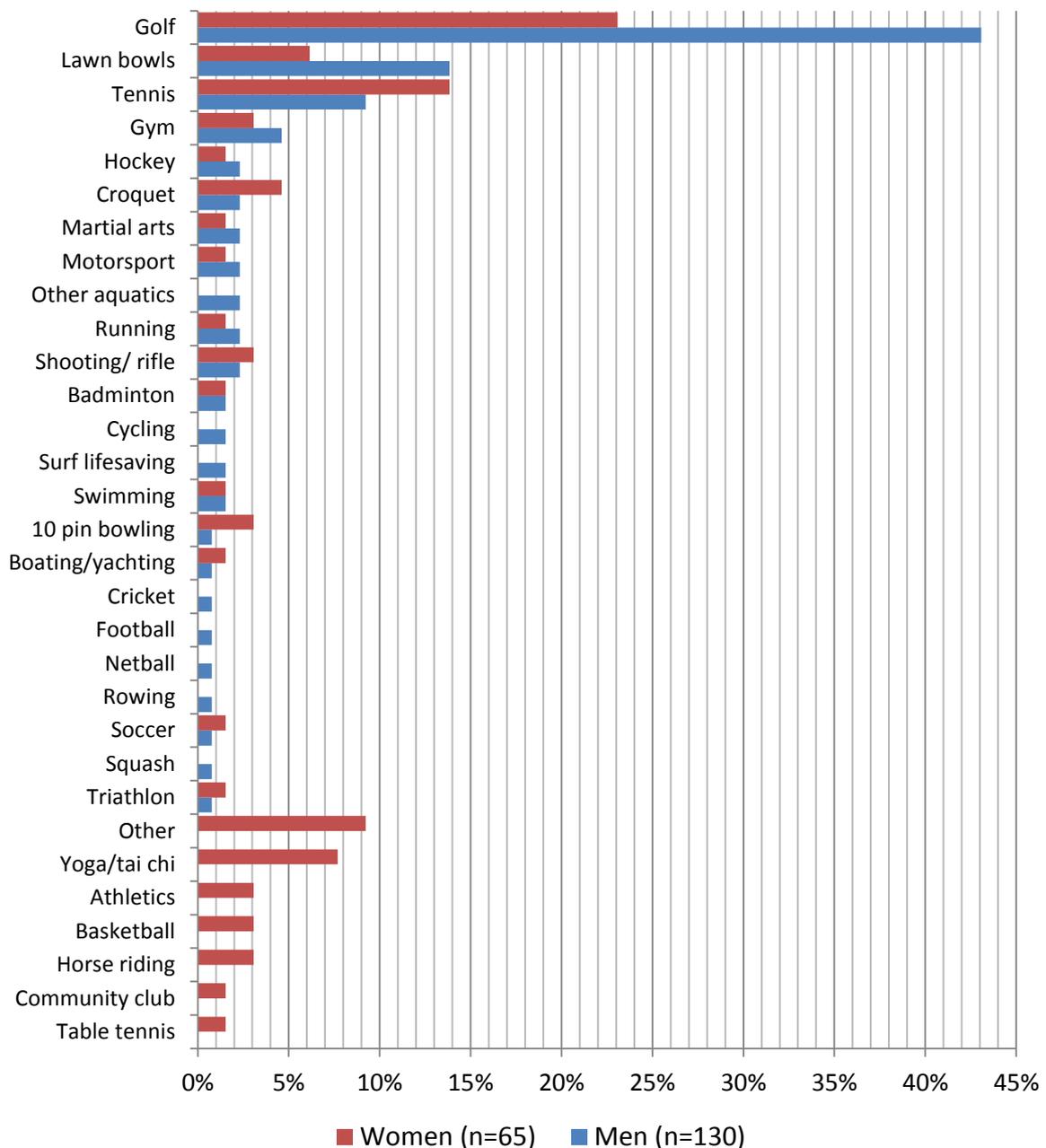


Figure 10: Sports reported by older club-members and proportion playing each sport by gender

How are older members involved in their club?

Older adults who were a member of a club were asked about their type of involvement (**Table 4**).

- **Most older club members** were involved as a **participant** with a focus on competition (60%), or on relaxation, socialising, health and fitness (39%)
- A **higher proportion of older adults than younger adults had a focus on competition** (60% vs 53%)
- Involvement as a **committee member or administrator** (19%) was the **most frequent type of involvement after being a participant; older adults were more likely to be involved in this role than younger adults** (19% vs 14%)
- Compared to younger members, **older members were less likely to be involved as a coach, instructor or teacher** (15% vs 9%), **or as a scorer or timekeeper** (5% vs 1%).

Table 4: Involvement of adults who are a member of club by age and gender

	Younger than 50 years*			50 years or older*		
	Women n=39	Men n=40	Total n=79	Women n=65	Men n=130	Total n=195
Participant - focus on competition	44%	63%	53%	60%	60%	60%
Participant - focus on relaxation, socialising, health and fitness	51%	45%	48%	37%	40%	39%
Committee member or administrator	8%	20%	14%	25%	16%	19%
Coach, instructor or teacher	10%	20%	15%	8%	9%	9%
Referee or umpire	5%	8%	6%	3%	9%	7%
Scorer or timekeeper	8%	3%	5%	0%	2%	1%
Provider of medical support	3%	0%	1%	2%	0%	1%

*Column percentages may not add up to 100% as multiple answers were possible

More than 90% of all older members were participants. There were no clear gender differences in the different types of involvement by older club members (**Figure 11**).

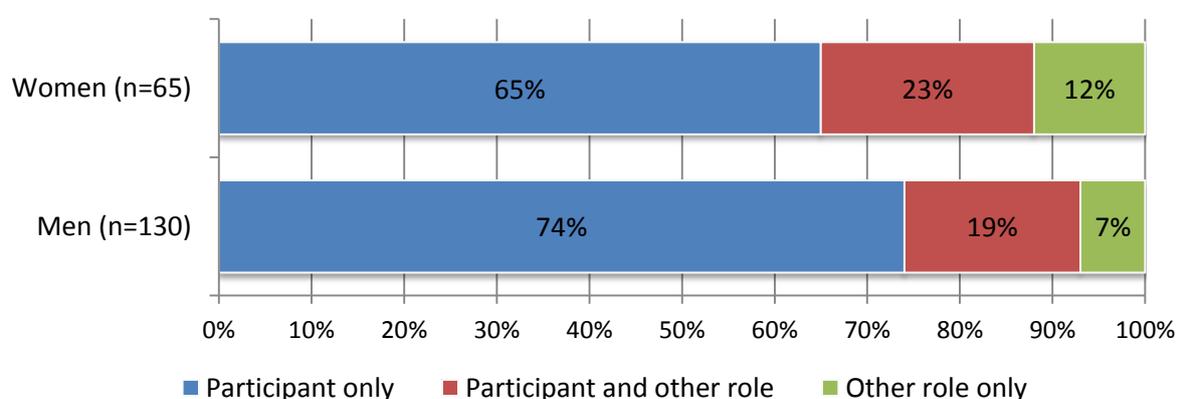


Figure 11: Involvement as participants and in other roles in adults aged 50+ years by gender

Older club members were also asked to rate the overall intensity of their participation

- 32% rated the intensity as **light**
- 57% rated the intensity as **moderate** (activity which increases your breathing, but you are still able to hold a conversation)
- 12% rated the intensity of activities in their club as **vigorous** (activity which makes you breathe harder or puff and pant).

Public health guidelines for PA recommend that adults do a combination of moderate and vigorous intensity activity for health benefits. The guidelines recommend adults do 150-300 minutes per week of moderate intensity activity, 75-150 minutes per week of vigorous intensity activity or any combination.[7] However, there is ample evidence that even if adults do not meet these PA levels, doing something is better for health and quality of life than doing nothing. It can therefore be assumed that PA levels achieved through sport participation contribute to the health of active older club members.

Benefits of sport participation

Club members were also asked to rate their agreement with statements about the potential benefits of being a member (**Figure 12**).

- Almost 90% agreed or strongly agreed that being a club member was good for physical and mental health
- Almost 80% agreed or strongly agreed that being a club member was good for their social health
- The results indicate that women and men believe they receive similar benefits from being a club member.

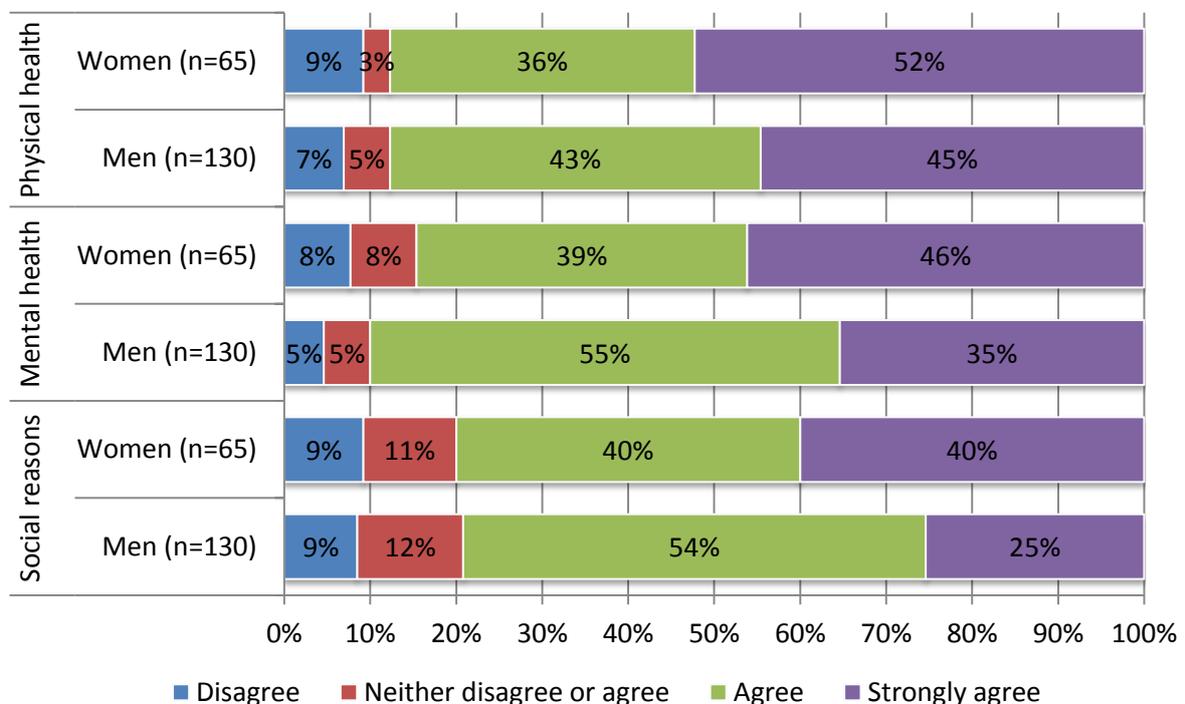


Figure 12: Perceived benefits of being a club member in current members aged 50+ years by gender

Are current non-members interested in becoming a member and, if so, why?

Older adults who were not a current member of an organisation were asked if they were interested in becoming a member and, if so, what type of organisation they would be interested in. Results are presented in **Table 5**.

- **The proportion of older adults interested in becoming a member of a sport club was**
 - 8% in those who were a member in the last 10 years, behind fitness centre (19%), community fitness program (18%) and other activity options (14%)
 - 10% in those who were a member more than 10 years ago, behind community fitness program (14%) and recreation club or association (12%)
 - 4% in those who have never been a member, behind other (13%), community fitness program (11%) and recreation club or association (7%)

- **The proportion of older adults not interested in becoming a member was**
 - 29% in those who were a member in the last 10 years
 - 42% in those who were a member more than 10 years ago
 - 59% in those who have never been a member.

Table 5: Type of organisation non-members aged 50+ years are most interested in joining by past membership status and gender

	Member <10 years ago			Member >10 years ago			Never-member		
	Women N=135	Men N=67	Total N=202	Women N=118	Men N=154	Total N=272	Women N=171	Men N=211	Total N=382
Club	3%	18%	8%	5%	14%	10%	2%	6%	4%
Fitness, leisure or indoor sport centre that requires payment for participation	19%	19%	19%	14%	11%	8%	6%	2%	4%
Recreation club or association	2%	10%	5%	7%	16%	12%	5%	9%	7%
Community fitness program	24%	8%	18%	20%	8%	14%	18%	5%	11%
Physical activity course	7%	6%	6%	3%	2%	2%	3%	1%	2%
Other (e.g. work, events based)	18%	8%	14%	8%	11%	10%	14%	13%	13%
Not interested	27%	31%	29%	43%	40%	42%	53%	64%	59%

Of the 58 older adults who were interested in becoming a member, the majority were male (n=45; 78%). Older adults were interested in a range of sports including: golf (n=15); lawn bowls (n=6); cricket or hockey (both n=4); cycling, swimming or tennis (all n=3); croquet, gymnastics, shooting/rifle, or other (all n=2); baseball, boxing, fencing, football, gymnastics, motorsport, netball, rowing, rugby, sailing, surf and lifesaving club, or soccer (all n=1). This again highlights the popularity of golf and lawn bowls for older adults. However, these findings also indicate that older adults are interested in a range of sports.

Older adults interested in becoming a member of a sport club were asked to rate their agreement with four potential reasons for becoming a club member (**Figure 13**).

- Two thirds (67%) of older adults would become a club member for **social reasons**
- Just over half (55%) would become a club member to **improve physical health**
- Just over half (53%) would become a club member to **be more active**
- Just below half (45%) would become a club member to **improve mental health**
- There were no clear differences in agreement with these reasons based on past membership status or gender.

This indicates that **sport clubs** looking to **grow their membership base among older adults** could **focus on the social aspect of their sport and the physical and mental health benefits of regular participation**.

