



Charles Sturt  
University

Final report

# A Snapshot of the Man Walk

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*The Man Walk is simplistic in its concept but extremely powerful in its execution of connecting men, normalising conversations and encouraging mateship.*

Man Walk participant

”

# 1 Executive summary

## 1.1 STUDY OVERVIEW

The Man Walk is a free, nationwide Australian program that supports men's health through inclusive group walks. This study used online surveys to assess participant characteristics and health outcomes.

## 1.2 KEY FINDINGS

A total of 377 men completed the survey. Most were aged 55 and over, partnered and had completed post high school education.

Walking was most frequent among long-term participants and those from lower-middle socioeconomic backgrounds. Less frequent walking was associated with at-risk drinking. Anxiety symptoms were less common in older adults and immigrants, while depression was less prevalent among university-educated and long-term participants but strongly linked to social loneliness and chronic illness.

Emotional loneliness was more common among middle-aged, unpartnered, and anxious men, but less so among those with higher education. Social loneliness was less prevalent in regional areas but closely linked to depression. At-risk drinking was less frequent among older adults, regular walkers, and regional residents, but more common in higher socioeconomic groups.

Older participants reported higher self-rated health, though scores were lower for those experiencing depression, emotional loneliness, or chronic illness. Open-ended responses revealed that participants perceived social, mental, and physical health benefits from the Man Walk, often viewing these as interconnected.

## 1.3 CONCLUSION

The Man Walk is a community-based program that effectively fosters social connection, routine, and wellbeing, especially for older men and those in regional and lower socioeconomic areas. Its informal, accessible approach likely engages men who might not use traditional health services. Retaining participants is key for lasting benefits, so the program should continue prioritising social connection through healthy activities. The model is scalable, and future research should explore its long-term impacts.



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## 2 Background

There is an extensive body of literature describing the positive impact of physical activity on both physical and mental health (1, 2). For example, a meta-analysis of eight studies indicated that walking had a significant, large effect on the symptoms of depression (3). Similarly, according to the World Health Organization (2019), risk for depression can be reduced by up to 45% by increased physical activity.

In 2020–2022, approximately 21.5% of Australians aged 16–85 experienced a mental disorder within the past 12 months (4). For men, common issues include anxiety (10.6%) and depression (7.8%) (4). Men are less likely to seek help compared to women (5), and in 2020–2022, only 12.9% of Australian men saw a health professional for their mental health (4). In addition to the connection between mental health and physical health, there is a strong, well-documented connection between mental wellbeing and social connectedness (6), and strong social relations has been shown to be a protective factor for mental wellbeing (7).

Community-based interventions are well-placed to facilitate physical activity and social connectedness increase physical activity and improve mental health (8, 9). One Australian community-based initiative, The Man Walk, has gained popularity and aims to promote mental health and well-being among men through structured physical activity and social interaction.

Participants in The Man Walk meet at set locations and times for group walks. These sessions are inclusive, accessible, and free, encouraging men of all ages and backgrounds to join. The Man Walk operates at over 80 locations nationwide, with more than 135,000 registered participants. Walks are held in major cities, regional, and remote areas, and are promoted through social media and local organisers. To participate, men simply attend a scheduled walk and no registration is required. Organisers, known as “Manbassadors,” are present to welcome and support new members. Further information can be found on the Man Walk [website](#).

Despite the potential benefits, there is limited information on The Man Walk cohort or any indications of the initiative’s impact. Research is required to explore this community-led program. This study aims to describe the cohort of Man Walk participants, including their level of participation, chronic illness status, mental health, general health, and the perceived benefits of the program.

## 3 Methods

Given the limited understanding of ongoing engagement in The Man Walk initiative, this study employed a repeated cross-sectional observational design. An online survey was conducted at two time-points, 3 months apart, to identify the characteristics of the Man Walk cohort.

### 3.1 SURVEY ADMINISTRATION

The self-administered survey was delivered via Qualtrics in March 2025 and again in July 2025, with each round open for two weeks. To encourage participation, respondents were entered into a prize draw to win one of 20 items, including an Apple iPad, Man Walk merchandise, or BCF gift vouchers.

### 3.2 PARTICIPANT ELIGIBILITY

To be eligible for participation in the study, individuals were required to be either current or former participants of the Man Walk. Participants also needed to be at least 18 years of age and willing to complete a survey focused on their health and involvement in the Man Walk initiative. The only exclusion criterion was age-related – individuals under the age of 18 were not eligible to take part in the study.

### 3.3 PARTICIPANT RECRUITMENT

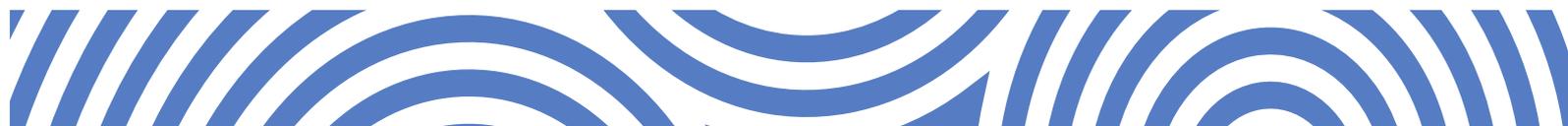
Recruitment was conducted through social media posts by the Man Walk founder (Mark Burns), which included a link to the survey. Additionally, during the survey periods, attendees at Man Walk locations were invited by organisers (or “Manbassadors”) to complete the survey on their mobile phones before or after their walk.

### 3.4 SURVEY INSTRUMENTS

The survey collected data on participants’ demographics, self-reported height, weight, diagnosed chronic conditions, their length of involvement in the Man Walk, and attendance frequency.

Respondents were asked to rate their agreement with three statements about the perceived benefits of the Man Walk program using a five-point Likert scale (ranging from strongly disagree to strongly agree):

1. “The Man Walk is good for my physical health,”



2. “The Man Walk is good for my mental health,” and
3. “The Man Walk helps me meet and connect with people in my community.”

Participants were also asked about their interest in attending educational sessions focused on mental health, using the same five-point Likert scale.

In addition, the survey included two open-ended questions inviting participants to share their reasons for joining the program and any additional comments they wished to provide.

The following validated health and wellbeing measures were also included:

### **3.4.1 Patient Health Questionnaire-4 (PHQ-4) (4-items)**

The Patient Health Questionnaire for Anxiety and Depression (PHQ-4) is a brief screening tool used to identify individuals who may be experiencing significant symptoms of anxiety or depression. It consists of four items: two related to anxiety and two related to depression. Each item is rated on a 4-point Likert scale ranging from 0 (Not at all) to 3 (Nearly every day) (10). An example question from the tool is: “Over the last two weeks, how often have you been bothered by feeling nervous, anxious or on edge?” A combined score of  $\geq 3$  on the first two questions suggests the presence of anxiety symptoms. A combined score of  $\geq 3$  on the last two questions suggests the presence of depression symptoms. The total score across all four items can be used to categorise overall psychological distress as normal, mild, moderate, or severe (10).

### **3.4.2 De Jong-Gierveld Loneliness Scale (6 items)**

The De Jong-Gierveld Loneliness Scale is a validated tool designed to assess overall loneliness, as well as its two distinct dimensions: emotional and social loneliness. Emotional loneliness reflects the absence of a close, intimate relationship, while social loneliness refers to a lack of a broader social network or group of friends (11). Respondents answer using a 3-point scale - “yes,” “more or less,” or “no” - to indicate agreement with various statements. Scores are interpreted such that higher values indicate greater levels of loneliness (11).

### **3.4.3 Alcohol Use Disorders Identification Test-Consumption (AUDIT-C) (3-items)**

The AUDIT-C is a validated screening tool designed to identify individuals who are engaging in hazardous alcohol consumption (12). It consists of three questions that assess 1) frequency of drinking, 2) quantity of alcohol consumed, and 3) frequency of heavy drinking episodes. Each question is scored from 0 to 4, resulting in a total score ranging from 0 to 12.

Individuals who report no alcohol use in the past year typically score 0, indicating no current risk. Those with low-level use, scoring 1 to 3 for men and 1 to 2 for women, are generally considered to be drinking within safer limits. A score of 4 for men or 3 to 4 for women suggests mild alcohol misuse. Scores between 5 and 8 reflect moderate alcohol misuse, a range where individuals often exceed recommended drinking limits and may begin to experience negative health effects. Finally, scores from 9 to 12 indicate severe misuse, typically associated with significantly elevated alcohol intake (13).

#### **3.4.4 Self-rated health scores - EQ-5D-5L Visual Analogue Scale (VAS)**

This single-item measure asks participants to rate their overall health on the day of the survey using a vertical visual scale ranging from 0 to 100. A score of 100 represents the best health the respondent can imagine, while 0 represents the worst health imaginable. Participants are instructed to mark the point on the scale that best reflects their perception of their health “today” (14).

### **3.5 DATA ANALYSIS**

#### **3.5.1 Outcome analysis**

All analyses were conducted using the R statistical software (version 4.5.1). Descriptive statistics were first applied to characterise participants by sociodemographic and health-related factors, including age, educational attainment, employment status, marital status, country of birth, weekly income, duration of program participation, BMI category, and presence of chronic disease. Participants’ perceptions of the Man Walk were assessed using Likert scale survey items, with responses summarised as frequencies and percentages to illustrate levels of agreement with statements related to physical health, mental health, and social connectedness. Health and wellbeing outcomes were measured using validated instruments: the PHQ-4 for anxiety and depression, the De Jong-Gierveld Loneliness Scale for social isolation and loneliness, and the AUDIT-C for alcohol use. Scores were calculated in line with their respective guidelines and categorised to determine the prevalence of anxiety, depression, loneliness, and at-risk drinking. To examine factors associated with health and wellbeing outcomes, multivariable regression analyses were performed. Binary logistic regression was applied to dichotomous outcomes such as anxiety, depression, and risky drinking, while linear regression was used for continuous outcomes, including self-rated health. Results are presented as odds ratios (ORs) with 95% confidence intervals (CIs), providing estimates of both the strength and direction of associations.



### **3.5.2 Analysis of open-ended survey responses**

A quantitative content analysis was conducted on short, open-ended survey responses. Participants were asked two questions: 1) *“Why did you join the Man Walk?”* and *“Do you have anything else to add?”* Following an initial review of all responses by two members of the research team (NS and JA), it was determined that participant comments clustered around three broad themes: 1) reasons for joining the Man Walk, 2) benefits of participation, and 3) recommendations for program improvement. Descriptive categories were then inductively developed through repeated, collaborative readings of the data by NS and JA, allowing patterns to emerge organically. These categories were subsequently reviewed and refined in consultation with other members of the research team, and a codebook (see Appendix 7.1) was constructed to ensure consistent application. Where participants completed both survey questions, their responses, including specific phrases and complete sentences, were grouped together so that each individual represented a single unit of analysis. Coding was conducted using a dichotomous (presence/absence) approach, with a unique participant count applied, meaning each participant could contribute only one count per category, regardless of how many times that category appeared in their response. Because the categories were non-mutually exclusive, each participant’s response could be assigned to multiple categories to capture co-occurring categories. Response data was exported into Microsoft Excel. Two coders (NS and JA) reviewed a random sample of 37 participant responses, which represented 9.8% of the total number of participant responses. Responses were compared and intercoder reliability was calculated using Cohen’s Kappa. Cohen’s Kappa values showed substantial agreement between the two raters across most categories, particularly for “Provide support” ( $\kappa = 0.72$ ) and “Socialise” ( $\kappa = 0.71$ ), with all statistically significant ( $p < 0.001$ ). Agreement was perfect for “Irrelevant” ( $\kappa = 1.00$ ), while “Suggestions” showed no variability, resulting in  $\kappa = 0.00$  (see Appendix 7.2 for further information). Following the coding process, a frequency analysis was conducted to quantify the prevalence of each descriptive category across the dataset. This involved calculating the number and proportion of participants whose responses reflected each category.

# 4 Findings

## 4.1 SAMPLE DESCRIPTION

This analysis included a total of 377 participants from the Man's Walk program. The survey was conducted in 121 postcodes, with 57.6% from major cities, 29.8% from inner regional areas and the remaining 12.6% from outer regional and remote areas (see Appendix 7.3 for a full list of locations according to their remoteness classification).

As depicted in Figure 1, the distribution of participants across Australian states and territories showed that the majority were from the eastern states, with New South Wales contributing the largest proportion (134 participants, 35.9%), followed by Queensland (83 participants, 22.3%) and Victoria (62 participants, 16.6%). Together, these three states accounted for more than three-quarters of all participants. In contrast, the remaining states and territories had relatively small contributions, including the Northern Territory (9.4%), Western Australia (7.0%), the Australian Capital Territory (4%), South Australia (3.5%), and Tasmania (1.3%).

Among the 377 participants, the largest age group was those aged 65 years and over (35.1%), followed by 55–64 years (30.6%), with fewer in younger age groups (see Figure 2). Most had completed certificates or diplomas (41.8%) or tertiary education (30.1%), while smaller proportions had not completed Year 12 (16.2%) or had Year 12 only (11.9%). Over half were employed (56.0%), 39.2% were retired, and the majority were currently partnered (76.6%), born in Australia (76.0%), and reported an annual household income between \$45,001 and \$135,000 (51.4%).

As shown in Figure 3, about one-third had participated for 12 months or less (38.1%), with similar proportions involved for 1–3 years (31.1%) or more than 3 years (30.8%).

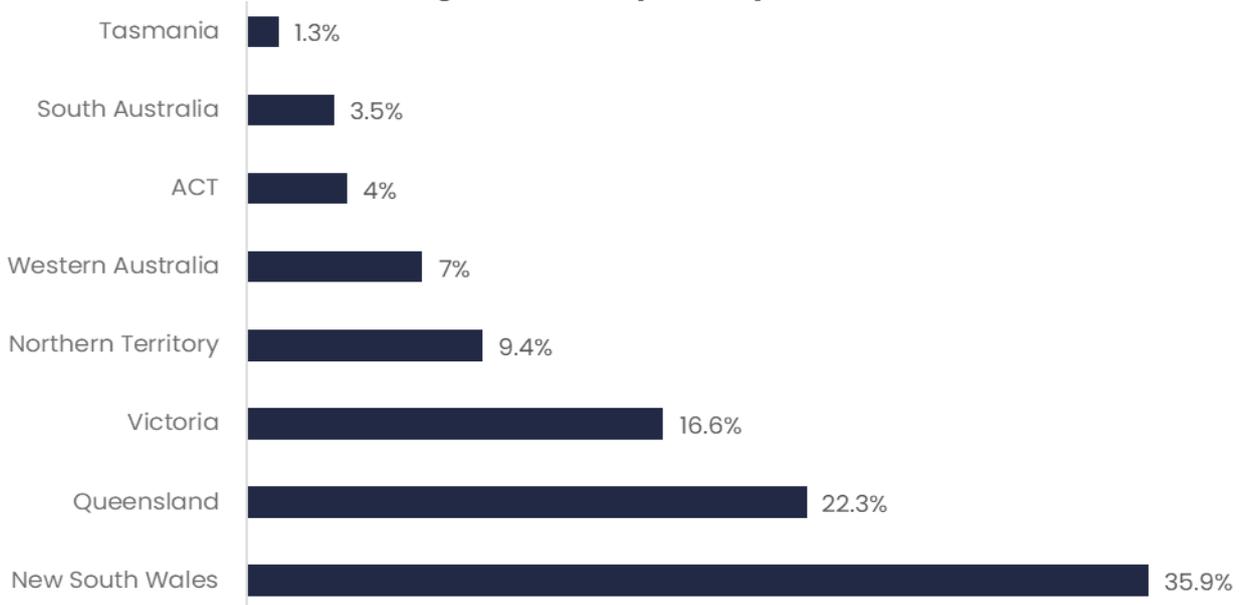
In terms of body mass index, nearly half were overweight (47.5%) and 39.9% were obese, with none underweight. Most identified as A Man Walk participants (75.9%), while smaller numbers were Manbassadors (14.9%) or others (6.9%). Most participants engaged in fewer than eight walks per month (81.0%), while 19.0% walked eight or more times. Specifically, participation levels were evenly split between 0–3 and 4–6 walks (39.1% each), with fewer attending more frequently (see Figure 4).

Interest in education was generally positive, with almost 60% agreeing to some extent, while only 9.6% expressed disagreement (see Figure 5). Regarding health, 41.3% reported no chronic conditions, 37.3% reported one, and 21.4% reported two or more.

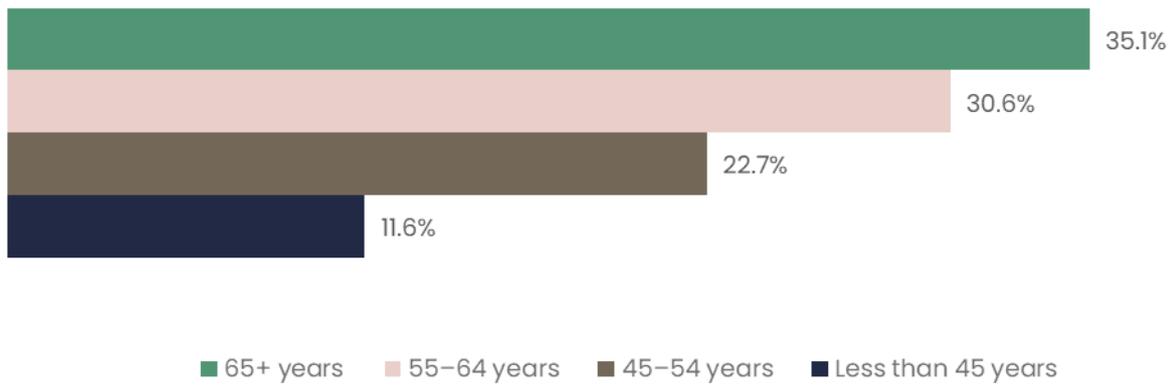


Socio-economic advantage was assessed using the Index of Relative Socio-economic Advantage and Disadvantage (IRSAD), where Quintile 1 (Q1) represents the most disadvantaged and Quintile 5 (Q5) the most advantaged. Socioeconomic distribution was fairly even, with 27.9% in Q4, 24.9% in Q3, 20.9% in Q5, 13.7% in Q1, and 12.6% in Q2 (see Figure 6).

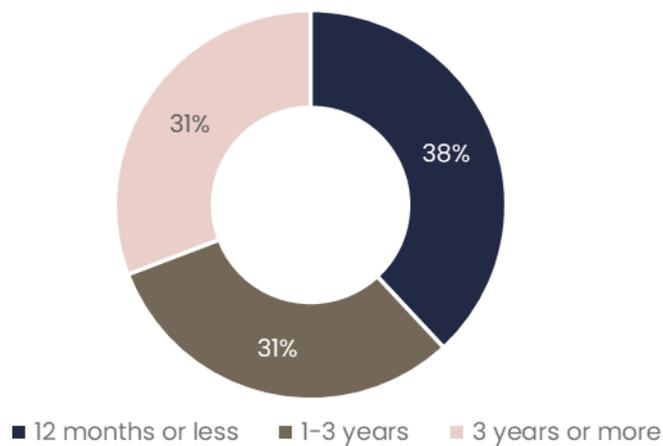
**Figure 1. Participants by state**



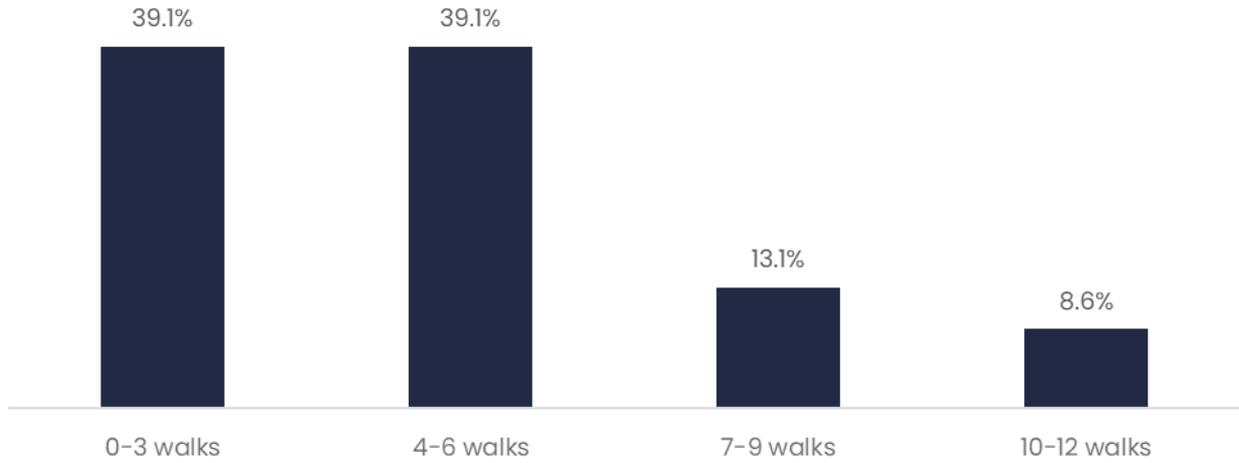
**Figure 2. Participant age**



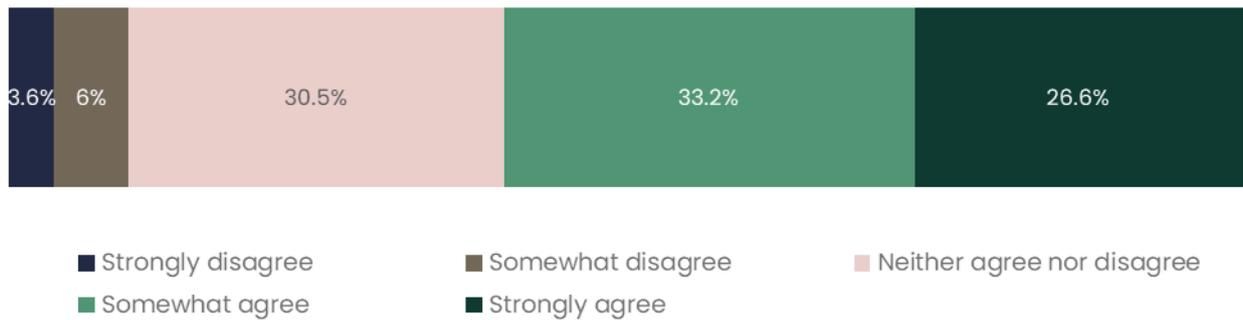
**Figure 3. Duration of participation in the Man Walk**