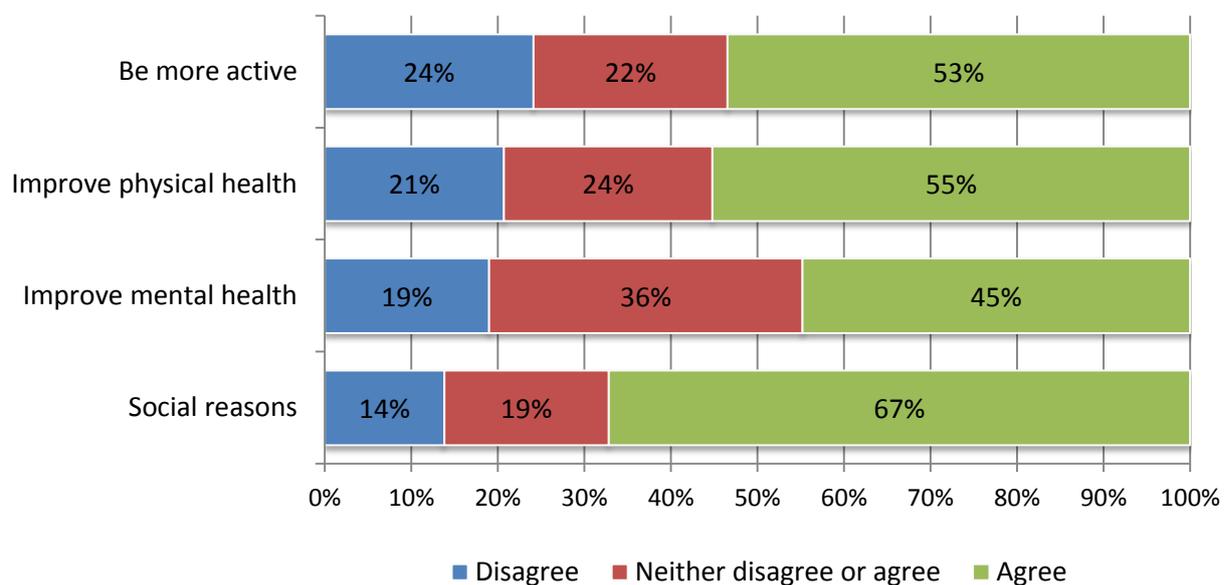


Figure 13: Agreement with potential reasons for becoming a club member in adults aged 50+ years who are interested in becoming a member of a club

Comparison of club members, members of other organisations and non-members

Physical activity levels

The PA levels of club-members, members of other organisations and non-members are presented in **Figure 14**.

- **Club members were more likely to meet the PA guidelines (82%)** than members of other organisations (75%) and non-members (54%)
- **The proportion of 82% is considerably higher than the proportion of 40% of adults aged 55-64 years in the general population who meet the guidelines.**[9]

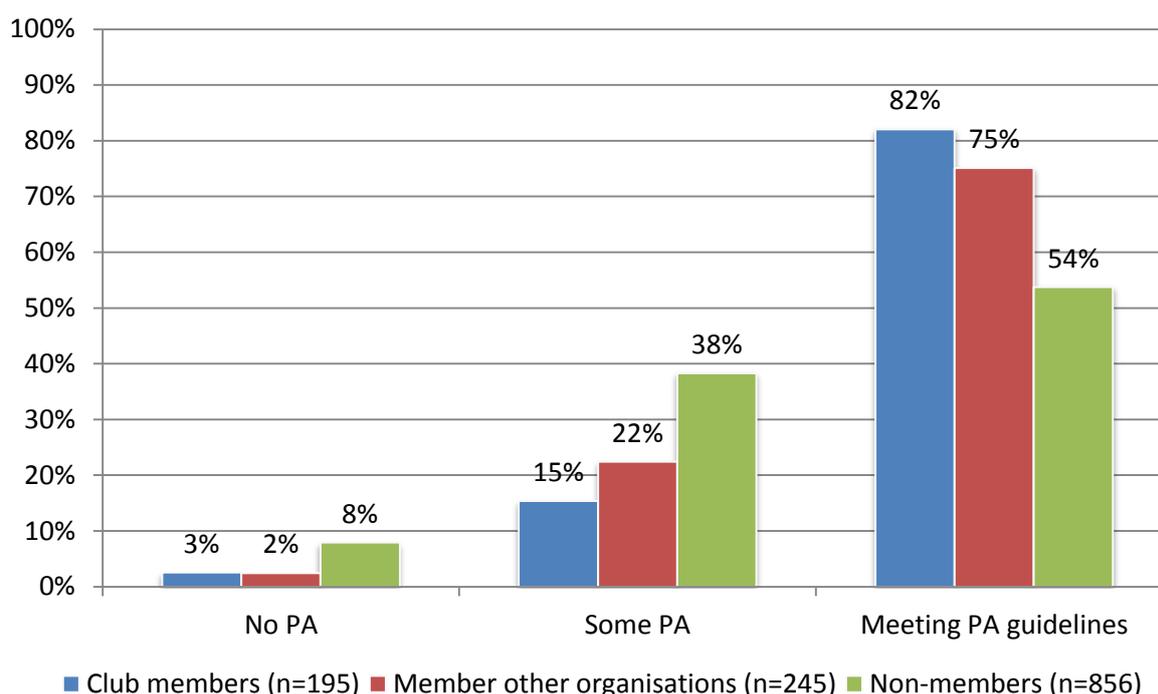


Figure 14: Physical activity levels of adults aged 50+ years by membership status

Socio-demographics

Socio-demographic characteristics of club members, members of other organisations and non-members are reported in **Table 6 (page 30)**. The statistically significant differences were:

- **A larger proportion of club members was male (67%),** compared to members of other organisations (38%) and non-members (51%)
- **Club-members differed more in socio-demographic characteristics from the members of other organisations than from the non-members**
 - Fewer club members lived in major cities (57% vs 66% in members of other organisations) and more lived in outer regional or remote areas (10% vs 4% in members of other organisations)
 - Club members generally had lower education than members of other organisations (**Table 6**)
 - Club members generally had a lower income than members of other organisations (**Table 6**)

- There were no significant differences between the three groups in age, marital status, living situation, country of birth or employment status.

Table 6: Socio-demographic characteristics of adults aged 50+ years by current membership status

	Club members N=195	Member other organisation N=245	Non-members N=856	Total N=1296
Age, mean (SD)	64 (7.9)	63 (8.2)	63 (8.3)	63 (8.2)
Gender				
Female	33%	62%	50%	49%
Male	67%	38%	51%	51%
Marital status				
Single/widowed/divorced	22%	20%	20%	20%
Married/de-facto/live-in	79%	80%	80%	80%
Living situation				
children<18 yrs	7%	9%	10%	10%
children 18+ yrs	15%	20%	19%	19%
children moved out/no children	79%	71%	71%	72%
Area of residence				
Major Cities	57%	66%	54%	57%
Inner Regional	32%	30%	33%	33%
Outer Regional/Remote	10%	4%	13%	11%
Country of birth				
Australia	76%	74%	78%	77%
Other	24%	26%	22%	23%
Education				
Up to year 12	24%	17%	30%	27%
Technical studies/trade certificate	21%	11%	16%	16%
Tertiary studies	55%	73%	54%	58%
Employment status				
Full-time	24%	27%	31%	29%
Part-time	15%	18%	14%	15%
Casual	4%	4%	5%	5%
Unemployed/home duties/student	3%	4%	6%	5%
Retired/pensioner	55%	47%	44%	46%
Income				
Lowest tertile	36%	27%	44%	40%
Middle tertile	35%	39%	30%	32%
Highest tertile	29%	34%	26%	28%

Health and wellbeing

Details about the health and wellbeing of club members, members of other organisations and non-members are presented in **Table 7**. The statistically significant differences were:

- **Club members and members of other organisations** had **better self-rated health** than non-members
- Body Mass Index
 - **A higher proportion of club members was overweight**
 - **Lower proportions of club members and members of other organisations were obese**, compared to non-members
- **Club members and members of other organisations** reported **better physical quality of life** than non-members
- There were no significant differences between the three groups in the number of chronic conditions, the presence of symptoms of depression, or mental quality of life.

Table 7: Health and wellbeing of adults aged 50+ years by current membership status

	Club members N=195	Member other organisations N=245	Non-members N=856	Total N=1296
Self-rated health				
Very good/excellent	51%	53%	36%	42%
Good	33%	35%	41%	39%
Poor/fair	16%	12%	22%	19%
Chronic conditions				
None	20%	24%	24%	23%
One	32%	26%	28%	28%
Two	20%	25%	19%	20%
Three or more	29%	25%	29%	28%
Body Mass Index				
Normal weight	33%	45%	34%	36%
Overweight	50%	36%	36%	38%
Obese	18%	20%	30%	26%
Depression				
No symptoms	84%	82%	82%	83%
Symptoms	16%	18%	18%	17%
Quality of life				
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Physical component summary	46 (8.9)	45 (9.3)	43 (10.3)	44 (9.9)
Mental component summary	52 (9.0)	51 (9.3)	51 (9.9)	51 (9.7)

Study 3 - Sport and ageing from the perspective of sporting organisations (Survey study)

Aim and study description

To develop a better understanding of how Sporting Organisations (SOs) perceive sport and ageing, the research team conducted a survey study. For this study, SOs refer to National Sporting Organisations (NSOs) and State/Territory Sporting Organisations (SSOs). The aim of the study was to understand these SOs perspectives on:

- 1) Current sport opportunities for older adults
- 2) Potential barriers of and benefits to increasing sport participation in older adults
- 3) Potential strategies to increase sport participation among older adults.

In addition, SOs were asked to indicate their preference for a resource to help increase sport participation in older adults.

The results of this survey were analysed with a focus on responses in the following subcategories:

- NSO versus SSO
- Team sports versus individual sports
- Contact/collision sports versus limited contact sports and non-contact sports
- Sports with a high participation rate for older adults, versus sports with a medium participation rate, and sports with low participation rates among older adults (based on ERASS 2010 data).[2]

A web based survey was designed for this study by the research team, with input from the Director Sport Market Insights, Australian Sports Commission (ASC). The survey included 19 questions about sport and ageing, and was completed by SO employees or volunteers with a remit to increase active participation in their sport.

These SOs were selected via the ASC's list of recognised NSOs (as of February 2012),[5] and included both funded and unfunded sports. Of the 93 organisations listed, 78 NSOs and their associated SSOs were contacted to complete the survey (maximum of 702 SOs). Fifteen NSOs were not contacted, as 14 were umbrella organisations and one focused on elite sport only.

Recruitment of the NSOs was undertaken in partnership with the ASC. The ASC asked relevant contacts within each selected NSO to provide permission for Victoria University (VU) to contact them. Interested NSOs (n=28) were then invited by the VU research team to complete the survey and to share contact details for relevant employees in all of their SSOs. NSOs that did not respond to the invitation from the ASC (n=50) were contacted by the researchers through their respective NSO websites. This was also done for the SSOs if no contact details were received from the NSOs. Altogether, 241 SSOs were contacted (47% of the total eligible SSOs).

Respondents

Overall, 65% of eligible sports were represented in this study. The response rate for NSOs was 59% (46 out of 78 eligible NSOs). The response rate for SSOs was 61% (146 out of 241 contacted SSOs). SOs from all Australian states and territories were included in the study.

The mean age of respondents was 44 years, ranging from 22 to 71 years. Almost two-thirds (64%) of the respondents were male. Respondents worked in a variety of roles, including CEOs, Participation Managers and Secretaries. However, most respondents (76%) had a focus on both strategic development and program delivery, with 12% responsible for strategic delivery only, and 6% responsible for program delivery only. The remaining 6% had a focus on other responsibilities. Most respondents (45%) had worked in their respective organisations for one to five years.

Sporting Organisations' level of priority for different target groups

Respondents were asked to report how important it was for their SO to increase participation in different population groups (Figure 15):

- The **highest priority** was **11-15 year olds** (86% rated as high/very high)
- The **lowest priority** was **older adults** (39% rated as high/very high).

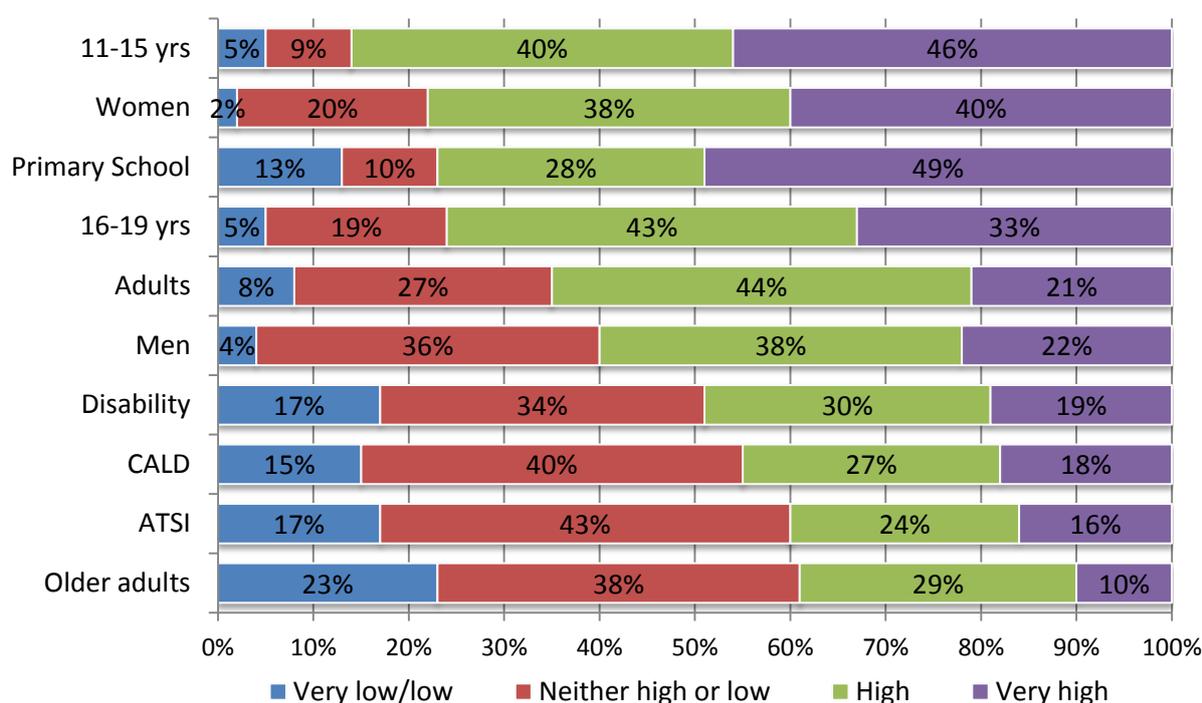


Figure 15: Ratings of level of priority to increase sport participation in different population groups (n=192)

Whilst increasing participation among older adults appears to be a lower priority for the majority of SOs, it is important to keep in mind that the survey was completed by representatives of sports that may be less frequently played by older adults (ERASS data, 2010),[2] including high impact and high contact sports.

To acquire a better understanding of the survey responses, SOs were categorised by the level of older adults' participation as derived from ERASS data (Figure 16, page 34).[2] Based on participation rates among older adults, sports were categorised as having a 'high level of participation' (>0.5%); a 'medium level of participation' (>0.05%-<0.5%); or a 'low level of participation' (<0.05%). Nine sports (covering 21 SOs) that were not included in the ERASS 2010 data were classified as an 'unknown level of participation'.

- Sports with the **highest levels of participation** among older adults tended to express a **higher level of priority** to increase sport participation in this population group (44% rated as high/very high) than sports with lower or unknown participation rates.

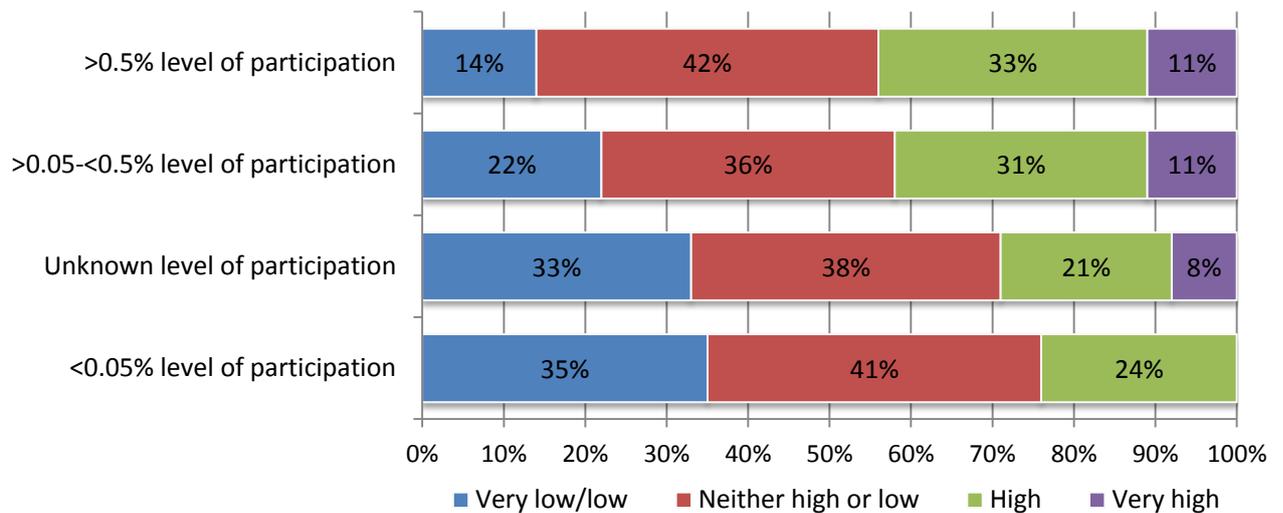


Figure 16: Ratings of level of priority to increase sport participation in older adults by participation level (n=192)

There were also differences in priorities between the subcategories:

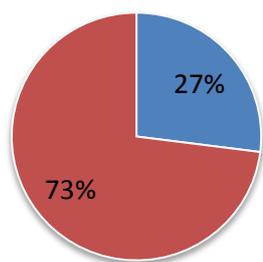
- Team and individual sports neither agreed nor disagreed that older adults were a priority for their organisation. However, the **level of priority** to promote participation in older adults was **higher in individual sports (46%) than team sports (29%)**
- Respondents from **limited (40%) or non-contact (50%)** sports rated their **level of priority as higher than contact/collision sports (13%)**.

Thus, **individual sports, and sports with limited or no contact, appear to prioritise older adults' sport participation more than team sports and sports that involve contact/collision**. However, the promotion of sports participation in older adults was neither a high nor low priority for most SOs.

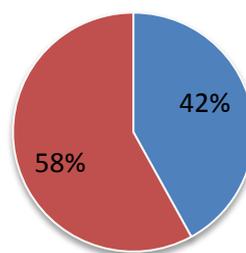
Sport opportunities for older adults

Respondents were asked if their SOs had specific strategies or programs for older adults (**Figures 17 and 18, page 35**). Strategies were defined as 'a long term plan to attract older adults into your sport, and/or retain players as they age, which is not part of a specific older adults' program'. Programs were defined as 'a formal program(s)/series of activities that are specifically designed for older adults'. **Most SOs did not have specific strategies or programs** for older adults:

- 27% of SOs had strategies for older adults
- 42% of SOs had programs for older adults
- **The most popular programs were Masters, Legends or Veterans programs**, with 20% of SOs (representing 22 different sports) providing these programs.



■ SOs with an older adults' strategy
 ■ SOs without an older adults' strategy



■ SOs with an older adults' program
 ■ SOs without an older adults' program

Figure 17: Proportion of SOs with strategies (n=192) Figure 18: Proportion of SOs with programs (n=192)

Strategies:

There were differences between the following subcategories:

- **More individual sports (30%) than team sports (19%) had specific strategies**
- **More high level participation sports (30%) than low level participation sports (17%) had specific strategies.**

However, only 30% of high level participation sports had strategies, which suggests that **having a specific strategy does not necessarily mean that participation numbers for older adults will increase.** Participation is likely to be higher in sports that are more attractive for older adults, regardless of specific strategies and programs to increase their participation.

Programs:

There were minor differences between sports with different participation levels:

- **More low level participation sports (50%) than medium (45%) or high level participation sports (42%) had specific programs.**

This suggests that **having specific programs does not necessarily mean participation levels for older adults will increase.**

Respondents were also asked to report what age they considered an 'older player' to be, and to report the age of the oldest age group their sport would cater for:

- **The average age for 'older players' was 42 years old,** ranging from 18 to 75 years
- **The average maximum age sports would cater for was 72 years,** ranging from 30 to 110 years.

SOs categorise 'older players' differently and there are differences in the maximum age SOs would cater for. This study has defined older adults as adults aged 50+ years, but the average age that SOs considered older players to be is younger than 50 years.

Organisational barriers to increasing sport participation in older adults

Respondents were asked to rate their agreement with 11 potential organisational barriers to sport participation in older adults (**Figure 19**). The top three barriers were:

- **Lack of resources to manage programs** for this age group (70% agreed/strongly agreed)
- **Lack of resources to develop programs** for this age group (69% agreed/strongly agreed)
- **Main focus is on other age groups** (69% agreed/strongly agreed).

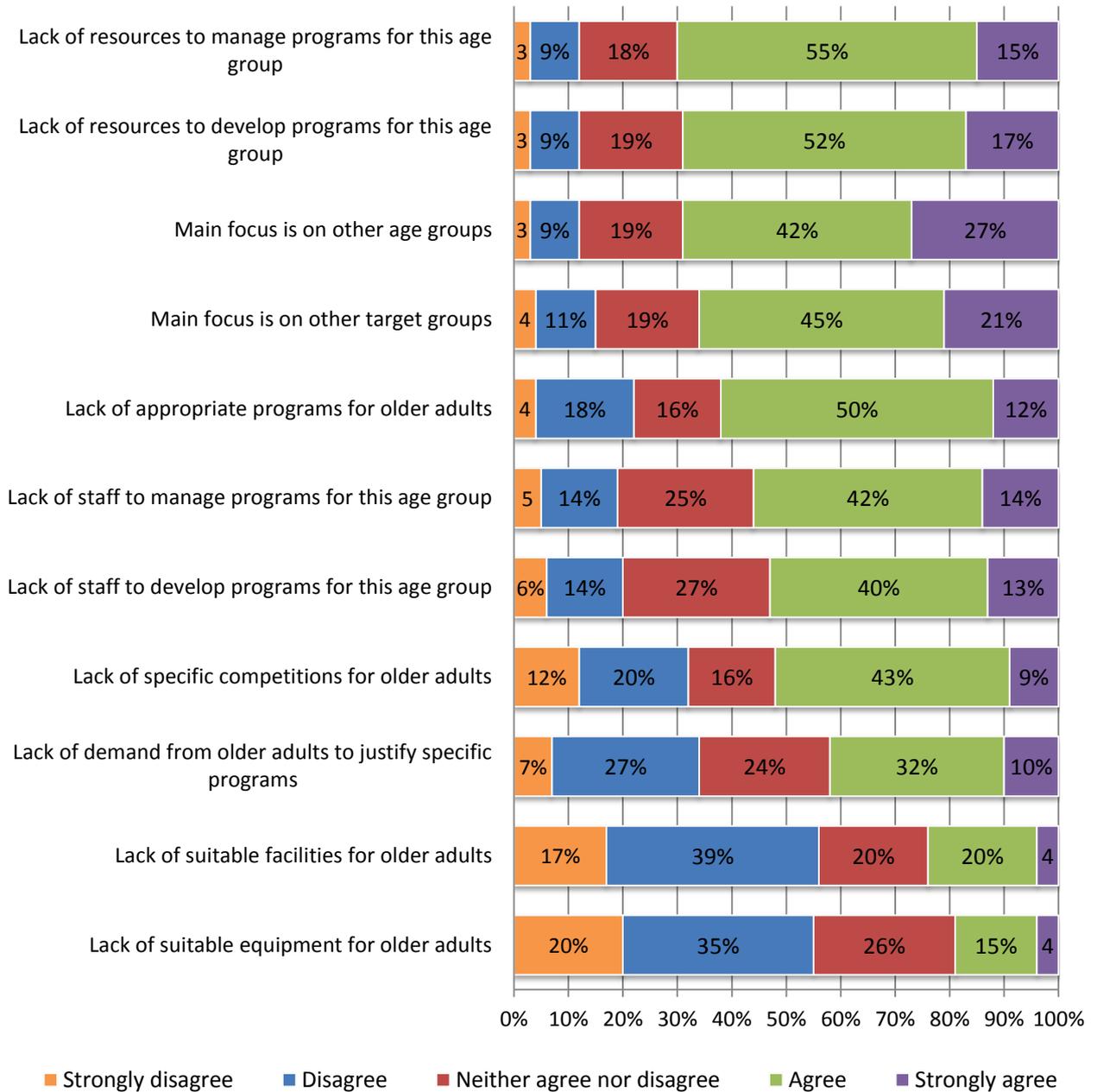


Figure 19: Ratings of agreement with potential organisational barriers to increase sport participation in older adults (n=192)

There were differences between sports with different participation levels and between contact and non-contact sports:

- **More low level participation sports** (50%) than medium (34%) or high level participation sports (26%) reported a **perceived lack of demand for their sports**
- **More contact/collision sports** (64%) than limited (45%) or non-contact sports (27%) reported a **perceived lack of demand for their sports**
- **More low participation sports** (72%) than medium (61%) or high level participation sports (62%) reported that they did **not have appropriate programs** for older adults
- **More contact/collision sports** (90%) than limited (69%) or non-contact sports (56%) reported a **focus on other age groups**.

Organisational benefits of increasing sport participation in older adults

Respondents were asked to rate their agreement with five potential organisational benefits for SOs of increasing sport participation in older adults. Most (60%) of the respondents agreed or strongly agreed with all five benefits (**Figure 20**). The top three benefits were:

- Facilitate an **increase in overall participation numbers** (91% agreed/strongly agreed)
- **Engage with SOs older fan base** (78% agreed/strongly agreed)
- Be **socially responsible** and accommodate a growing population group in society (75% agreed/strongly agreed).

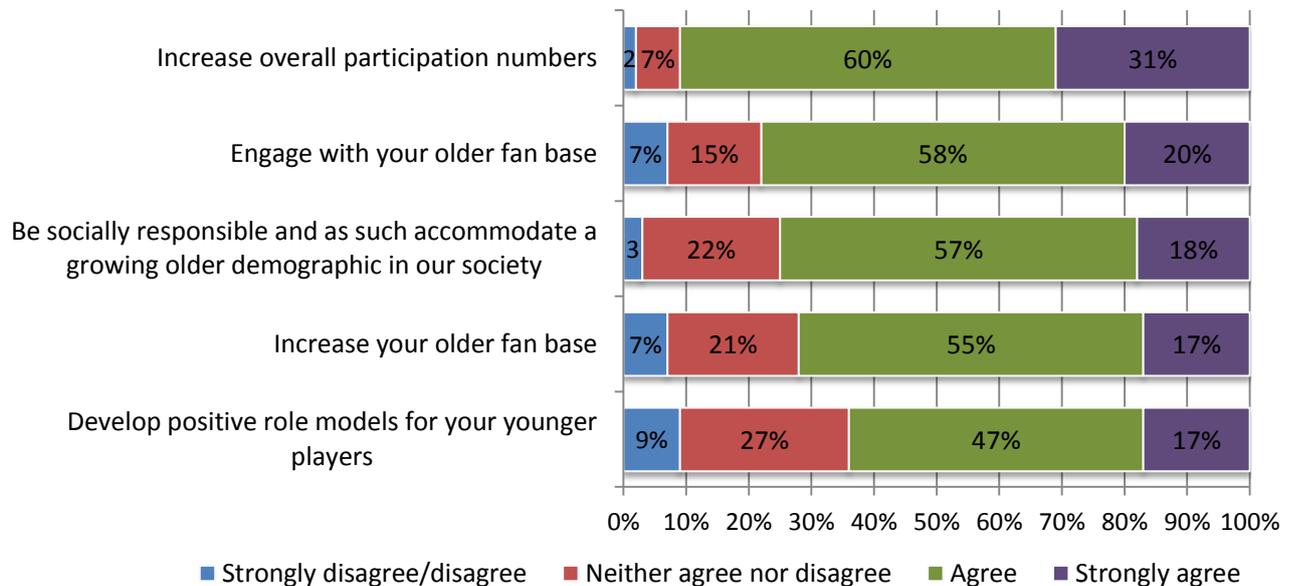


Figure 20: Ratings of agreement with potential organisational benefits of increased participation in older adults (n=192)

Strategies to increase sport participation among older adults

Respondents were asked to rate their level of agreement with 21 potential modifications to increase older adults' sport participation (**Figure 21**). The top three modifications were:

- **Change the way their sport is advertised** (77% agreed/strongly agreed)
- **Collaborate with community organisations** (77% agreed/strongly agreed)
- **Collaborate with senior organisations** (74% agreed/strongly agreed).