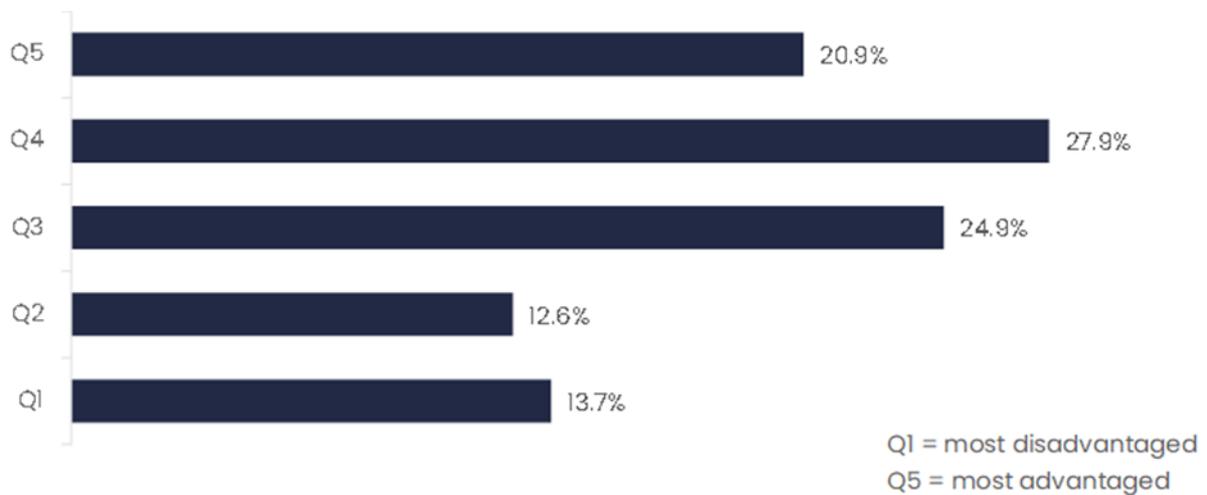
**Figure 4. Number of walks attended in the past month**



**Figure 5. Interest in mental health education**



**Figure 6. Socioeconomic distribution of participants**



**Table 1. Distribution of participants by sociodemographic characteristics**

<b>Characteristic</b>	<b>N = 377 n(%)</b>
<b>Age Group</b>	
Less than 45 years	41 (11.6%)
45–54 years	80 (22.7%)
55–64 years	108 (30.6%)
65+ years	124 (35.1%)
Missing	24
<b>Educational Status</b>	
Did not complete year 12	57 (16.2%)
Year 12 or equivalent	42 (11.9%)
Certificates or diploma	147 (41.8%)
Tertiary education	106 (30.1%)
Missing	25
<b>Employment Status</b>	
Employed	200 (56.0%)
Retired	140 (39.2%)
Not working	17 (4.8%)
Missing	20
<b>Marital Status</b>	
Currently partnered	271 (76.6%)
Not partnered	83 (23.4%)
Missing	23
<b>Country of Birth</b>	
Australia	272 (76.0%)
Not Australia	86 (24.0%)
Missing	19
<b>Income Status</b>	
Less than \$45,000	78 (26.4%)
\$45,001 – \$135,000	152 (51.4%)
\$135,001 and over	66 (22.3%)
Missing	81
<b>Duration of Participation</b>	
12 months or less	141 (38.1%)
1–3 years	115 (31.1%)
3 years or more	114 (30.8%)
Missing	7
<b>Body Mass Index (BMI) Category</b>	
Underweight	0 (0.0%)
Normal	41 (12.6%)
Overweight	155 (47.5%)
Obese	130 (39.9%)
Missing	51
<b>Mans Walk Participation Type</b>	
A Man Walk participant	286 (75.9%)
A Manbassador	56 (14.9%)
Others	26 (6.9%)
Prefer not to say	9 (2.4%)
<b>Number of Walks last month</b>	
0–3 walks	128 (39.1%)
4–6 walks	128 (39.1%)
7–9 walks	43 (13.1%)
10–12 walks	28 (8.6%)



Characteristic	N = 377 n(%)
Missing	50
<b>Interest in Education</b>	
Strongly disagree	13 (3.6%)
Somewhat disagree	22 (6.0%)
Neither agree nor disagree	111 (30.5%)
Somewhat agree	121 (33.2%)
Strongly agree	97 (26.6%)
Missing	13
<b>Chronic Disease Status</b>	
No condition	143 (41.3%)
One condition	129 (37.3%)
Two or more conditions	74 (21.4%)
Missing	31
<b>Remoteness</b>	
Major cities	215 (57.6%)
Inner regional	111 (29.8%)
Outer regional and remote	47 (12.6%)
Missing	4
<b>IRSAD<sup>1</sup></b>	
Q1	51 (13.7%)
Q2	47 (12.6%)
Q3	93 (24.9%)
Q4	104 (27.9%)
Q5	78 (20.9%)
Missing	4

<sup>1</sup> IRSAD: Index of Relative Socio-economic Advantage and Disadvantage; Q1 = most disadvantaged; Q5 = most advantaged

## **4.2 DESCRIPTIVES FOR ALL OUTCOMES**

### **4.2.1 Benefits of the Man Walk**

Figure 7 shows participants' perceptions of the Man Walk program across social, mental, and physical health benefits. Most participants strongly agree that the program helps them connect with others (76.7%) and supports their mental health (76.7%), with smaller proportions somewhat agreeing or neutral. Physical health benefits are also widely recognized, with 70.4% strongly agreeing and 26.3% somewhat agreeing.

### **4.2.2 Patient Health Questionnaire-4 (PHQ-4)**

Among the 377 participants, 17.5% reported anxiety symptoms and 14.7% reported depression symptoms (Figure 8). Figure 9 shows that overall psychological distress was most commonly in the no distress range (58.1%), with 29.5% mild, 8.5% moderate, and 4.0% severe.

### **4.2.3 De Jong-Gierveld Loneliness Scale**

Emotional loneliness was reported by 36.6% of participants, while social loneliness was even more common, affecting 52.2%. More than half of the participants (54.2%) were classified as generally lonely (see Figure 10).

### **4.2.4 Alcohol Use Disorders Identification Test-Consumption (AUDIT-C)**

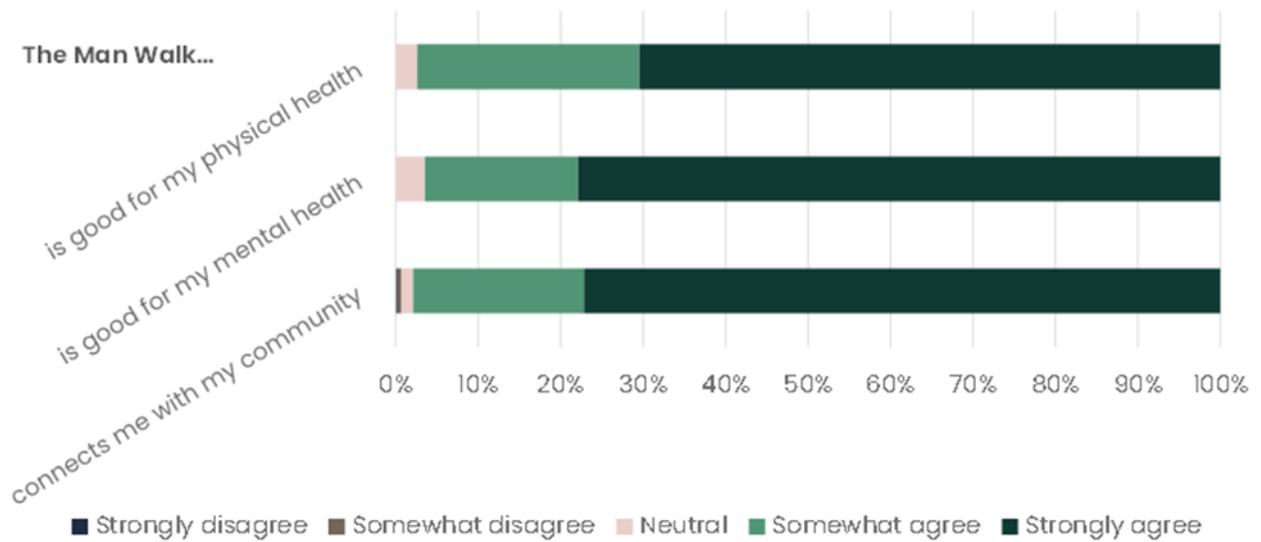
Alcohol use varied across the group: 13.4% reported no use and were at no risk of harm, 41.9% had low-level use (low risk), 14.8% occasional use (mild risk), 26.0% frequent use (moderate risk), and 3.9% reported significantly elevated intake, indicating high risk of alcohol-related harm (Figure 11).