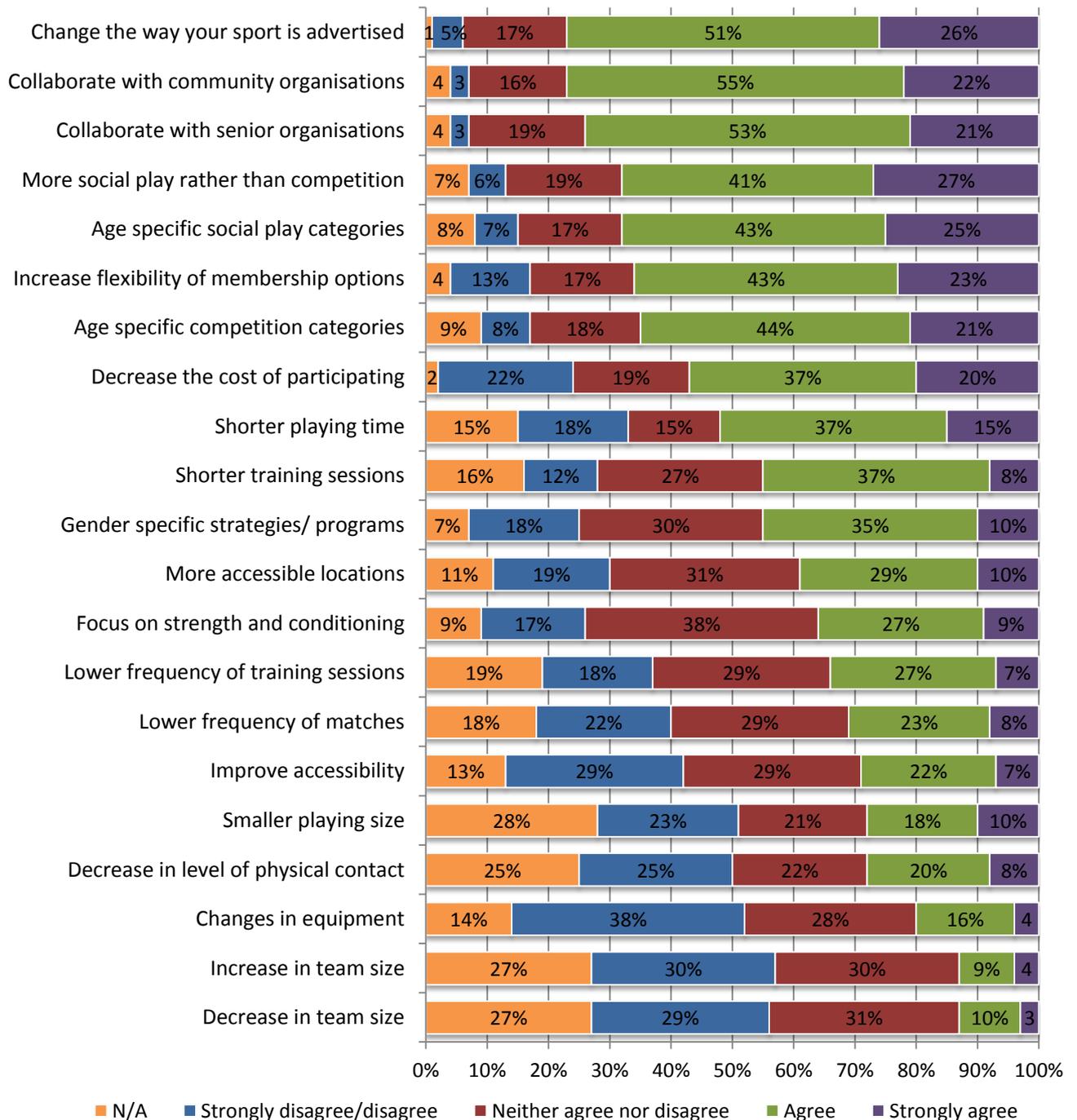


Figure 21: Ratings of agreement with potential modifications to increase older adults' sport participation (n=192)

There was general agreement among subcategories for modifications, such as changing the way their sports are advertised, collaborating with other organisations and introducing more social play. However, there were clear differences regarding other potential modifications for some subcategories.

Modifying equipment:

- Twice as many **NSOs** (52%) as **SSOs** (25%) **disagreed with modifying equipment.**

Decrease in level of physical contact:

- More than twice as many **contact/collision sports** (59%) as limited (25%) or non-contact sports (12%) agreed with a **decrease in the level of physical contact**
- More **low** (50%) **and medium** (22%) **level** participation sports than high participation sports (13%) agreed with a **decrease in the level of physical contact.**

SOs representing high level participation sports reported that a decrease in the level of physical contact was either not applicable or they did not agree or disagree with this modification. These results reflect the 2010 ERASS data,[2] which show that more older adults participate in low contact or collision sports such as golf, lawn bowls and tennis than in contact/collision sports.

Decrease the cost of participating:

- More **high** (61%) **and medium** (58%) than low participation sports (33%) agreed with a **decrease in the cost of participating.**

These results indicate that a decrease in the cost for low participation level sports will not necessarily result in an increase in sport participation in older adults.

Frequency and length of training sessions:

- **More contact/collision sports** (51%) than limited (32%) or non-contact sports (18%) agreed that there should be a **lower frequency of training sessions**
- Three and a half times as many **team sports** (56%) as individual sports (16%) agreed that there should be a **lower frequency of training sessions**
- Twice as many **team sports** (63%) as individual sports (30%) agreed that **training sessions should be shorter.**

Therefore training sessions for team sports may be more time restrictive or physically intense than training sessions for individual sports.

Gender specific strategies/programs:

- More **low** (61%) than medium (44%) or high level participation sports (42%) agreed that **gender specific strategies or programs** should be introduced.

More accessible locations:

- More **non-contact** (49%) and limited contact (35%) than contact/collision (21%) sports agreed that sport should take place in more **accessible locations.**

Resource development

Respondents were asked to rate the level of usefulness for 10 different resources to help SOs increase sport participation for older adults (**Figure 22**).

- Over 80% of respondents reported that all of the resources could be useful or very useful.

The top three resources in terms of usefulness were:

- Specific **marketing guidelines** to attract older adults into sport (49% rated as very useful)
- **Factsheet** for SOs (44% rated as very useful)
- **Factsheet** for local sport clubs (43% rated as very useful).

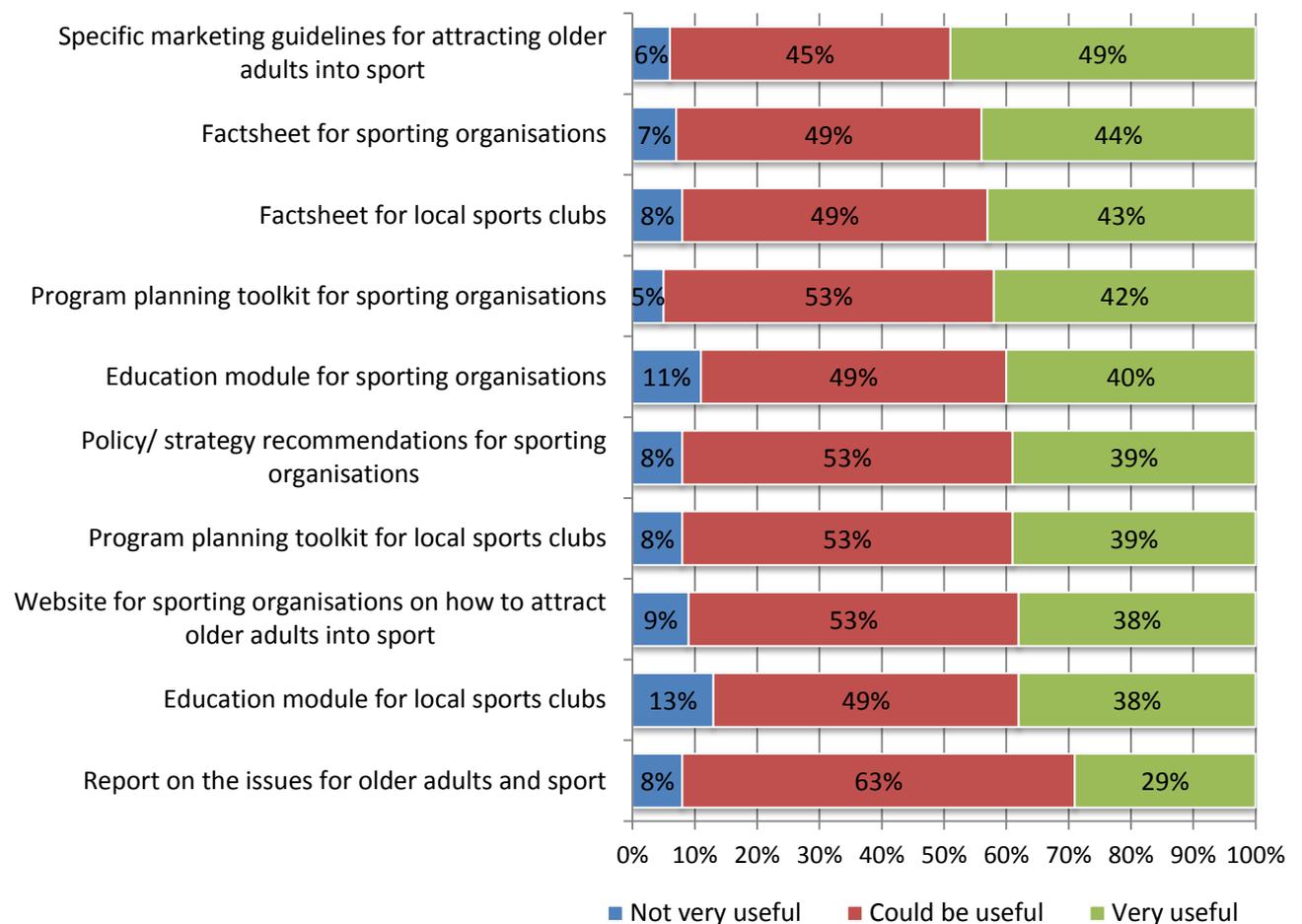


Figure 22: Ratings of usefulness for resource options to increase sport participation in older adults (n=192)

When SOs were asked to select their preferred resource, the results were different (**Figure 23**). The top three preferred resources were:

- A **website providing advice on attracting older adults into sport** (preferred by 16% of SOs)
- A **report on the issues surrounding older adults and sport** (preferred by 16% of SOs)
- **Specific marketing guidelines** to attract older adults into sport (preferred by 15% of SOs).

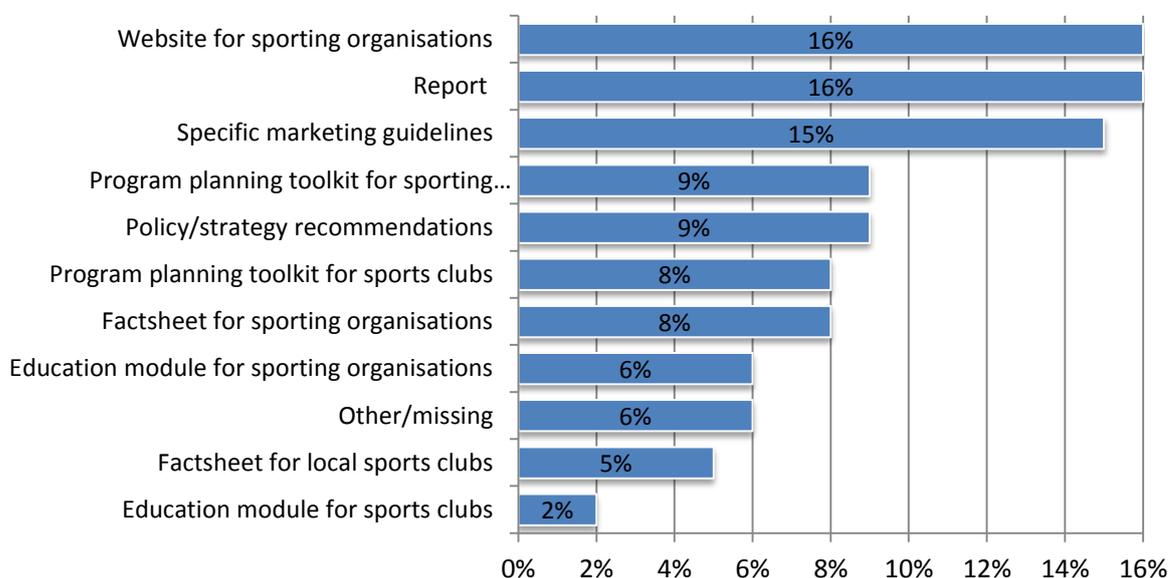


Figure 23: Preferred resource to increase sport participation in older adults (n=192)

A website, report or marketing guidelines were also the three preferred resources across the subcategories, but the preference order differed by subcategory (**Table 8**). Alternative resources identified by survey respondents included case studies, grant opportunities and funding strategies. There was a **strong preference for electronic delivery of resources** (90% of SOs).

Table 8: Preferred resource for each of the subcategories

Preferred resource	
Organisation	
NSOs	Website (preferred by 22% of NSOs)
SSOs	Report (preferred by 15%) Marketing guidelines (preferred by 15%)
Participation rate for older adults	
Low level participation sports	Report (preferred by 28%)
Medium level participation sports	Report (preferred by 18%)
High level participation sports	Marketing guidelines (preferred by 23%)
Type of sport	
Individual sports	Website (preferred by 18%) Marketing guidelines (preferred by 18%)
Team sports	Report (preferred by 22%)
Level of contact	
Non-contact sports	Marketing guidelines (preferred by 19%)
Limited contact sports	Website (preferred by 19%)
Contact/collision sports	Report (preferred by 18%)

Summary

Increasing **sport participation in older adults is a lower priority** for most SOs than increasing participation in other population groups, particularly youth. Individual sports, and limited or non-contact sports, reported a higher level of priority for older adults than team sports or contact/collision sports. **Most SOs did not have specific strategies or programs** to engage older adults in their sport. However, of the SOs that had strategies or programs for older adults in place, more SOs had programs than strategies.