### **4.2.5 Self-rated health scores - EQ-5D-5L Visual Analogue Scale (VAS)**

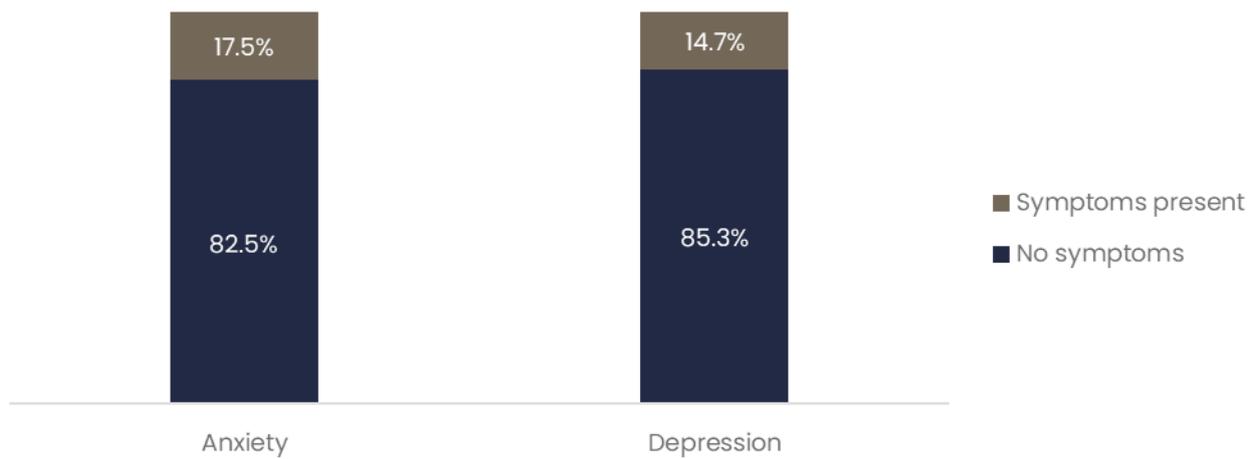
Self-rated health scores ranged from 2 to 100, with a median of 78 and a mean of 74.9, indicating generally high perceived health. The distribution was slightly right-skewed, with most scores between 68 and 85 and a few low outliers.



**Figure 7. Perceived benefits of the Man Walk**



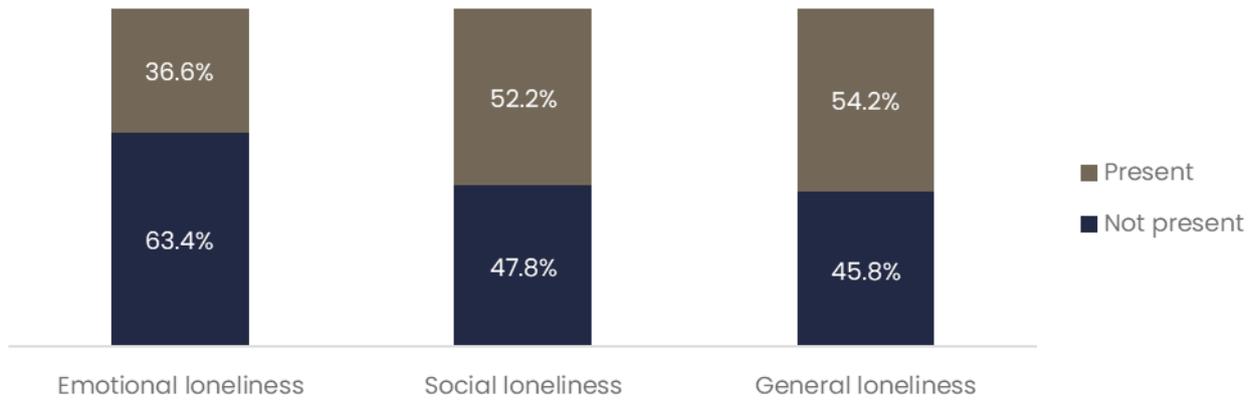
**Figure 8. Prevalence of depression and anxiety**



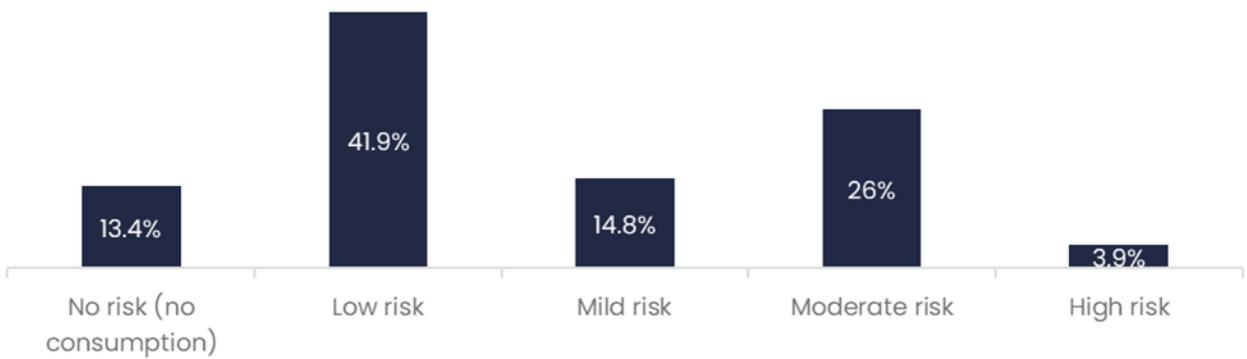
**Figure 9. Overall psychological distress**



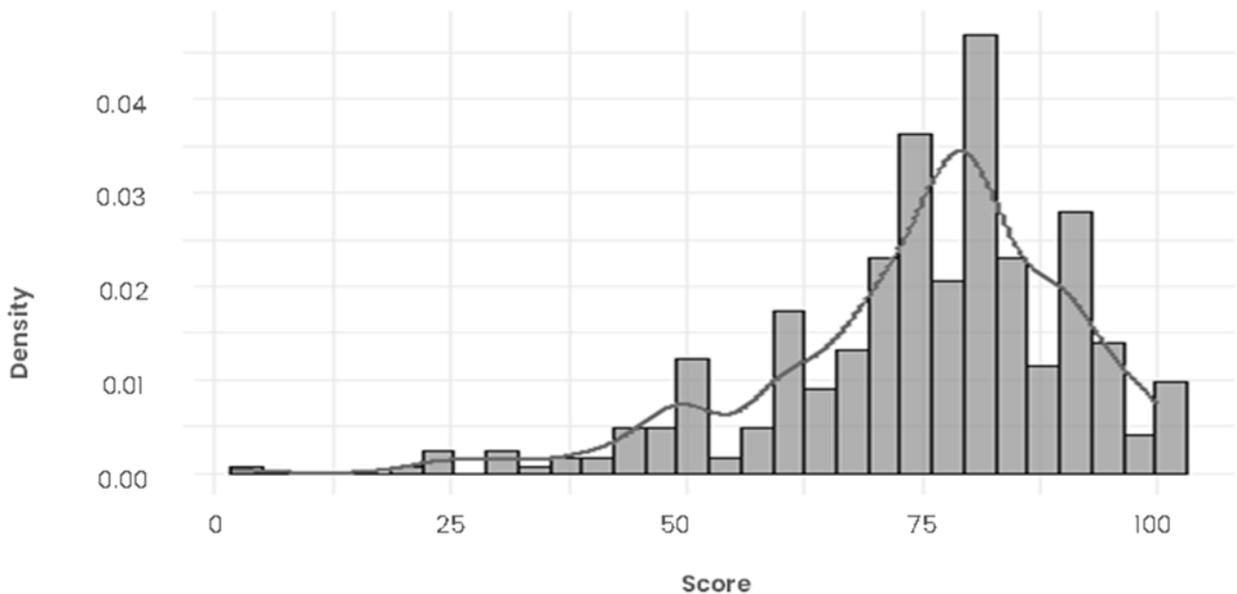
**Figure 10. Prevalence of loneliness among participants**



**Figure 11. Risk of alcohol-related harm**



**Figure 12. Distribution of EQ-5D-5L VAS scores**



**Table 2. Descriptives for all outcomes**

Characteristic	N = 377 n(%)
<b>Anxiety symptoms</b>	
No	297 (82.5%)
Yes	63 (17.5%)
Missing	17
<b>Depression symptoms</b>	
No	307 (85.3%)
Yes	53 (14.7%)
Missing	17
<b>Overall psychological distress</b>	
No distress	205 (58.1%)
Mild	104 (29.5%)
Moderate	30 (8.5%)
Severe	14 (4.0%)
Missing	24
<b>Emotional loneliness</b>	
Not emotionally lonely	227 (63.4%)
Emotionally Lonely	131 (36.6%)
Missing	19
<b>Social loneliness</b>	
Not socially lonely	171 (47.8%)
Socially Lonely	187 (52.2%)
Missing	19
<b>Number of walks</b>	
Less than 8 walk/month	265 (81.0%)
8+ walk/month	62 (19.0%)
Missing	50
<b>General loneliness</b>	
Not lonely	164 (45.8%)
Lonely	194 (54.2%)
Missing	19
<b>At risk drinking</b>	
No	209 (58.4%)
Yes	149 (41.6%)
Missing	19
<b>Risk of alcohol-related harm</b>	
No risk (no consumption)	48 (13.4%)
Low risk	150 (41.9%)
Mild risk	53 (14.8%)
Moderate risk	93 (26.0%)
High risk	14 (3.9%)
Missing	19

## 4.3 OUTCOME ANALYSES

### 4.3.1 Factors associated with at least 8 walks in the past month

Table 3 presents the logistic regression model for number of walks. Participants engaged in the program for three years or more had significantly higher odds of walking eight or more times per month compared to those with less than 12 months of participation (OR = 2.62, 95% CI: 1.13–6.30,  $p = 0.027$ ). Those in the second-lowest socioeconomic quintile (Q2) were also more likely to walk frequently (OR = 7.49, 95% CI: 2.39–25.8,  $p < 0.001$ ), while at-risk drinking was associated with lower odds of frequent walking (OR = 0.47, 95% CI: 0.22–0.97,  $p = 0.045$ ).

### 4.3.2 Factors associated with anxiety

Table 4 presents the logistic regression model for anxiety. Participants aged 65 years and older were significantly less likely to have anxiety compared with those under 45 years (OR = 0.11, 95% CI: 0.02–0.66,  $p = 0.018$ ). Similarly, being born outside Australia (OR = 0.22, 95% CI: 0.05–0.75,  $p = 0.028$ ) was associated with lower odds of anxiety. In contrast, emotional loneliness was strongly associated with higher odds of anxiety (OR = 4.65, 95% CI: 1.93–12.0,  $p < 0.001$ ).