The main barriers to increase sport participation in older adults reported by SOs were a **lack of resources to manage and develop appropriate programs** for this population group. Also, SOs reported that their **focus was on other age groups or target groups**. Low participation sports and contact/collision sports felt there was a lack of demand for their sports. However, SOs identified that increasing sport participation in older adults would help to **increase overall participation numbers**, and enable them to **engage with their older fan base**.

Overall, SOs reported that **changing the way in which their sports were advertised** and **collaborating with community or senior organisations** would be the modifications most likely to help increase older adults' sport participation. Potential modifications for subcategories include:

- For **team sports**, a decrease in the frequency of training sessions and shorter training sessions would also be beneficial
- For **contact/collision sports**, a decrease in the level of physical contact, and a decrease in the frequency of training sessions should be considered
- For sports with **limited or no contact**, more accessible locations would be a potential modification
- For **high or medium level participation sports**, a decrease in the cost of sport is a potential modification
- For **low level participation sports**, a decrease in the level of physical contact and the introduction of gender specific programs are potential modifications.

SOs had a preference for the following resources to increase sport participation in older adults:

- A **website** providing advice on attracting older adults into sport
- A **report** on the issues surrounding older adults and sport
- **Specific marketing guidelines** for attracting older adults.

Study 4 - Sport and ageing: opinions of sporting organisations, sport club members and non-sport club members (Focus group interview study)

Aim and study description

The aim of the Focus group interview study was to:

- 1) Explore the role of sport for active and healthy ageing
- 2) Examine sporting organisations' (SOs) attitudes towards sport opportunities for older adults
- 3) Discuss potential strategies to engage older adults in sport.

For this study, SOs refer to National Sporting Organisations (NSOs), State/Territory Sporting Organisations (SSOs) and local sport clubs.

Two sports were selected for this study on the basis of ERASS data.[2] This was done by ranking the sports included in ERASS from high to low participation rates among older adults. The research team considered the 10 most frequently played sports and the 10 least frequently played sports in this age group, in terms of the appropriateness of each sport for older adults and the research team's existing relationships with SOs. Subsequently, tennis was selected from the 10 most frequently played sports and cricket was selected from the 10 least frequently played sports. NSO representatives, older sport club members and older adults who were not members of any sport club, were invited to participate in the study. Sport club members included members who played the sport, and those who were involved in a different capacity, such as committee members or coaches. Separate focus group interviews for the sport club members and non-sport club members were held for men and women. Details about the focus group interviews are presented in **Figure 24**; each square represents a separate focus group interview.

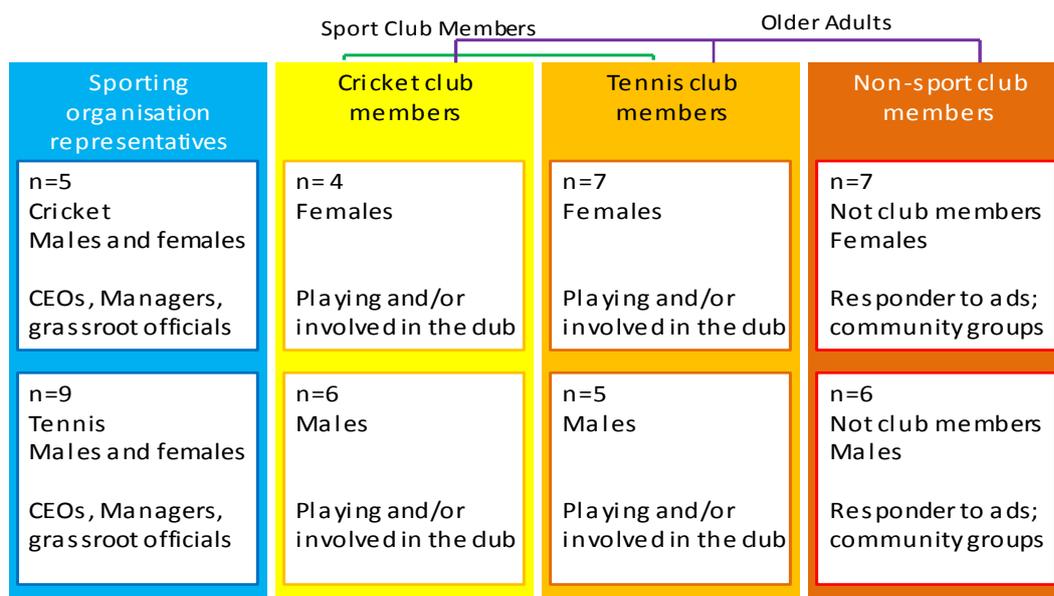


Figure 24: Structure of focus group interview study

A total of 49 adults participated in the focus group interviews, with group sizes ranging from four to nine participants. The groups were held in a variety of settings, including the NSO offices (Tennis Australia (TA) and Cricket Australia (CA)), sport clubs and at VU. There were two VU facilitators at each focus group interview; one led the group and the other took notes of any non-verbal communication. The interviews lasted 70-90 minutes and there were engaged discussions in all groups. In general, there was agreement in each focus group interview about the issues discussed, although there were some differing opinions. After the focus group interviews, data were transcribed and analysed using a hybrid approach of content and thematic analysis.

Within each focus group interview, three key issues were addressed. These three key issues are reported within six sections in this study:

1) Benefits of sport participation

- a) Benefits of sport participation for older adults
- b) Benefits of older adults' sport participation for SOs

2) Barriers to sport participation

- a) Barriers to sport participation for older adults
- b) Barriers to older adults' sport participation for SOs

3) Strategies to increase sport participation

- a) Current age specific sport opportunities for older adults
- b) Potential sport modifications to increase sport participation for older adults.

Within each of these six sections, there are three sub sections:

- Results from SOs will be presented together
- Results from cricket and tennis club members will be presented together
- Results from the non-sport club members will be presented together.

The benefits, barriers and strategies addressed in this study are mostly pertinent for sport and ageing in general. The results in this study are a reflection of the discussions during the focus group interviews; so not all benefits, barriers and strategies to increase older adults' sport participation may have been discussed. All of the themes are firstly displayed in a thematic data table, and then common themes that emerged across the focus group interviews in each sub section are presented together. Themes that were not commonly discussed in each sub section are presented separately. Each of the six sections has an overall summary to address the three key issues.

Benefits of sport participation

All focus group interviews began with a discussion on the benefits of sport participation for older adults and SOs.

Benefits of sport participation for older adults

The common benefits across the eight focus group interviews were **social health, physical health and intergenerational benefits**. See **Table 9** for an overview of all benefits that were discussed.

Table 9: Key benefits of sport participation for older adults*

Individual benefits	NSOs		Sport club members		Non-sport club members	
	Tennis	Cricket	Male	Female	Male	Female
Social health	√	√	√	√	√	√
Physical health	√	√	√	√	√	√
Intergenerational benefits	√	√	√	√	√	√
Mental health		√	√			√
Safety						√
Role modelling ('feel good factor')					√	
Club provides flexibility of playing opportunities				√		

* Order based on the number of focus group interviews in which the benefits were discussed

Benefits for older adults: NSOs

Benefits of sport participation for older adults discussed by both Tennis Australia (TA) and Cricket Australia (CA) included **social health, physical health** and **intergenerational benefits**. Mental health was discussed by CA only.

Social health – TA and CA:

- Tennis clubs can provide an **increased sense of belonging**, as they may be perceived to have a more welcoming environment than other leisure facilities
- Tennis enables older adults to still **compete at an older age**
- There are also opportunities for older adults to socialise after playing tennis, so sport clubs can **provide an environment that fosters social connections**
- Cricket players have often **played together for a long time**, and could have a drink together after training or a game.

Physical health – TA and CA:

Both organisations discussed **physical health**, but from slightly different angles.

- Tennis provides the opportunity for **relatively robust exercise**. As it is non-contact and less physically strenuous than some other sports, it can be played across the lifespan, and adults can still compete at an older age
- Cricket is **not overly strenuous**, and therefore an appropriate sport for older adults.

Intergenerational benefits – TA and CA:

- Both sports are **suitable for all ages**, so older adults could play in the same club as their children/grandchildren, which in turn can provide an opportunity for **family bonding**
- Tennis can be a **mixed gender sport**, which could provide further opportunities to include all members of the family.

Mental health - CA:

- Older cricket members can interact in their club settings, which can aid their mental health.

Benefits for older adults: Sport club members

For tennis and cricket club members, common benefits included **social health, physical health and intergenerational benefits**. **Mental health** was discussed by the male sport club members only.

There were a number of sport specific differences in the benefits (details below), but there were no notable differences in responses between male and female sport club members.

Social health – male and female tennis and cricket club members:

- Sport clubs have a **family atmosphere** and include regular social activities, such as having a drink after a match/training or having a monthly party day
 - **Developing friendships** through sport clubs is an important benefit of both sports
 - Sport clubs **provide social connections**; playing tennis could be a day out for older adults who live alone.
- *“It’s the social aspect that keeps me going” (53 year old male cricket club member)*
- *“The club becomes your extended family” (51 year old male cricket club member)*
- *“In the world of cricket..., you always have a friend” (69 year old female cricket club member)*
- *“We come together for the socialisation, don’t we?” (70 year old female tennis club member).*

Physical health – male and female tennis and cricket club members:

- Sport can keep older adults’ bodies and minds active, and can also provide an avenue to **minimise the effects of ageing**
 - Sport can provide a **type of exercise older adults enjoy**
 - **Sport in general can improve health** and playing sport could help with **injury rehabilitation**
 - Tennis is an **appropriate and safe sport**; older adults who play tennis are less likely to be injured than older adults who play a contact sport
 - Cricket is an appropriate sport for older adults.
- *“Cricket is a sport where a club can have an older cricketer and he could play for as long as he wants” (54 year old male cricket club member).*

Intergenerational benefits – male and female tennis club members:

- Tennis is a **family sport**
 - Tennis has a **lifetime involvement**; those involved as a child are likely to stay involved for life
 - Older adult members become involved in sport clubs to **bond with their family**, especially with their children.
- *“There is nothing better than playing with your kids” (62 year old male tennis club member).*

Although the opinion was that adults who play as a child are more likely to play as an older adult, there were male tennis club members and female cricket club members who started playing at an older age after their children started playing the sport.

Mental health – male cricket club members:

- Cricket enables players to switch off and relax.
- *“You’re amongst people. You’re not talking about work stuff. Yes, the brain’s switching off. You go home at the end of the day and you just feel relaxed before your real job starts again. That [is] mental health”* (53 year old male cricket club member).

Clubs provide flexibility of playing opportunities – female tennis club members:

- Being a member of a sport club provides **flexibility in playing options**, with the chance to play structured competitions, such as intra club and inter club, as well as social tennis.

Benefits for older adults: Non-sport club members

Social health, physical health and **intergenerational benefits** were common benefits in the focus group interviews with male and female non-sport club members. The male non-sport club members also discussed role modelling, whereas the female non-sport club members discussed mental health and safety.

Social health – male and female non-sport club members:

- Sport clubs can provide opportunities for **social interaction** and to **meet people**
- The **social structure/network** of belonging to a sport club is important
- People who retire could experience **social isolation** and may need something to do, especially if they have lost a partner.

Physical health – male and female non-sport club members:

- Sport can provide an opportunity to **remain healthy**.

Intergenerational benefits – male and female non-sport club members:

- Sport enables participants to **build a bond with their family**
- Sport participation **promotes respect between younger and older people** through regular interaction.
- *“A family that plays together stays together”* (54 year old female non-sport club member).

Role modelling – male non-sport club members only:

- Older adults can provide **authority and guidance to younger players** and **be a role model to younger and less experienced players**.

Mental health – female non-sport club members only:

- **Older adults can experience personal enjoyment**, as being a club member can help adults feel good about themselves as they age.

Safety – female non-sport club members:

- Older adults who participate in sport as part of a sport club, such as kayaking, feel more comfortable to explore new areas, as they may **feel safer doing this as part of a group rather than individually**.

Summary of benefits of sport participation for older adults

A number of common benefits emerged in the eight focus group interviews; **better social health**, **better physical health** and **intergenerational benefits**.

Improved health was the predominant benefit discussed in all groups and perceived benefits were even greater for **social health** than for physical health. Participants felt the primary benefit from being a sport club member was the opportunity to socialise with their friends. The **social nature of sport** could **help sport position itself** as a provider of physical activity programs for older adults. Whilst there are opportunities for social interaction in non-sport club based activities, such as gym classes or walking groups, sport clubs provide a unique cultural setting with regular social events, and where social interaction after games or training is part of the environment. **Better physical health** was also discussed as a key benefit. Participants felt that sport could improve their physical health, minimise the effects of ageing, and aid injury rehabilitation.

Intergenerational benefits included the **opportunity to bond with their family** whilst participating in sport. In addition, **sport could foster respect between generations**. As with the social health benefits, this is **also unique to sport in comparison to other types of physical activity**, and could be used to maintain and promote sport participation in people as they age.

Other potential benefits of sport participation for older adults discussed in some of the focus groups were **mental health**, **safety**, **role modelling**, and that the club provides **flexibility of playing opportunities**.

Benefits of sport participation for Sporting Organisations

The common benefits for SOs across the eight focus group interviews were **volunteering**, **role modelling for younger club members** and **financial contributions**, although these benefits were not discussed in all focus group interviews. See **Table 10** for an overview of all benefits that were discussed.

Table 10: Key benefits for SOs of older adults participating in sport*

Organisational benefits	NSOs		Sport club members		Non-sport club members	
	Tennis	Cricket	Male	Female	Male	Female
Higher volunteering capacity	√	√	√	√	√	√
Role modelling for younger club members		√	√	√	√	
Financial contributions		√	√	√	√	
Intergenerational benefits	√		√	√		
Community engagement		√			√	
Member diversity				√		√
Maximising facility usage	√					
Appropriate playing opportunities	√					

* Order based on the number of focus group interviews in which the benefits were discussed

Benefits for SOs: NSOs

Tennis Australia (TA) and Cricket Australia (CA) mostly discussed sport specific benefits and therefore there were few similarities in benefits for SOs.