### 4.3.3 Factor associated with depression

Table 5 presents the logistic regression results for factors associated with depression. Significant predictors included educational status, duration of participation, social loneliness, socioeconomic disadvantage, and chronic disease. Participants with tertiary education had significantly lower odds of depression compared with those who did not complete year 12 (OR = 0.15, 95% CI: 0.02–0.95,  $p = 0.045$ ). Longer Man Walk participation was protective, with individuals involved for three or more years showing reduced odds of depression (OR = 0.30, 95% CI: 0.09–0.95,  $p = 0.048$ ). Social loneliness was strongly associated with depression, with socially lonely participants having nearly six times higher odds than those not lonely (OR = 5.70, 95% CI: 2.03–18.8,  $p = 0.002$ ). In terms of socioeconomic status, participants in the second IRSAD quintile (Q2) were less likely to report depression than those in the most disadvantaged group (Q1) (OR = 0.16, 95% CI: 0.02–0.89,  $p = 0.046$ ). Finally, having chronic disease significantly increased depression: participants with one condition had more than five times higher odds (OR = 5.29, 95% CI: 1.66–18.9,  $p = 0.007$ ) and those with two or more conditions had over five and a half times higher odds of depression (OR = 5.55, 95% CI: 1.52–22.4,  $p = 0.012$ ) compared with those with no chronic condition.

#### **4.3.4 Factors associated with emotional loneliness**

Table 6 presents the logistic regression analysis of factors associated with emotional loneliness. Adults aged 45–54 years had significantly higher odds of emotional loneliness compared with those under 45 (OR = 3.17, 95% CI: 1.09–9.75,  $p = 0.038$ ). Marital status was also important, with those not partnered more than twice as likely to experience emotional loneliness compared to those partnered (OR = 2.14, 95% CI: 1.06–4.32,  $p = 0.033$ ). Anxiety symptoms showed the strongest association, with over six times more likely to report emotional loneliness (OR = 6.37, 95% CI: 2.83–15.3,  $p < 0.001$ ). Conversely, tertiary education was strongly protective, with participants holding a university degree significantly less likely to report emotional loneliness than those who did not complete year 12 (OR = 0.18, 95% CI: 0.07–0.45,  $p < 0.001$ ).

#### **4.3.5 Factors associated with social loneliness**

Table 7 shows the logistic regression results for social loneliness. Living in inner regional areas was associated with significantly lower odds of social loneliness compared to major cities (OR = 0.52, 95% CI: 0.28–0.95,  $p = 0.034$ ). Participants who reported at-risk drinking also had reduced odds of social loneliness (OR = 0.55, 95% CI: 0.32–0.93,  $p = 0.028$ ). In contrast, depression symptoms were strongly associated with higher odds of social loneliness (OR = 4.46, 95% CI: 1.56–14.1,  $p = 0.007$ ).

#### **4.3.6 Factors associated with general loneliness**

Table 8 presents the logistic regression analysis of factors associated with general loneliness. Adults aged 55–64 years had significantly lower odds of general loneliness compared with those under 45 (OR = 0.29, 95% CI: 0.10–0.81,  $p = 0.020$ ). Participants with certificates or diplomas were more likely to report general loneliness than those who did not complete year 12 (OR = 2.13, 95% CI: 1.01–4.58,  $p = 0.049$ ). Living in inner regional areas was protective, with lower odds compared to major cities (OR = 0.44, 95% CI: 0.23–0.82,  $p = 0.011$ ). At-risk drinking was also associated with reduced odds of general loneliness (OR = 0.57, 95% CI: 0.33–0.99,  $p = 0.047$ ). The strongest association was observed for anxiety symptoms, with nearly six times more likely to experience general loneliness (OR = 5.71, 95% CI: 2.35–15.7,  $p < 0.001$ ).

#### **4.3.7 Factors associated with at risk drinking**

Table 9 shows the logistic regression analysis for at risk drinking. At-risk drinking was significantly associated with age, number of walks, remoteness, socio-economic status, and social loneliness. Older adults were less likely to be at risk, particularly those aged 65+ (OR = 0.27, 95% CI: 0.07–0.95,  $p = 0.043$ ). Walking 8 or more times per month reduced the odds by half (OR = 0.45, 95% CI: 0.20–0.95,  $p = 0.042$ ). Participants living in outer regional/remote areas also had lower odds (OR = 0.41, 95% CI: 0.16–0.98,  $p = 0.049$ ). In

contrast, those in more advantaged IRSAD quintiles (Q2–Q5) had significantly higher odds (ORs ranging from 3.39 to 7.75, all  $p < 0.05$ ). Social loneliness was associated with reduced odds of risky drinking (OR = 0.54, 95% CI: 0.29–0.98,  $p = 0.044$ ).

#### **4.3.8 Linear regression model for self-rated health**

Table 10 shows the linear regression analysis of self-rated health scores. Older adults (65+ years) reported significantly higher self-rated health compared to those under 45 ( $\beta = 11.0$ , 95% CI: 3.9–19.0,  $p = 0.003$ ). In contrast, depressive symptoms ( $\beta = -11.0$ , 95% CI: -17.0 to -4.2,  $p = 0.001$ ), emotional loneliness ( $\beta = -7.9$ , 95% CI: -12.0 to -3.8,  $p < 0.001$ ), and having two or more chronic conditions ( $\beta = -4.9$ , 95% CI: -9.3 to -0.44,  $p = 0.031$ ) were significantly associated with poorer self-rated health. No other factors were statistically significant, although those living in outer regional/remote areas had borderline higher scores ( $\beta = 5.0$ , 95% CI: -0.09–10.0,  $p = 0.054$ ), while participants in the second IRSAD quintile tended to report lower scores ( $\beta = -5.8$ , 95% CI: -12.0–0.41,  $p = 0.067$ ).



**Table 3 . Factors associated with at least 8 walks in the past month**

Characteristic	OR	95% CI	p-value
<b>Age Group</b>			
Less than 45 years	–	–	
45–54 years	1.08	0.28, 4.80	0.914
55–64 years	0.38	0.09, 1.80	0.202
65+ years	0.89	0.17, 5.06	0.894
<b>Educational Status</b>			
Did not complete year 12	–	–	
Year 12 or equivalent	0.50	0.13, 1.72	0.281
Certificates or diploma	0.53	0.21, 1.38	0.192
Tertiary education	0.52	0.18, 1.48	0.218
<b>Duration of Participation</b>			
12 months or less	–	–	
1–3 years	1.13	0.46, 2.80	0.791
<b>3 years or more</b>	<b>2.62</b>	<b>1.13, 6.30</b>	<b>0.027</b>
<b>Employment Status</b>			
Employed	–	–	
Retired	1.68	0.58, 5.04	0.342
Not working	1.72	0.22, 9.13	0.557
<b>Remoteness</b>			
Major cities	–	–	
Inner regional	0.52	0.23, 1.13	0.106
Outer regional and remote	0.31	0.06, 1.10	0.098
<b>IRSAD</b>			
Q1	–	–	
<b>Q2</b>	<b>7.49</b>	<b>2.39, 25.8</b>	<b>&lt;0.001</b>
Q3	2.59	0.89, 8.27	0.092
Q4	0.63	0.18, 2.18	0.467
Q5	0.94	0.25, 3.41	0.923
<b>Depression symptoms</b>			
No	–	–	
Yes	0.60	0.07, 3.38	0.590
<b>Anxiety symptoms</b>			
No	–	–	
Yes	0.37	0.07, 1.56	0.214
<b>Social Loneliness</b>			
Not socially lonely	–	–	
Socially Lonely	0.65	0.31, 1.35	0.250
<b>Emotional Loneliness</b>			
Not emotionally lonely	–	–	
Emotionally Lonely	1.18	0.51, 2.72	0.695
<b>Chronic Disease</b>			
No condition	–	–	
One condition	1.05	0.48, 2.30	0.902
Two or more conditions	0.79	0.29, 2.04	0.628
<b>At Risk Drinking</b>			
No	–	–	
<b>Yes</b>	<b>0.47</b>	<b>0.22, 0.97</b>	<b>0.045</b>

Abbreviations: CI = Confidence Interval, OR = Odds Ratio; IRSAD: Index of Relative Socio-economic Advantage and Disadvantage; Q1 = most disadvantaged; Q5 = most advantaged. Significant findings ( $p < 0.05$ ) are highlighted in blue.

**Table 4. Factors associated with anxiety**

Characteristic	OR	95% CI	p-value
<b>Age Group</b>			
Less than 45 years	—	—	
45–54 years	0.31	0.09, 1.09	0.070
55–64 years	0.54	0.15, 1.87	0.330
<b>65+ years</b>	<b>0.11</b>	<b>0.02, 0.66</b>	<b>0.018</b>
<b>Educational Status</b>			
Did not complete year 12	—	—	
Year 12 or equivalent	2.52	0.55, 12.6	0.238
Certificates or diploma	2.86	0.86, 11.7	0.108
Tertiary education	0.84	0.18, 4.20	0.820
<b>Employment Status</b>			
Employed	—	—	
Retired	0.79	0.21, 2.81	0.713
Not working	0.43	0.06, 2.57	0.382
<b>Country of Birth</b>			
Australia	—	—	
<b>Not Australia</b>	<b>0.22</b>	<b>0.05, 0.75</b>	<b>0.028</b>
<b>Duration of Participation</b>			
12 months or less	—	—	
1–3 years	0.75	0.28, 1.95	0.561
3 years or more	0.53	0.18, 1.45	0.221
<b>Number of Walks past month</b>			
Less than 8 walk/month	—	—	
8+ walk/month	0.34	0.06, 1.28	0.143
<b>Social Loneliness</b>			
Not socially lonely	—	—	
Socially Lonely	1.35	0.53, 3.43	0.530
<b>Remoteness</b>			
Major cities	—	—	
Inner regional	1.54	0.59, 4.02	0.374
Outer regional and remote	0.82	0.25, 2.49	0.729
<b>IRSAD</b>			
Q1	—	—	
Q2	0.82	0.17, 3.89	0.802
Q3	1.10	0.30, 4.23	0.884
Q4	1.38	0.40, 5.13	0.617
Q5	0.63	0.13, 2.84	0.554
<b>Emotional Loneliness</b>			
Not emotionally lonely	—	—	
<b>Emotionally Lonely</b>	<b>4.65</b>	<b>1.93, 12.0</b>	<b>&lt;0.001</b>
<b>Chronic Disease</b>			
No condition	—	—	
One condition	2.00	0.76, 5.44	0.164
<b>Two or more conditions</b>	<b>1.81</b>	<b>0.59, 5.66</b>	<b>0.300</b>
<b>At Risk Drinking</b>			
No	—	—	
Yes	0.83	0.36, 1.88	0.650

Abbreviations: CI = Confidence Interval, OR = Odds Ratio

IRSAD: Index of Relative Socio-economic Advantage and Disadvantage; Q1 = most disadvantaged; Q5 = most advantaged. Significant findings ( $p < 0.05$ ) are highlighted in blue.

**Table 5. Factors associated with depression**

Characteristic	OR	95% CI	p-value
<b>Age Group</b>			
Less than 45 years	–	–	
45–54 years	1.56	0.40, 6.50	0.529
55–64 years	0.88	0.22, 3.56	0.856
65+ years	0.23	0.03, 2.04	0.190
<b>Educational Status</b>			
Did not complete year 12	–	–	
Year 12 or equivalent	4.39	0.87, 24.2	0.076
Certificates or diploma	1.20	0.32, 5.34	0.797
<b>Tertiary education</b>	<b>0.15</b>	<b>0.02, 0.95</b>	<b>0.045</b>
<b>Employment Status</b>			
Employed	–	–	
Retired	0.28	0.05, 1.33	0.129
Not working	2.25	0.29, 15.1	0.413
<b>Country of Birth</b>			
Australia	–	–	
Not Australia	0.35	0.08, 1.13	0.103
<b>Duration of Participation</b>			
12 months or less	–	–	
1–3 years	0.33	0.10, 0.99	0.056
<b>3 years or more</b>	<b>0.30</b>	<b>0.09, 0.95</b>	<b>0.048</b>
<b>Number of Walks past month</b>			
Less than 8 walk/month	–	–	
8+ walk/month	0.34	0.04, 1.64	0.226
<b>Social Loneliness</b>			
Not socially lonely	–	–	
<b>Socially Lonely</b>	<b>5.70</b>	<b>2.03, 18.8</b>	<b>0.002</b>
<b>Remoteness</b>			
Major cities	–	–	
Inner regional	2.18	0.74, 6.49	0.155
Outer regional and remote	1.77	0.52, 5.87	0.350
<b>IRSAD</b>			
Q1	–	–	
<b>Q2</b>	<b>0.16</b>	<b>0.02, 0.89</b>	<b>0.046</b>
Q3	0.25	0.06, 1.04	0.057
Q4	0.62	0.16, 2.42	0.490
Q5	0.33	0.06, 1.60	0.179
<b>Chronic Disease</b>			
No condition	–	–	
<b>One condition</b>	<b>5.29</b>	<b>1.66, 18.9</b>	<b>0.007</b>
<b>Two or more conditions</b>	<b>5.55</b>	<b>1.52, 22.4</b>	<b>0.012</b>
<b>At Risk Drinking</b>			
No	–	–	
Yes	0.93	0.36, 2.40	0.889

Abbreviations: CI = Confidence Interval, OR = Odds Ratio

IRSAD: Index of Relative Socio-economic Advantage and Disadvantage; Q1 = most disadvantaged; Q5 = most advantaged. Significant findings ( $p < 0.05$ ) are highlighted in blue.

**Table 6. Factors associated with emotional loneliness**

Characteristic	OR	95% CI	p-value
<b>Age Group</b>			
Less than 45 years	—	—	
<b>45–54 years</b>	<b>3.17</b>	<b>1.09, 9.75</b>	<b>0.038</b>
55–64 years	1.10	0.38, 3.25	0.867
65+ years	0.84	0.23, 3.16	0.795
<b>Educational Status</b>			
Did not complete year 12	—	—	
Year 12 or equivalent	0.92	0.33, 2.57	0.877
Certificates or diploma	0.58	0.26, 1.27	0.174
<b>Tertiary education</b>	<b>0.18</b>	<b>0.07, 0.45</b>	<b>&lt;0.001</b>
<b>Employment Status</b>			
Employed	—	—	
Retired	0.70	0.28, 1.77	0.445
Not working	2.63	0.64, 11.4	0.181
<b>Duration of Participation</b>			
12 months or less	—	—	
1–3 years	1.07	0.53, 2.16	0.841
3 years or more	0.74	0.35, 1.56	0.432
<b>Number of Walks past month</b>			
Less than 8 walk/month	—	—	
8+ walk/month	1.16	0.53, 2.50	0.708
<b>Remoteness</b>			
Major cities	—	—	
Inner regional	0.74	0.37, 1.46	0.386
Outer regional and remote	1.41	0.59, 3.37	0.437
<b>IRSD</b>			
Q1	—	—	
Q2	0.76	0.26, 2.22	0.610
Q3	0.46	0.17, 1.21	0.116
Q4	0.59	0.22, 1.53	0.277
Q5	0.54	0.20, 1.50	0.241
<b>Marital Status</b>			
Currently partnered	—	—	
<b>Not partnered</b>	<b>2.14</b>	<b>1.06, 4.32</b>	<b>0.033</b>
<b>Chronic Disease</b>			
No condition	—	—	
One condition	0.89	0.45, 1.75	0.729
Two or more conditions	1.68	0.76, 3.69	0.197
<b>At Risk Drinking</b>			
No	—	—	
Yes	0.90	0.49, 1.65	0.736
<b>Anxiety symptoms</b>			
No	—	—	
<b>Yes</b>	<b>6.37</b>	<b>2.83, 15.3</b>	<b>&lt;0.001</b>

Abbreviations: CI = Confidence Interval, OR = Odds Ratio

IRSD: Index of Relative Socio-economic Advantage and Disadvantage; Q1 = most disadvantaged; Q5 = most advantaged. Significant findings ( $p < 0.05$ ) are highlighted in blue.

**Table 7. Factors associated with social loneliness**

Characteristic	OR	95% CI	p-value
<b>Age Group</b>			
Less than 45 years	–	–	
45–54 years	1.03	0.38, 2.77	0.953
55–64 years	0.59	0.22, 1.54	0.286
65+ years	0.60	0.18, 1.93	0.394
<b>Educational Status</b>			
Did not complete year 12	–	–	
Year 12 or equivalent	0.87	0.33, 2.30	0.785
Certificates or diploma	1.57	0.76, 3.28	0.223
Tertiary education	1.23	0.56, 2.73	0.605
<b>Employment Status</b>			
Employed	–	–	
Retired	1.67	0.74, 3.83	0.220
Not working	0.46	0.11, 1.79	0.271
<b>Duration of Participation</b>			
12 months or less	–	–	
1–3 years	1.64	0.88, 3.09	0.125
3 years or more	0.77	0.40, 1.45	0.413
<b>Number of Walks past month</b>			
Less than 8 walk/month	–	–	
8+ walk/month	0.66	0.33, 1.32	0.243
<b>Remoteness</b>			
Major cities	–	–	
<b>Inner regional</b>	<b>0.52</b>	<b>0.28, 0.95</b>	<b>0.034</b>
Outer regional and remote	1.34	0.58, 3.16	0.496
<b>IRSAD</b>			
Q1	–	–	
Q2	2.00	0.74, 5.51	0.172
Q3	2.06	0.87, 5.00	0.105
Q4	1.32	0.56, 3.16	0.530
Q5	1.53	0.61, 3.84	0.364
<b>Marital Status</b>			
Currently partnered	–	–	
Not partnered	1.08	0.56, 2.07	0.817
<b>Chronic Disease</b>			
No condition	–	–	
One condition	0.82	0.46, 1.48	0.517
Two or more conditions	1.31	0.65, 2.66	0.448
<b>At Risk Drinking</b>			
No	–	–	
<b>Yes</b>	<b>0.55</b>	<b>0.32, 0.93</b>	<b>0.028</b>
<b>Depression symptoms</b>			
No	–	–	
<b>Anxiety symptoms</b>			
No	–	–	
Yes	1.20	0.49, 2.96	0.691

Abbreviations: CI = Confidence Interval, OR = Odds Ratio

IRSAD: Index of Relative Socio-economic Advantage and Disadvantage; Q1 = most disadvantaged; Q5 = most advantaged. Significant findings ( $p < 0.05$ ) are highlighted in blue.

**Table 8. Factors associated with general loneliness**

Characteristic	OR	95% CI	p-value
<b>Age Group</b>			
Less than 45 years	—	—	
45–54 years	1.01	0.35, 2.84	0.990
<b>55–64 years</b>	<b>0.29</b>	<b>0.10, 0.81</b>	<b>0.020</b>
65+ years	0.34	0.10, 1.15	0.087
<b>Educational Status</b>			
Did not complete year 12	—	—	
Year 12 or equivalent	1.92	0.71, 5.33	0.204
<b>Certificates or diploma</b>	<b>2.13</b>	<b>1.01, 4.58</b>	<b>0.049</b>
Tertiary education	0.91	0.40, 2.08	0.825
<b>Duration of Participation</b>			
12 months or less	—	—	
1–3 years	1.48	0.78, 2.85	0.229
3 years or more	0.75	0.38, 1.46	0.394
<b>Employment status</b>			
Employed	—	—	
Retired	2.24	0.97, 5.32	0.062
Not working	2.22	0.52, 10.5	0.289
<b>Number of Walks past month</b>			
Less than 8 walk/month	—	—	
8+ walk/month	0.57	0.28, 1.14	0.117
<b>Remoteness</b>			
Major cities	—	—	
<b>Inner regional</b>	<b>0.44</b>	<b>0.23, 0.82</b>	<b>0.011</b>
Outer regional and remote	1.19	0.51, 2.86	0.682
<b>IRSAD</b>			
Q1	—	—	
Q2	1.03	0.37, 2.88	0.957
Q3	1.14	0.46, 2.85	0.772
Q4	0.73	0.30, 1.78	0.492
Q5	0.76	0.29, 1.94	0.561
<b>Chronic Disease</b>			
No condition	—	—	
One condition	0.92	0.50, 1.69	0.790
Two or more conditions	1.18	0.58, 2.42	0.651
<b>At Risk Drinking</b>			
No	—	—	
<b>Yes</b>	<b>0.57</b>	<b>0.33, 0.99</b>	<b>0.047</b>
<b>Anxiety symptoms</b>			
No	—	—	
Yes	5.71	2.35, 15.7	<0.001

Abbreviations: CI = Confidence Interval, OR = Odds Ratio

IRSAD: Index of Relative Socio-economic Advantage and Disadvantage; Q1 = most disadvantaged; Q5 = most advantaged. Significant findings ( $p < 0.05$ ) are highlighted in blue.