Volunteering – TA and CA:

- **Older adults are often volunteers** who can contribute to the running of tennis clubs
 - Older adults are often more **time rich** than younger people, which can benefit sport clubs
 - Older adults can successfully liaise with local government, schools and also the wider community.
- Older adults are “*worth their weight in gold*” (49 year old male Cricket Australia participant).

Intergenerational benefits – TA:

- Parents/grandparents who are engaged in tennis may introduce their children/grandchildren to the sport. **Families are often influenced to participate in similar sports that other family members participate in**, so this could increase overall tennis participation numbers.

Maximising facility usage – TA:

- **Courts are often empty during the day** and could be used by retired older adults at off peak times.

Appropriate playing opportunities – TA:

- Tennis can be played between and against men and women, and requires only a **minimum of two players**. This can increase playing opportunities for older adults.

Role modelling for younger club members – CA:

- Older adults are often seen as local heroes and can provide **mentoring for younger players**
- Older adults can show younger players that it is possible to play the game long term, and could **positively influence children’s and grandchildren’s perception of older adults**.

Financial contributions – CA:

- Older adults are often more financially secure than younger people, which can benefit sport clubs.

Community engagement – CA:

- A cricket **club is representative of the broader community**, and therefore it is important that sport clubs include older adults to reflect this.

Benefits for SOs: Sport club members

The main benefits discussed in the focus group interviews with sport club members were **volunteering, role modelling, financial contributions** and **intergenerational benefits**. Women also discussed member diversity.

Volunteering – male and female tennis and cricket club members:

- Older adults are **more likely to volunteer** to become **committee members**, and are more likely to **do this long term**, whereas younger players often do not show the same dedication to a sport club
- Volunteering in sport clubs occurs because older adults are generally more time rich, especially if they are retired
- Older adults may be more likely to volunteer for the club in other ways, for example helping with the **maintenance of club facilities**
- Some participants feel indebted to their club, for examples one participant said the club welcomed him when he first joined, and another participant said that the club helped him to keep out of trouble. They therefore felt a desire to **‘give back’ to the club**, through being a volunteer and being supportive of youth player development.

Role modelling for younger club members – male and female cricket club members:

- Older adults often teach cricket etiquette to younger players, such as **sportsmanship**
- Younger players can benefit from older adults’ organisational and **nurturing skills**.

Financial contributions – male and female tennis and cricket club members:

- Older adults may be more **financially comfortable** than younger players, so would be more willing to spend money at club functions and post-game social events
- Older adults can provide an **additional membership source to a club**
- There are **financial benefits of older adults’ volunteering for the club**. If the older adults did not volunteer their time, the membership costs to run a sport club would be higher and potentially less accessible for younger members.

Intergenerational benefits – male and female cricket club members:

- Older adults are more likely to have a **vested interest in the club** to ensure the club would provide a safe environment for their children
- Older adults **enjoy seeing children grow up** through the club and the **children appreciate the adults being there** every week.

➤ *“We do it for the kids...it’s like a big family”* (51 year old female cricket club member).

Member diversity – female cricket club members:

- Aligning a female cricket team with a male cricket club can bring benefits to both parties
 - The female team would benefit from **joint fundraising**
 - The male team would benefit from having women involved more heavily within the club, as it can create a **wider community within the club**.
- *“We’re with a men’s club, so we’re affiliated with men’s clubs. So obviously we have a great social life. Some of the women’s clubs are... [on their own] and that’s a bit harder because you’ve got to do your own fundraising”* (51 year old female cricket club member)
- *“The guys love the fact they’ve got a women’s team and they all get out and support us”* (51 year old female cricket club member).

Benefits for SOs: Non-sport club members

In both focus group interviews with non-sport club members, **volunteering** was the major benefit. However, the male and female non-sport club members also discussed a range of other benefits (**Table 10, page 49**).

Volunteering – male and female non-sport club members:

- Older adults are likely to **volunteer in club administration**
- Older adults are generally more **time rich** than younger people, so it can increase their ability to volunteer within the club.

However the female non-sport club members felt that **50+ years was a very broad age range, which** contains people in different situations, for example, people who are retired and those that still work. Hence, it depends on people’s situation whether they have more time available or not.

Role modelling for younger club members – male non-sport club members:

- Older adults are seen as **role models in the wider community**, especially for young people
- Older adults can **transfer their knowledge** about the sport to younger players and coaches.

Financial contributions – male non-sport club members:

- Older adults can be **more financially secure** than younger members, so they would be more likely to **spend money** at fundraising events
- Encouraging older adults to become sport club members could **increase club income** through additional membership fees.

Community engagement – male non-sport club members:

- **Word of mouth advertising** within the community could not only raise the profile of the club, but also further increase membership numbers.

Member diversity – female non-sport club members:

- Attracting older adults would ensure greater **diversity** and breadth in membership.

Summary of benefits for Sporting Organisations

The main benefits that were discussed were **higher volunteering capacity, role modelling for younger members** and **financial contributions**. Almost all groups felt that **older adults were more likely to volunteer** as committee members than younger adults, especially over the long term. However, the female tennis club members felt that volunteering would still occur, even if older adults stopped playing the sport. This could deter SOs from investing resources into increasing participation for this population group and needs further investigation. There were also numerous discussions on older adults being **role models** to younger players. SOs could **capitalise on these volunteering and role model opportunities** to help sport clubs flourish and benefit all generations.

The opportunity to reap potential **financial benefits** was also discussed. The groups felt that older adults were more likely to financially contribute to sport clubs during fundraising events and by socialising in the club.

A range of other potential benefits for SOs of older adults participating in sport was discussed by SOs, sport club members and non-members. These included **intergenerational benefits, community engagement, member diversity**, the opportunity to **maximise facility usage** and that some sports **already provide appropriate playing opportunities** for older adults.

Barriers to sport participation

Barriers to sport participation for older adults, and the potential barriers for SOs to increase sport participation in older adults, are discussed in this section.

Barriers for older adults

Time constraints and a **lack of appropriate opportunities** were discussed in all eight focus group interviews. **Poor physical health** was widely discussed as a barrier by the sport club members and non-sport club members. See **Table 11** for all barriers that were raised in the eight focus group interviews.

Table 11: Barriers to sport participation for older adults*

Individual barriers	NSOs		Sport club members		Non-sport club members	
	Tennis	Cricket	Male	Female	Male	Female
Time constraints	√	√	√	√	√	√
Lack of appropriate playing opportunities	√	√	√	√	√	√
Physical health (including risk of injury)	√		√	√	√	√
Lack of knowledge about opportunities	√		√	√		
Cost (too expensive)			√	√	√	
Societal factors			√	√		
Inappropriate facilities			√	√		
Perceived concerns about participation	√					√
Lack of resources		√				
Lack of skill		√				
Location						√

* Order based on the number of focus group interviews in which the barriers were discussed

Barriers for older adults: NSOs

Both Tennis Australia (TA) and Cricket Australia (CA) highlighted **time constraints** and a **lack of appropriate playing opportunities** as barriers to sport participation for older adults. There were also some sport specific differences; physical health and injury risk, lack of knowledge about opportunities and perceived concerns about participation were discussed by TA only, whereas lack of resources and lack of skill were discussed by CA only.

Time constraints – TA and CA:

- The **retirement age has risen**, which has implications for the time people can invest in sport; Saturday tennis competition formats are perceived to be too long
- As older adults can be time poor, **cricket could be competing with other traditional sports that are less time consuming**, such as golf, which may hinder older adults' participation in cricket.

These reported barriers are in contrast with the benefit mentioned in the previous section that older adults are perceived to be time rich.

Lack of appropriate playing opportunities – TA and CA:

- Sport participation is often specific to where older adults live. Older adults in certain areas may **lack appropriate opponents in social tennis competition**, for example, a 50 year old may not want to play a match against a 35 year old
- Most clubs **do not have senior aged club teams**, so interested older adults have to travel further afield to play sport
- There are **limited playing facilities**, so it would be difficult for newly created senior aged teams to access local cricket pitches
- Cricket **clubs can sometimes be quite insular**, so it may be difficult for new players to discover a club, or feel welcomed into a new club.

Physical health (including risk of injury) – TA:

- Playing tennis can increase the risk of sport injuries, and can cause general wear and tear of the body.

Lack of knowledge about opportunities – TA:

- There is a general **lack of awareness** among older adults about the available programs and events for older adults.

Perceived concerns about participation – TA:

- **Specific marketing** may be needed to **break down negative perceptions** of tennis, for example, that the sport is perceived to be too expensive and that courts are inaccessible
- Most beginner programs are aimed at younger players and **older adults may be nervous or hesitant to start beginner programs with younger players.**

Lack of resources – CA:

- Cricket clubs often do not have coaches, so there may be **limited capacity to teach new older adult members how to play the game.**

Lack of skill – CA:

- Cricket is a **highly skilled and technical game**, making it harder for new participants to start to play in their adult years.

Barriers for older adults: Sport club members

Common barriers discussed in the four focus group interviews with sport club members included **time constraints, lack of appropriate playing opportunities, physical health, lack of knowledge about playing opportunities, cost, societal factors and inappropriate facilities.** These barriers were discussed by men and women; there were no gender specific barriers.

Time constraints – male and female tennis and cricket club members:

- Older adults can be involved in **other activities**, so they may not have time to play tennis
- Older adults are often **responsible for minding** their children, grandchildren or caring for elderly parents
- **Life schedules have changed**, as more adults work on Saturdays. Therefore Saturday tennis competitions are losing their popularity, although this may result in higher participation levels for week night tennis
- Cricket **matches are lengthy**, especially when compared to sports such as the Australian Football League (AFL).

Lack of appropriate playing opportunities – male and female tennis and cricket club members:

- The **proximity of other tennis clubs** is important, as it would be easier to play more inter-club and diverse competitions if there are nearby clubs
- There **may not be veterans' competitions** close to where older adults live, which could deter participation in cricket
- However, even if further veterans' competitions for either men or women were developed, **a lack of cricket facilities** would hinder the possibility of playing matches.

Physical health – male and female tennis and cricket club members:

- Former club members **dropped out** of sport due to physical ailments and/or injuries
- As people get older, more injuries occur, and it is **harder to recover from injuries** at an older age.

➤ *“I still have to run the kids around and it would be a bit hard if I was injured. I'd find it difficult. So yeah, I gave it up at forty”* (52 year old female cricket club member).

Although physical health was regarded as a main barrier, it was also discussed that sport can be beneficial for physical health and that injuries can be prevented.

- **Injuries are a risk for all players, regardless of age**, and older adults are less likely to get injured playing sport than if they did no exercise
- As long as players **manage their body correctly**, such as ensure they include a thorough warm up and cool down, then physical health should not be a barrier to participation
- As long as the sport club has a **supportive network**, older adults can continue playing tennis until they can no longer compete on-court.

Lack of knowledge about opportunities – male and female tennis club members:

- Older adults are interested in playing sport, but they **may not know how to access opportunities**
 - In contrast, male tennis club members discussed that playing opportunities were widely advertised in local newspapers and on club signs, but that this did not attract new members.

Cost (too expensive) – male and female tennis and cricket club members:

- **Tennis can be an expensive sport**, especially for new players. However once participants have the equipment and do not need coaching, it will become much cheaper. The **equipment for cricket** can also be quite expensive.

There were discussions in both sports about **membership cost**. This resulted in a debate within each sport about having a **joining fee versus increasing the membership fees** and eliminating the joining fee. **There was no consensus**. Some sport club members felt that **joining fees provided much needed financial capital** for sport clubs, and that it was a fairer process than an increase in fees for long standing members. However other participants felt that this **high initial cost could be a barrier** to attracting new members.

Societal factors – male and female tennis club members:

- It may be **daunting** for a new player to walk into an unfamiliar club environment
 - Members of the general public **expressed surprise** that older participants were still playing tennis
 - **Socio-demographic factors** can contribute towards lower participation rates
 - In socio-economically privileged areas, more people want to play tennis to compensate for an inactive office job
 - In socio-economically deprived areas, people who tend to work in labour-intensive jobs are often more physically tired after work, and may not want to play sport in their leisure time.
- *“I’ll say I’m going to tennis. ‘Oh do you still play tennis?’ Like hell, once you get over fifty, you shouldn’t be playing” (70 year old female tennis club member).*

Inappropriate facilities – male and female tennis club members:

- **Concrete/flexi paved tennis courts** (the most frequently used surface for grassroots tennis courts) are **detrimental for the joints of older adults**, and it is painful to play on these surfaces
- **Porous surfaces are more appropriate** for tennis courts, but it can be difficult in persuading the relevant organisations to consider installing porous tennis court surfaces in grassroots sport clubs.

Barriers for older adults: Non-sport club members

The main barriers that were discussed in the two focus group interviews with non-sport club members were **time constraints**, **lack of opportunities** and **physical health**. Male non-sport club members also discussed cost and female non-sport club members discussed perceived concerns about participation and location.

Time constraints – male and female non-sport club members:

- **Family becomes more important than sport**
 - It is **difficult to regularly commit** to a club due to **caring** for children/grandchildren or elderly parents
 - Older adults may be **required to work away from home**, so it can be difficult to regularly commit to a sport club
 - **Spectatorship is prioritised over participation**, and for some older adults, it may be too expensive and too time consuming to undertake both.
- *“We’re from a generation where we’ve all worked [whilst raising a family]...So you talked about being time poor, I remember when I was 50, I was very time poor, because you’re pulled in different directions, and if you’ve got a full-time job as well or even a very big part-time job, there’s no time. So we’re from a generation where maybe we’ve had 20 or 30 years away from being able to commit to a sport apart from being our kids’ sport programs” (60 year old female non-sport club member).*

Lack of appropriate playing opportunities – male and female non-sport club members:

- Some clubs may **not always welcome** new players into a sport club environment
- There is a **lack of age appropriate sport clubs** for older adults to join.

Physical health (including risk of injury) – male and female non-sport club members:

- Older adults are **more likely to break bones** and **injure themselves** playing sport than younger adults
- Older adults **need to be fit to play sport**, in order to fit into a sport club, and to reduce the likelihood of injury
- Older adults **cannot afford to become injured**. Insurance may cover their wage during injury, but they could lose their job as a longer term consequence of being absent because of a sport injury
- The participants of the focus group interview stated that they would **still play sport if they were physically capable**, but their physical health prevented them from playing sport.

Cost (too expensive) – male non-sport club members:

- The **costs** involved in playing sport, including membership, equipment and social activities, can prevent participation.

Perceived concerns about participation – female non-sport club members:

- Older adults need to **develop the necessary skill** to play that sport before joining a club
- Older adults may **disappoint existing sport club members** if they are not very good.

Location – female non-sport club members:

- Older adults **do not want to travel too far** to attend sport sessions
 - People living in **rural areas** may be more inclined to play sport, but there are often **few provisions in those areas** for older adults. There are generally more sport opportunities in cities, and local councils in cities are more likely to push the importance of exercise.
- In the rural areas, *“if you don’t play sport, there is no life”* (60 year old female non-sport club member).

Summary of barriers for older adults

Time constraints and **lack of appropriate playing opportunities** were discussed as main barriers to participation in older adults by NSOs, sport club members and non-sport club members. **Physical health** was the main barrier discussed by the sport club and non-sport club members.

Whilst CA and female non-sport club members felt that older adults were more likely to provide a benefit to sport clubs by volunteering (benefits section, page 49), it was stated in all focus group interviews that older adults **may not have time to participate in sport**. This appears to be **closely linked to working status and caring responsibilities**.

Lack of appropriate playing opportunities included a discussion about **people to play with or compete against**, as well as the actual **sport facilities**. For example, there are **typically few sport clubs with senior teams**, and therefore few neighbouring teams to compete against. This could be an important barrier to older adults' sport participation if they do not want to compete, or are not capable of competing, against younger and more agile opponents. Linked with this were **limited facilities**, especially for cricket. Even if senior aged teams were developed, it would be difficult to provide sufficient facilities for both younger and older adults to play their separate matches. A potential solution to a general lack of opportunities, as discussed by the female tennis club members, would be to **identify and incentivise a relatively large and well-resourced sport club** in each suburb to create a senior aged team. This could then be supported by the NSOs and SSOs via marketing initiatives and by encouraging neighbouring clubs to support this team. However it would still require accessible playing facilities and resources from SOs, which may not always be available.

Physical health was a key barrier to participation discussed by club members and non-club members. **Injury and injury prevention** were important issues for most participants, but there was a dichotomy between injuries and health. **Sport club members felt that playing sport helped to prevent and rehabilitate injuries**, whereas **non-sport club members felt that injuries prevented their participation in sport**. However, the male non-sport club members did concede that injuries would probably be reduced if sport was modified.

Other potential barriers to sport participation for older adults discussed in some of the focus groups were **lack of knowledge** about opportunities, **cost** (too high), **societal factors**, **inappropriate facilities**, **perceived concerns about participation**, **lack of resources**, **lack of skill** and **inconvenient location**.

Barriers for Sporting Organisations

Only a few common barriers emerged from the discussion. For the most part SOs, sport club members and non-sport club members discussed different barriers. NSOs and non-sport club member groups discussed **risk management** as a potential barrier. See **Table 12** for all barriers that were discussed in the eight focus group interviews.

Table 12: Barriers for SOs of older adults participating in sport*

Organisational barriers	NSOs		Sport club members		Non-sport club members	
	Tennis	Cricket	Male	Female	Male	Female
Risk management (resources, insurance & external partners)	√	√			√	√
Focus on other age groups and elite level	√	√				
Emphasis on competition					√	√
Attracting new members			√	√		
Creating the right balance in a club			√			

* Order based on the number of focus group interviews in which the barriers were discussed

Barriers for SOs: NSOs

Both Tennis Australia (TA) and Cricket Australia (CA) discussed **risk management** and that their focus was **on younger age groups** as potential barriers for SOs of older adults participating in sport.

Risk management (resources, insurance & external partners) – TA and CA:

- Competitions for older adults may need **additional resources**, such as extra first aid facilities, which could deter sport clubs from engaging with this population group. This could add **implications for other partners**, such as local government
- Access to **appropriate insurance** to cover older adults' sport participation is often difficult
- For non-NSO affiliated competitions, there can be a **lack of structure and communication** with some of these organisations, which can make it difficult to fully maximise the opportunities available.

Focus on other age groups and elite level – TA and CA:

- NSOs are generally focused on **elite player development**
- The **media and the general population influence** the focus of NSO and SSOs, which have a focus on younger age groups and elite level players
- Whilst it was acknowledged that the goal of TA is to have a certain number of registered players, fans and Grand Slam champions, it was also expressed that there is often too much of a **focus on those who already play**, rather than those who are not current players
- Sport clubs have difficulty focusing on older adults, as clubs rely heavily on volunteers. So sport clubs may **lack the capacity** to undertake any further work to engage older adults
- It is important to focus on increasing cricket participation in young people, because children who engage with cricket, will become **hooked on the sport**, and are likely to be a fan for life
- It may not be **cost effective** for an organisation to focus on older adults, as there are fewer participants to engage
- NSOs are focused on the concept of **creating and maintaining their fan bases**
- CA may not prioritise an increase in participation in older adults if they are already fans.

Barriers for SOs: Sport club members

Sport club members felt there were **very few barriers** for organisations to offer sport participation opportunities for older adults. Male and female cricket club members discussed attracting new members as a barrier. Male cricket club members also discussed ‘creating the right balance in clubs’.

- *“I don’t see any disadvantages at all, and I think there are many advantages to the clubs”* (51 year old female cricket club member).

Attracting new members – male and female tennis club members:

- Older adults want **flexibility in hiring tennis courts**, but do not want to become sport club members, despite that becoming a member is cheaper in the long term
- Older adults often have **competing priorities** with other activities.

Creating the right balance in a club – male cricket club members:

- If **too many older adults play in a team**, younger players’ cricket development may be blocked
- If a club has too many older adults on the committee or in volunteering roles for too long, the **club may stagnate**, and sport clubs need to ensure their club remains progressive.

Barriers for SOs: Non-sport club members

Non-sport club members discussed **risk management** and an **emphasis on competition** as key barriers of older adults participating in sport for SOs.

Risk management (resources, insurance & external partners) – male and female non-club members:

- A sport club’s **insurance policy is typically unlikely to cover older adults**, as most sport clubs take out minimal, low cost cover which would probably include an age limit
- Whilst certain insurance is likely to cover older adults, having older adults members could require more paperwork and **could result in higher premiums**
- Sport clubs **may not want to spend extra time on insurance paperwork**, as they are predominantly run by volunteers; clubs may therefore be less inclined to encourage older adults to become members.

Emphasis on competition – male and female non-sport club members:

- **Clubs often focus on competition**, and therefore may not want members who cannot adhere to high playing standards
- Although competitiveness may decrease with age, **some clubs are overly competitive**, which may deter older adults to play sport.

Summary of barriers for Sporting Organisations

SOs, sport club members and non-sport club members discussed different barriers for SOs to increase sport participation in older adults. **Risk management** was the most frequently discussed barrier. A **focus on other age groups and elite level** was only discussed by the NSOs. The sport club members felt there were few barriers for SOs, however they did discuss the difficulty in attracting new members. Non-sport club members felt that the emphasis on competition at some sport clubs was a potential barrier to participation.

Risk management was discussed by SOs and non-sport club members. The discussion focused on **the inclusion of older adults in insurance policies** and the **cost of insurance**. Further research is required to determine if these are perceived or actual barriers. If they are actual barriers, then SOs would need to look into insurance policies and see if they can be changed in the future. If they are perceived barriers, sport clubs and potential older adult participants need to be made aware of these misconceptions.

NSOs are focused on other age groups, and an important aim for them is to increase **youth participation**. TA and CA stated that the focus on **finding their next 'superstar'** and ensuring **lifelong fandom** through involving people at a young age, are both potential barriers that could negatively affect time and resources to promote or increase older adults' sport participation. However, older adults tend to be the primary volunteers within sport clubs (benefits section, page 49). Volunteers are essential for most sport clubs and are likely to contribute to the capacity of those clubs to provide both elite pathways and grassroots participation opportunities for younger players. So whilst it currently may be unlikely that older adults will become the principal participation focus of SOs, older adults are an important population group for SOs to consider, both as players to increase overall participation numbers and to contribute towards volunteering.

Sport club members felt that there were very few risks for SOs, but that it was **difficult to attract new members**. They stated that older adults wanted flexibility in hiring facilities, and therefore did not want to become a club member. This suggests that the **current club membership structure may not suit older adults who want to start playing club sport**.

Non-sport club members felt that sport clubs had an emphasis on competition. They felt that **clubs were often overly competitive** and may not want older adults who could not adhere to high playing standards. This would suggest that **many sport clubs do not have opportunities for social play that older adults could participate in**.

Another potential barrier for SOs discussed by male cricket club members was **creating the right balance between younger and older players in a club**.

Strategies to increase sport participation

The third aim of this study was to identify current age specific sport opportunities for older adults and potential modifications to promote sport participation in this population group.

Current age specific sport opportunities for older adults

NSOs, sport club members and non-sport club members discussed different opportunities. Current sport opportunities for older adults that were discussed included **formal programs** and **informal modifications (Table 13)**. There were some differences between male and female sport club members and non-sport club members.

Table 13: Current age specific sport opportunities for older adults

Sport opportunities		NSOs		Sport club members		Non-sport club members	
		Tennis	Cricket	Male	Female	Male	Female
Formal programs	Masters competitions	√	√			√	
	Seniors' Cricket		√				
	Twenty20 cricket			√	√		
	ITF Tennis Xpress Program	√					
	ITF Tennis Seniors	√					
	Rusty Rackets	√					
	Cardio Tennis	√					
	Next Generation	√					
	Seniors Tennis (Old Man's Tennis)			√			
	Golden Oldies cricket		√				
	Veterans Cricket			√			
Informal modifications	Internal club rule changes			√	√		√
	Club fun days			√	√		
	Social outings/ intergenerational activities				√		

* Order based on the number of focus group interviews in which the opportunities were discussed

Age specific sport opportunities: NSOs

Tennis Australia (TA) and Cricket Australia (CA) discussed current **formal programs** that they promote or support.

Formal programs – TA and CA:

- **Masters competitions** are held for indoor and outdoor versions of cricket. **Tennis Seniors Australia** provides a program of playing opportunities for players aged 35-80+ years
- The **International Tennis Federation's (ITF) Tennis Xpress Program** provides beginner sessions for new adult players, or for adults who are returning to the game
- The **ITF Tennis Seniors program** is the formal overage program with national and world ranking events in Australia, and social events/competitions around Australia

- The **Rusty Rackets** program (in South Australia) is a social tennis program for older adults who want to build their confidence in playing tennis
- The **Cardio Tennis program** has mixed aged groups, but is popular with older adults, as there are decompressed balls and smaller racquets (to cater for lower skilled players). It also has an emphasis on having fun, rather than on competition
- **Next Generation Fitness Centres** run tennis programs that offer social play opportunities, intra club championships and coaching sessions for older adults who are members of their centres
- The **Seniors Cricket** program has matches in the on and off season. The players often travel to interstate competitions with their partners and use cricket as an opportunity to socialise with people their own age
- **Golden Oldies cricket** is a one week annual global cricket festival for people over 35 years.

None of these programs are reported to be run within the traditional NSO structure. However, the ITF programs and the Tennis Seniors Australia programs are supported by TA. Similarly, the cricket programs mentioned are often supported by CA.

Age specific sport opportunities: Sport club members

Tennis club members predominantly discussed **informal modifications** and cricket club members discussed **formal programs**. There were no differences in the programs discussed by the male and female sport club members.

Formal programs – male and female tennis and cricket club members:

- The **Seniors Tennis** program was introduced six years ago by either Tennis Victoria or TA. The program was open to all tennis clubs, and the NSO/SSO provided marketing materials and tennis balls. This program developed into ongoing '**Old Man's Tennis**' sessions, which is the informal and social program for older adults at the tennis club of which some of the focus group interview participants are a member of
 - **Veterans' (Vets) cricket:**
 - Run by the **Victorian Over 60s Cricket Association**
 - Consists of one day games of 36 overs, in which each player bowls a maximum of six overs, and each batsman has to retire after hitting 40 runs
 - There is a **reduced frequency of matches**, with one game every two weeks, and the heat rule is lowered to 35 degrees compared to 38 degrees in affiliated adult competitions
 - Some veterans' cricket teams also make **informal modifications** to the sport. For example, one team does not participate in training sessions, and another team changes the batting order for each game, to ensure that every player has the opportunity to bat throughout the season
 - Whilst these matches still provide a competitive edge, the matches differ from affiliated adult competitions
 - **Twenty20 cricket** is a CA registered program for all ages. Whilst it may be suitable for mixed aged teams, it is potentially too physically intense for a team consisting of purely older adults.
- *"Vets is really, really big on social", as both captains give speeches at the tea break (57 year old male cricket club member).*

Informal modifications – male and female tennis club members:

- Clubs informally modified their training or competitive sessions for new players; for those who are less skilled; or for those who are less physically able, for example **underarm serving** or playing **American Doubles' Tennis**
- **Club fun days** were **assisted by Tennis Victoria**, through general advertising and the provision of merchandise, such as key rings and balloons. However these club fun days were available for all ages, and their purpose was to increase club membership generally
- The non-playing aspects of retaining older adults, such as the organisation of **social outings** and the development of **family/intergenerational activities** within the club, are important to attract older adult members.

Age specific sport opportunities: Non-sport club members

The non-sport club member groups were aware of a number of sport opportunities for their peers. However, they had not undertaken any themselves for various reasons, as discussed in the barriers section on page 56. The male non-sport club members discussed **formal programs that have been created by NSOs/SSOs**, and the female non-sport club members predominantly discussed informal opportunities at **sport clubs**.

Formal modifications – male non-sport club members:

- **Masters competitions**
 - **Age specific competitions for AFL and Soccer**: shorter matches, fewer matches, reduced playing intensity, and no offside rules for soccer.