**Table 9. Factors associated with at risk drinking**

Characteristic	OR	95% CI	p-value
<b>Age Group</b>			
Less than 45 years	—	—	
45–54 years	0.78	0.28, 2.15	0.629
55–64 years	0.49	0.17, 1.33	0.163
<b>65+ years</b>	<b>0.27</b>	<b>0.07, 0.95</b>	<b>0.043</b>
<b>Educational Status</b>			
Did not complete year 12	—	—	
Year 12 or equivalent	0.47	0.15, 1.35	0.167
Certificates or diploma	0.64	0.29, 1.40	0.262
Tertiary education	0.82	0.35, 1.94	0.654
<b>Country of Birth</b>			
Australia	—	—	
Not Australia	1.19	0.62, 2.27	0.602
<b>Duration of Participation</b>			
12 months or less	—	—	
1–3 years	1.73	0.89, 3.40	0.106
3 years or more	1.28	0.64, 2.58	0.486
<b>Number of walks past month</b>			
Less than 8 walk/month	—	—	
<b>8+ walk/month</b>	<b>0.45</b>	<b>0.20, 0.95</b>	<b>0.042</b>
<b>Employment Status</b>			
Employed	—	—	
Retired	1.49	0.61, 3.68	0.381
Not working	1.01	0.24, 3.96	0.987
<b>BMI Category</b>			
Normal	—	—	
Overweight	1.62	0.63, 4.37	0.327
Obese	1.55	0.57, 4.38	0.398
<b>Remoteness</b>			
Major cities	—	—	
Inner regional	0.72	0.37, 1.38	0.319
<b>Outer regional and remote</b>	<b>0.41</b>	<b>0.16, 0.98</b>	<b>0.049</b>
<b>IRSAD</b>			
Q1	—	—	
<b>Q2</b>	<b>7.75</b>	<b>2.49, 26.8</b>	<b>&lt;0.001</b>
<b>Q3</b>	<b>3.39</b>	<b>1.20, 10.7</b>	<b>0.027</b>
<b>Q4</b>	<b>4.18</b>	<b>1.53, 12.7</b>	<b>0.008</b>
<b>Q5</b>	<b>4.25</b>	<b>1.48, 13.5</b>	<b>0.010</b>
<b>Social Loneliness</b>			
Not socially lonely	—	—	
<b>Socially Lonely</b>	<b>0.54</b>	<b>0.29, 0.98</b>	<b>0.044</b>
<b>Emotional Loneliness</b>			
Not emotionally lonely	—	—	
Emotionally Lonely	1.10	0.54, 2.22	0.791
<b>Chronic Disease</b>			
No condition	—	—	
One condition	0.68	0.36, 1.29	0.242
Two or more conditions	1.06	0.50, 2.23	0.878
<b>Depression symptoms</b>			
No	—	—	
Yes	1.18	0.38, 3.62	0.768
<b>Anxiety symptoms</b>			

<b>Characteristic</b>	<b>OR</b>	<b>95% CI</b>	<b>p-value</b>
No	—	—	
Yes	0.65	0.24, 1.68	0.382

Abbreviations: CI = Confidence Interval, OR = Odds Ratio

IRSAD: Index of Relative Socio-economic Advantage and Disadvantage; Q1 = most disadvantaged; Q5 = most advantaged. Significant findings ( $p < 0.05$ ) are highlighted in blue.



**Table 10. Linear regression model for self-rated health**

Characteristic	Beta	95% CI	p-value
<b>Age Group</b>			
Less than 45 years	–	–	
45–54 years	3.4	-2.7, 9.5	0.273
55–64 years	3.9	-2.1, 9.9	0.197
<b>65+ years</b>	<b>11</b>	<b>3.9, 19</b>	<b>0.003</b>
<b>Educational Status</b>			
Did not complete year 12	–	–	
Year 12 or equivalent	2.4	-3.8, 8.6	0.448
Certificates or diploma	-1.7	-6.4, 3.0	0.468
Tertiary education	-1.4	-6.6, 3.7	0.585
<b>Country of Birth</b>			
Australia	–	–	
Not Australia	1.5	-2.3, 5.3	0.450
<b>Duration of Participation</b>			
12 months or less	–	–	
1–3 years	1.5	-2.4, 5.4	0.456
3 years or more	1.6	-2.5, 5.6	0.445
<b>Number of walks past month</b>			
Less than 8 walk/month	–	–	
8+ walk/month	1.6	-2.8, 5.9	0.479
<b>Employment Status</b>			
Employed	–	–	
Retired	-3.8	-8.9, 1.4	0.154
Not working	0.03	-8.0, 8.1	0.995
<b>Remoteness</b>			
Major cities	–	–	
Inner regional	-1.7	-5.5, 2.2	0.392
Outer regional and remote	5.0	-0.09, 10	0.054
<b>IRSAD</b>			
Q1	–	–	
Q2	-5.8	-12, 0.41	0.067
Q3	-1.1	-6.5, 4.4	0.704
Q4	-2.9	-8.3, 2.5	0.298
Q5	-2.0	-7.8, 3.7	0.493
<b>Anxiety Symptoms</b>			
No	–	–	
Yes	-1.2	-6.8, 4.3	0.668
<b>Depression Symptoms</b>			
No	–	–	
<b>Yes</b>	<b>-11</b>	<b>-17, -4.2</b>	<b>0.001</b>
<b>Social Loneliness</b>			
Not socially lonely	–	–	
Socially Lonely	0.33	-3.2, 3.8	0.851
<b>Emotional Loneliness</b>			
Not emotionally lonely	–	–	
<b>Emotionally Lonely</b>	<b>-7.9</b>	<b>-12, -3.8</b>	<b>&lt;0.001</b>
<b>Chronic Disease</b>			
No condition	–	–	
One condition	-1.4	-5.1, 2.3	0.460
<b>Two or more conditions</b>	<b>-4.9</b>	<b>-9.3, -0.44</b>	<b>0.031</b>
<b>At Risky drinking</b>			
No	–	–	

Characteristic	Beta	95% CI	p-value
Yes	0.68	-2.7, 4.0	0.689

Abbreviation: CI = Confidence Interval

IRSAD: Index of Relative Socio-economic Advantage and Disadvantage; Q1 = most disadvantaged; Q5 = most advantaged. Significant findings ( $p < 0.05$ ) are highlighted in blue.

## 4.4 OPEN-ENDED SURVEY RESPONSES ANALYSIS

Data were missing from 38 participants, resulting in 339 participant responses included in the analysis. These responses were coded into six categories, as shown in Table 11.

**Table 11: Frequency of coding<sup>2</sup>**

Category	n (%)
Socialisation	248 (73.2%)
Mental health	91 (26.8%)
Physical health	90 (26.5%)
Provide support	34 (10.0%)
Suggestions	12 (3.5%)
Irrelevant	35 (10.3%)

### 4.4.1 Categories

#### 4.4.1.1 Socialisation

Respondents joined the Man Walk primarily to connect with others and reported benefits such as reduced social isolation, stronger social bonds, a sense of belonging, increased community engagement, and opportunities to share interests through conversations with other men. This was the most frequently coded category in the data, with 73.2% of respondents including a statement about socialisation (n = 248).

*“Mateship and exercise. Was something I needed to do at that time in my life. Now it’s just something I want to do.”*

*“Great group of men, good community feel and have made a number of friends and mates...”*

*“Has been a great opportunity to meet a wide variety of people and enjoy both the walk and the connections.”*

<sup>2</sup> Each participant could contribute only one count per category, regardless of how many times that category appeared in their response. However, because the categories were non-mutually exclusive, participants could be counted in multiple categories to reflect overlapping categories. Percentages are based on the total number of participants, not the total number of codes, meaning the sum of percentages across categories may exceed 100%.

#### 4.4.1.2 Mental health

Another key benefit participants gained from the Man Walk was support in managing their mental health challenges. The initiative provided emotional support and helped individuals navigate difficult life events. This was the second most frequently coded category, with 26.8% of respondents (n = 91) making a statement related to mental health.

*"Needed to talk to people in similar mental and emotional situations."*

*"I had to stop working when covid hit. I was getting depressed. The Man Walk gave me purpose. I am mentally stronger, I have a great bunch of friends in the Man walk group."*

*"Saved me from deep depression, anxiety and more. So happy to be part of an extremely welcoming group."*

#### 4.4.1.3 Physical health

Respondents noted that they joined the Man Walk to engage in regular physical exercise, with some also participating as part of injury rehabilitation. A total of 26.5% of respondents (n = 90) described the Man Walk as beneficial to their physical health in their open-ended responses.

*"For fitness."*

*"Routine exercise for me and the dog."*

*"Original for injury recovery."*

#### 4.4.1.4 To provide support

Participants also highlighted the Man Walk as an opportunity to support others. This included giving back to the community, being available to listen, addressing men's health issues through grassroots efforts, and offering emotional or practical support. Ten percent of respondents (n = 34) referenced providing support to others in their responses.

*"... I get satisfaction from listening and possibly offering advice to others in need."*

*"I'm a pretty fortunate boke, I feel lucky to have a great family, network or friends etc. Not everyone has that, so I thought it*

*was a simple way to help a few other men have access to the same support opportunities that I have had.”*

*“To help other men in my community connect with a support network.”*

#### **4.4.1.5 Suggestions for program improvement**

At total of 3.5% (n = 12) respondents provided suggestions or ideas for improving the Man Walk program. This included recommendations for activities, structure, resources, outreach, or support services. A full list of respondent suggestions can be found in Appendix 7.4, pg. 51.

*“Great idea, support group is weekly but friendly. message group available for outside walk time contact would be handy, as fully reliant on social media Facebook for notification of walk locations.”*

*“I have enjoyed the Bulli group, we all visited the Mr Perfect group last week and enjoyed the weekend BBQ/beer format. A more relaxed setting perhaps something that should be promoted/funded to attract and retain participants. Guidance to participants on how to promote and guide conversations, especially when talking through difficult conversations perhaps should be considered. Advice on where to point someone when professional advice required”.*

*“Great initiative. I understand the complexities however I think it would be good to have more events for the local MW group. Maybe events with guest speakers and a lunch or morning tea. I think the local library can provide a venue at low cost or free of charge. The other option may be the local tavern which seems quiet of a morning and sells coffee etc.”*

#### **4.4.1.6 Irrelevant**

Finally, data from 35 respondents (10.3%) was deemed not relevant to further understanding the benefits of the Man Walk. This category has been excluded from further analysis.

*“I look forward to manwalk days”*



*"I knew the organiser"*

*"One day ill do it"*

#### 4.4.2 Co-occurrent coding of categories

Table 12 presents a heat map of concurrent coding across five thematic categories. A total of 214 participants provided comments that were coded to more than one category, indicating substantial overlap in perceived benefits.