Informal modifications – female non-sport club members:

- **Local bowling club** that ran barefoot bowls taster sessions for non-club members
 - Short competitions, with a club member in charge of each team, so that **potential new members are introduced to someone involved within the club**
 - Participants **did not require specialised footwear**, which negated another potential barrier to participation
- **Local rowing club** that ran come-and-try sessions for non-club members
- **Local croquet club** ran open taster sessions.

Only some non-sport club members were aware of sport opportunities or programs for older adults. This emphasises a need for specific marketing for this population group.

Summary of current age specific sport opportunities

Whilst the focus group interviews focused on current tennis and cricket opportunities, a number of participants also discussed other age specific sport opportunities. The main opportunities discussed across all eight focus group interviews were **formalised programs** and **informal modifications**.

Formal programs for older adults were mainly discussed by the NSOs, but also very briefly by the male and female tennis and cricket club members, and the male non-sport club members. Although some sport club members and some non-sport club members were aware of current sport opportunities, most of them were **unaware of the available formal playing opportunities**. So whilst it may not be advisable to employ a wholly 'top down' approach to increasing opportunities for older adults to play sport, it would appear that there needs to be a **more coherent approach** from NSO/SSOs to ensure that available programs are well publicised to sport clubs.

Also these formal programs and organisations often appear to be **outside of the traditional NSO structure**. Therefore it may be more difficult to sustainably grow sport participation for older adults through these external organisations long term. One NSO felt that the partnerships with these types of organisations needed to be developed to build trust on both sides. However, they considered that some of these organisations may want engagement and support from the NSO, but may be reluctant to pay affiliation fees. **Building these relationships and trust requires time and resources, such as funding and staff capacity, from a NSO**. This would need to be taken into consideration by senior management teams when looking to develop long term strategic engagement plans with non-NSOs that offer programs for older adults.

Informal modifications were discussed by the sport club members and non-sport club members. It would appear that sport clubs often **informally modify** their sport's structure or make minor rules changes to cater for their older members' needs. This is a **'bottom up' approach**, where sport clubs are the primary driver. Examples of these modifications include the barefoot bowls and rowing taster sessions, which were mentioned by the non-sport club members. These examples demonstrate that the development of initiatives to increase older adults' sport participation is possible, provided there is capacity and passion within a sport club. **Sport clubs play a vital role in increasing sport participation in** older adults, but are often constrained by capacity limitations. So whilst some sport clubs are able to modify sessions for older adults, this may not be achievable for other clubs. Consequently, **sport clubs need to be supported by NSO/SSOs** to improve the sporting landscape for older adults. In turn, **NSO/SSOs are likely to need funding in order to increase their support**.

Potential modifications to increase participation

The final issue discussed was potential modifications that could be made to sport to increase participation in older adults. The common modifications discussed by NSOs, sport club members and non-sport club members were: **developing external partnerships, modifying/expanding existing programs, increasing opportunities for social and informal play, and minor rule amendments (See Table 14).**

Table 14: Potential modifications to increase sport participation for older adults*

Potential modifications	NSOs		Sport club members		Non-sport club members	
	Tennis	Cricket	Male	Female	Male	Female
Develop external partnerships	√	√	√	√	√	
Modify/expand existing programs	√	√			√	√
Increase social/informal play opportunities	√	√			√	√
Minor rule amendments	√		√		√	√
Marketing changes	√	√		√		
Membership/cost changes		√			√	√
Promote age appropriate sports					√	√

* Order based on the number of focus group interviews in which the modifications were discussed

Potential modifications to increase participation: NSOs

Research by Cricket Australia (CA) showed a need to engage players at an early age, as adults are less likely to start playing cricket as a new sport. As a result their potential modifications **focused on retaining existing players**. Also, CA felt that older adults prefer the traditional cricket game and would not want any major rule/structural amendments. In contrast, Tennis Australia (TA) felt that some minor rule amendments could be applicable to tennis.

- *“We regard fans in that age bracket as the test fans and the purists, and they’re very much into the traditional side of the game” (29 year old female CA participant).*

Develop external partnerships – TA and CA:

- **Work collaboratively** with external organisations, such as community organisations and senior organisations, to develop and deliver tennis programs
- Further develop the partnership with **‘The Lord Taverners Australia’** Association to include older adults as a target group to work with.

Modify/expand existing programs – TA and CA:

- The existing **Cardio Tennis** program could be modified for older adults
 - Develop **specific sessions** for older adults
 - **Modify aspects of the session**, so all ages and different skill levels could participate
 - **Emphasise fun**, rather than competition
 - Specifically **market sessions for older adults**
- Develop **Fast 4** (shortened version of tennis for time poor adults) for older adults
- Consider expanding **indoor cricket**
 - The game would **remain relatively informal**
 - It would involve **scoring and rivalries** to keep competitiveness, but could be played with **unwritten rules**, such as fairer play, to compensate for age.

Increase social/informal play opportunities – TA and CA:

- Introduce more **social and informal play opportunities** within sport clubs
- **Reduce the frequency of matches**, for example have one match per month, which would negate the issue of time constraints.

Marketing changes – TA and CA:

- Provide more **overt marketing** for older adults
- A **strong advertising and marketing campaign** would be needed for any new program that emphasised the social and physical health benefits, as well as the intergenerational benefits of sport participation.

Minor rule amendments – TA:

- There is an opportunity for shorter games, slower balls, smaller rackets, smaller courts and lower nets.

Membership/cost changes – CA:

- Introduce greater flexibility with club memberships.

Potential modifications to increase participation: Sport club members

The potential modifications that were discussed by sport club members largely reflected the opinions of their respective NSOs. For example, major rule amendments were not considered appropriate by cricket club members. Developing **external partnerships** was discussed by tennis members only, whereas **minor rule amendments** and **marketing changes** were discussed by cricket members only.

Develop external partnerships – male and female tennis club members:

- Tennis clubs could **liaise with nearby tennis clubs** to organise more joint competitions. This could diversify their sessions and increase participation in tennis
- Tennis clubs could work with their club coach to **offer more coaching sessions** for adult beginners
 - **Regional sessions** could be set up in **partnership with local councils**
 - These sessions, **aimed at new/beginner adults** or those who are **lacking confidence**, could be run by a tennis coach
 - The coach would be able to assess players' abilities and direct competent players straight into sport clubs, and then run more sessions for those who need further support.

Minor rule amendments – male cricket club members:

- One option is to reduce the **size of the cricket boundary**. This has been undertaken at veterans' level, but only on an ad hoc basis.

Marketing changes – female cricket club members:

- **Current sport opportunities should be marketed appropriately**, for example, to **emphasise** the sessions' **friendly atmosphere** and the **exercise element** of the sessions.

Potential modifications to increase participation: Non-sport club members

Non-sport club members suggested many modifications that could be made to increase sport participation in older adults (**Table 14, page 66**). Male non-sport club members discussed **developing external partnerships**, but this was not discussed by female non-sport club members.

The female non-sport club members felt that sport clubs should **put in more effort to attract older adults**. Some sports, such as barefoot bowls and golf, both perceived as **traditional older adult sports**, have already done this. However, these **sports can be perceived as not very interesting**. The female non-sport club members felt that other sports could be more interesting to play, and would like those sports to put in more effort to engage older adults.

Modify/expand existing programs – male and female non-sport club members:

- **Involve parents within their children’s sessions** to encourage parents to become physically active
 - England Netball’s **Back 2 Netball** program is targeted at all adults, but some netball clubs run specific sessions for parents at the same time as their daughters’ netball sessions
- Clubs could provide training sessions only, without associated competition
- Modify contact sports so that more emphasis is placed on options to score points through actions that require **less physical contact**
- Use **modified sport programs** that already exist for children, such as **AusKick**
- Introduce club/multisport **taster sessions**
 - Sport clubs could offer their sport as part of a wider community event, which would give older adults the opportunity to try a sport before deciding which club to join.

Increase social /informal play opportunities – male and female non-sport club members:

- Emphasise the **social and fun element** of sport
- Still **maintain an element of competition**, but place less emphasis on competitive sport
- **Indoor sport** should be promoted
 - There is generally **less running and less physical contact in indoor sport**. Also indoor sport promotes social sport; and the equipment is usually modified, such as softer cricket balls
 - However **age appropriate indoor sport competitions** need to be introduced, as most indoor sport is currently for adults of all ages
- **Reduce the frequency of games.**

Minor rule amendments – male and female non-sport club members:

- **Reduce the level of physical contact** in sport
 - Contact sports incur more injuries and are harder to modify
 - Older adults no longer want to play contact sports
- **Promote less physically exertive sports** that require less running
- **Introduce generic rule amendments**, such as reducing pitch/court sizes, shortening game length and modifying the scoring
- **Introduce sport specific amendments**; examples for basketball include a smaller court, a smaller ball and lowering the hoops.

Membership/cost changes – male and female non-sport club members:

- Older adults could **participate on a casual basis** without commitment, and have **flexible memberships**
 - **Introduce a monthly direct debit seniors' membership**, so the **cost is spread out over the year**. This direct debit would only be available for older adults to specifically attract this age group. Target groups that do not necessarily need incentives, such as children, would still be required to pay upfront to ensure the sport club has sufficient funds to successfully operate
 - **Introduce reduced fees during off peak hours**, similar to gyms and fitness centres.

Promote age appropriate sports – male and female non-sport club members:

- Examples of these sports include badminton, cricket, cycling, kayaking, swimming, rowing, table tennis, tennis, ten pin bowling and volleyball
 - **Key elements** of these sports include a **lack of physical contact, low impact** and the **potential to modify equipment**
- Sport could be used to **provide an upper body workout** for older adults. Many older adults already engage in cardiovascular physical activity, such as walking, so sport could provide physical activity that engages the upper body.

Develop external partnerships – male non-sport club members:

- Sport clubs could **partner with other community programs**
 - Use the Sons of the West project (a health promotion program run by an AFL club in Melbourne) as an example
 - Offer taster sessions to increase the awareness of playing opportunities at local sport clubs
 - Explore the feasibility of including an educational component to sport sessions.

Summary of potential modifications to increase participation

The most frequently discussed modifications included **developing external partnerships, modifying/expanding existing programs, increasing social/informal playing opportunities** and **minor rule amendments**.

There are opportunities for SOs to **work with external partners**, such as neighbouring sport clubs, non-sport community or seniors organisations, or charitable organisations to increase older adults' sport participation. A successful example of this is the Rusty Rackets program run by Tennis South Australia and Active Ageing Australia (page 63). The development of external partnerships could also negate the capacity issues that were previously discussed as a SO barrier to increasing sport participation in older adults.

Modifying or expanding existing programs, and/or **developing external partnerships**, would provide opportunities for SOs to develop and implement sport opportunities for older adults. One opportunity could be to use **appropriate modifications of programs that already exist for other population groups**, such as modified sports for children or Cardio Tennis. Whilst modifying/expanding existing programs, or developing external partnerships would still require significant commitment from SOs initially, there would be fewer long term resources needed.

Increasing social or informal playing opportunities was discussed by the two NSOs and also the non-sport club members. Examples included **emphasising the social and fun element of sport**, further **developing indoor sport** (specifically to introduce age specific competitions) and **reducing the frequency of matches**. **Minor rule amendments** were also discussed by TA, male sport club members and male and female non-sport club members, though these tended to be sport specific. Therefore, to increase participation in older adults across a range of sports, individual **sports could identify and choose the aspects of their sport that could be most feasible and attractive to modify**.

Marketing changes, changes to membership options and **membership costs** and the **promotion of age appropriate sports** were also discussed by NSOs, sport club members and non-sport club members as potential modifications to increase sport participation in older adults.

References

1. **Central Queensland University. Australian Health and Social Science Panel Study.** Accessed September 2014 from [<http://www.cqu.edu.au/research/research-organisations/institutes/health-and-social-sciences/centres2/population-research-laboratory/research/australian-health-and-social-science-panel-study>]
2. **Australian Sports Commission. Exercise, Recreation and Sport Survey.** Accessed February 2014 from [<http://www.ausport.gov.au/information/casro/ERASS>]
3. Caspersen CJ, Powell KE, Christenson GM: **Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research.** *Public health reports (Washington, DC : 1974)* 1985, **100**(2):126-131.
4. Bauman A, Phongsavan P, Schoeppe S, Owen N: **Physical activity measurement--a primer for health promotion.** *Promotion & education* 2006, **13**(2):92-103.
5. **Australian Sports Commission. ASC recognition. What is defined as a sport?** Accessed February 2014 from [http://www.ausport.gov.au/supporting/nso/asc_recognition]
6. **World Health Organization. Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June 1946, and entered into force on 7 April 1948.**
7. Brown WJ, Bauman AE, Bull FC, Burton NW: **Development of Evidence-based Physical Activity Recommendations for Adults (18-64 years).** *Report prepared for the Australian Government Department of Health.* August 2012.
8. Lee IM, Shiroma EJ, Lobelo F, Puska P, Blair SN, Katzmarzyk PT, Lancet Physical Activity Series Working G: **Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy.** *Lancet* 2012, **380**(9838):219-229.
9. **Australian Bureau of Statistics: 4364.0.55.004 - Australian Health Survey: Physical Activity, 2011-12.** 2013.
10. Khan KM, Thompson AM, Blair SN, Sallis JF, Powell KE, Bull FC, Bauman AE: **Sport and exercise as contributors to the health of nations.** *Lancet* 2012, **380**(9836):59-64.
11. Eime RM, Young JA, Harvey JT, Charity MJ, Payne WR: **A systematic review of the psychological and social benefits of participation in sport for adults: informing development of a conceptual model of health through sport.** *The international journal of behavioral nutrition and physical activity* 2013, **10**:135.
12. Eime RM, Sawyer N, Harvey JT, Casey MM, Westerbeek H, Payne WR: **Integrating public health and sport management: Sport participation trends 2001–2010.** *Sport Management Review* 2015, **18**(2): 207-217.
13. Brown WJ, van Uffelen JGZ: **Action area 10: Older people. In: Blueprint for an active Australia.** 2nd edn. Melbourne: National Heart Foundation of Australia; 2014.
14. Commonwealth of Australia: **National sport and active recreation policy framework.** Canberra; 2011.
15. Merom D, Bauman A, Ford I: **The public health usefulness of the exercise recreation and sport survey (ERASS) surveillance system.** *Journal of science and medicine in sport / Sports Medicine Australia* 2004, **7**(1):32-37.

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