**Table 12: Heat map of concurrent coding of categories**

	Socialisation	Mental health	Physical health	Provide support	Suggestions
Socialisation	248	62 29.0%	66 30.8%	14 6.5%	8 3.7%
Mental health	62 29.0%	91	39 18.2%	12 5.6%	4 1.9%
Physical health	66 30.8%	39 18.2%	90	5 2.3%	3 1.4%
Provide support	14 6.5%	12 5.6%	5 2.3%	34	1 0.5%
Suggestions	8 3.7%	4 1.9%	3 1.4%	1 0.5%	12

The most frequent co-occurrence was between physical health and socialisation, mentioned by 30.8% (n = 66) of multi-coded participants:

*"To get out in the fresh air and exercise and make connections with some local blokes, it makes the start to my weekend so much better"*

The second most common combination was socialisation and mental health, noted by 29.0% (n = 62) of participants:

*"I was looking for some connection after a suicide attempt, and seeking support from men in particular who would be able to relate to my challenges."*

The third most frequent pairing was physical health and mental health, cited by 18.2% (n = 39):

*"The Manwalk is a fantastic concept. Great for health, both mentally and physically."*

Other notable overlaps included socialisation and providing support (6.5%, n = 14):

*"I'm a private person but I thoroughly enjoy my bi weekly walks and chats.. developing friendships and trust.. I get satisfaction from listening and possibly offering advice to others in need."*

Less frequent but still meaningful combinations included mental health and providing support (5.6%, n = 12):

*"[I joined because of] my mental health... It is very rewarding to feel like you are helping other men and to be helped by other men through conversation."*

Among the 214 multi-coded responses, 12.6% (n = 27) were coded to three categories: socialisation, mental health, and physical health. Smaller proportions were coded to:

- Socialisation, mental health, and providing support: 2.3% (n = 5)
- Socialisation, physical health, and providing support: 1.4% (n = 3)
- Mental health, physical health, and providing support: 1.9% (n = 4)



## 5 Discussion

The Man Walk is more than just a walking group - it's a social and mental health intervention that fosters connection, routine, and wellbeing among its participants. Across multiple domains, the data reveals a consistent theme: long-term engagement, social connection, and mental health are deeply intertwined.

Participants who had been involved in the program for three years or more were significantly more likely to walk frequently. This suggests that sustained involvement helps build healthy habits and a sense of belonging. Interestingly, men from lower-middle socioeconomic backgrounds (Q2) were also more likely to walk regularly, perhaps drawn to the program's informal, non-clinical approach that fits well with flexible work schedules or retirement.

However, at-risk drinking emerged as a barrier to regular walking, reinforcing the idea that substance misuse can disrupt routines and reduce motivation (15, 16). This pattern extended into other areas: risky drinking was associated with poorer mental health and lower self-rated health, although paradoxically, it was also linked to lower social loneliness. This finding contrasts with previous research, which has shown that higher levels of loneliness are associated with increased alcohol use (17). While our findings may reflect greater social interaction through shared drinking contexts, the finding should be interpreted cautiously, as it does not imply alcohol use is beneficial for social wellbeing.

Mental health outcomes revealed a complex interplay with age, education, and social factors. Older adults (65+) consistently reported lower levels of anxiety, depression, and risky drinking, suggesting greater emotional resilience and fewer stressors (18). University education was protective across multiple domains, including depression and emotional loneliness, likely due to stronger coping skills and broader social networks (19).

One of the most striking findings was the impact of loneliness, both emotional and social, on mental health. Emotional loneliness was strongly linked to anxiety, while social loneliness was the strongest predictor of depression. Participants who felt socially isolated were nearly six times more likely to experience depressive symptoms. These findings underscore the critical role of meaningful relationships in maintaining mental wellbeing (6).

Interestingly, living in inner regional areas was associated with lower levels of both social and general loneliness, suggesting that smaller communities may offer stronger social ties than urban environments (20). This regional effect also extended to self-rated health, where older adults in these areas reported better overall wellbeing than their urban counterparts - contrary to previous research (21).

The open-ended survey responses reinforced these quantitative findings. Socialisation was the most frequently cited benefit of the program, mentioned by over 70% of respondents. Many participants also highlighted the Man Walk's benefits for both mental and physical health, while some joined to support others, underscoring the program's dual role in promoting personal wellbeing and fostering a sense of community care.

The overlap between physical, mental, and social benefits suggests that participants experience the program holistically. Walking together not only improves physical health but also creates opportunities for conversation, emotional support, and connection – factors that contribute to reduced anxiety, depression, and loneliness (22).

## **5.1 IMPLICATIONS FOR PRACTICE, POLICY, AND FUTURE RESEARCH**

### **5.1.1 Community-based health promotion works**

The Man Walk demonstrates that informal, low-cost, community-led programs can effectively engage men. Especially those less likely to seek help through traditional health services. The Man Walk should be replicated or scaled to other communities to address men's health and social isolation.

### **5.1.2 Sustained engagement is key**

Long-term participation is strongly linked to better physical activity and mental health outcomes. Efforts should focus on retaining participants and encouraging ongoing involvement, not just initial recruitment.

### **5.1.3 Social connection is central**

Socialisation is the most valued benefit, and loneliness (both social and emotional) is a major risk factor for poor mental health. The Man Walk should continue to prioritise activities that foster meaningful relationships and group cohesion.

### **5.1.4 Targeting vulnerable groups**

The program may be particularly effective for older men, those in regional areas, and those from lower socioeconomic backgrounds. Support should be tailored to these groups, who may face greater barriers to health and wellbeing.

### **5.1.5 Addressing alcohol use**

At-risk drinking is linked to poorer health and less frequent participation in The Man Walk. However, some participants who drink socially report feeling less lonely. The Man Walk



program should continue to promote healthy drinking habits and provide opportunities for social connection that do not revolve around alcohol.

### **5.1.6 Education and health literacy**

Integrating health literacy and mental health education into the Man Walk program may further improve outcomes. However, it is important to ensure that any changes preserve the core elements of the program that participants value most.

### **5.1.7 Holistic approach**

Participants experience physical, mental, and social benefits as interconnected. The Man Walk program should continue to address these domains simultaneously.

### **5.1.8 Future research**

Unexpected findings (e.g., links between alcohol use and loneliness, self-rated health and remoteness) highlight the need for further investigation. Ongoing evaluation and research are needed to understand the longer-term impacts of the Man Walk.

## **5.2 CONCLUSION**

The Man Walk model offers a promising, scalable approach to improving men's health and wellbeing. Its success underscores the importance of social connection, sustained engagement, and holistic support, especially for those at risk of isolation or poor health. Policymakers and practitioners should consider investing in and adapting similar community-based initiatives.

## 6 References

1. Ströhle A. Physical activity, exercise, depression and anxiety disorders. *Journal of neural transmission*. 2009;116:777-84.
2. World Health Organisation. Motion for your mind: physical activity for mental health promotion, protection and care 2019 [Available from: [https://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0018/403182/WHO-Motion-for-your-mind-ENG.pdf](https://www.euro.who.int/__data/assets/pdf_file/0018/403182/WHO-Motion-for-your-mind-ENG.pdf)].
3. Robertson R, Robertson A, Jepson R, Maxwell M. Walking for depression or depressive symptoms: a systematic review and meta-analysis. *Mental health and physical activity*. 2012;5(1):66-75.
4. Australian Bureau of Statistics. National Study of Mental Health and Wellbeing Canberra: ABS; 2020-2022 2022 [Available from: <https://www.abs.gov.au/statistics/health/mental-health/national-study-mental-health-and-wellbeing/latest-release>].
5. Seidler ZE, Wilson MJ, Walton CC, Fisher K, Oliffe JL, Kealy D, et al. Australian men's initial pathways into mental health services. *Health Promotion Journal of Australia*. 2022;33(2):460-9.
6. Wickramaratne PJ, Yangchen T, Lepow L, Patra BG, Glicksburg B, Talati A, et al. Social connectedness as a determinant of mental health: A scoping review. *PloS one*. 2022;17(10):e0275004.
7. Heinsch M, Wells H, Sampson D, Wootten A, Cupples M, Sutton C, et al. Protective factors for mental and psychological wellbeing in Australian adults: A review. *Mental Health & Prevention*. 2022;25:200192.
8. Morris P, Scott H. Not just a run in the park: a qualitative exploration of parkrun and mental health. *Advances in mental health*. 2019;17(2):110-23.
9. Grunseit A, Richards J, Merom D. Running on a high: parkrun and personal well-being. *BMC public health*. 2018;18:1-11.
10. Löwe B, Wahl I, Rose M, Spitzer C, Glaesmer H, Wingenfeld K, et al. A 4-item measure of depression and anxiety: validation and standardization of the Patient Health Questionnaire-4 (PHQ-4) in the general population. *Journal of affective disorders*. 2010;122(1-2):86-95.
11. De Jong-Gierveld J, van Tilburg TG. A 6-item scale for overall, emotional, and social loneliness: Confirmatory tests on survey data. *Research on aging*. 2006;28(5):582-98.



12. Lundin A, Hallgren M, Balliu N, Forsell Y. The use of alcohol use disorders identification test (AUDIT) in detecting alcohol use disorder and risk drinking in the general population: validation of AUDIT using schedules for clinical assessment in neuropsychiatry. *Alcoholism: Clinical and Experimental Research*. 2015;39(1):158–65.
13. Bradley KA, Rubinsky AD, Lapham GT, Berger D, Bryson C, Achtmeyer C, et al. Predictive validity of clinical AUDIT-C alcohol screening scores and changes in scores for three objective alcohol-related outcomes in a veterans affairs population. *Addiction*. 2016;111(11):1975–84.
14. Herdman M, Gudex C, Lloyd A, Janssen M, Kind P, Parkin D, et al. Development and preliminary testing of the new five-level version of EQ-5D (EQ-5D-5L). *Quality of life research*. 2011;20:1727–36.
15. Kitzinger Jr RH, Gardner JA, Moran M, Celkos C, Fasano N, Linares E, et al. Habits and routines of adults in early recovery from substance use disorder: clinical and research implications from a mixed methodology exploratory study. *Substance abuse: research and treatment*. 2023;17:11782218231153843.
16. Tracy E, So C, Shoemaker S, Borsari B, McCrae C, Miller MB, editors. *Daily Alcohol Use Moderates the Daily Relationship Between Fatigue and Sleep Among Heavy-Drinking Veterans*. SLEEP; 2025: OXFORD UNIV PRESS INC JOURNALS DEPT, 2001 EVANS RD, CARY, NC 27513 USA.
17. Canham SL, Mauro PM, Kaufmann CN, Sixsmith A. Association of alcohol use and loneliness frequency among middle-aged and older adult drinkers. *Journal of aging and health*. 2016;28(2):267–84.
18. Toth EE, Ihász F, Ruíz-Barquín R, Szabo A. Physical activity and psychological resilience in older adults: a systematic review of the literature. *Journal of Aging and Physical Activity*. 2023;32(2):276–86.
19. Nguyen TT, Tchetgen EJT, Kawachi I, Gilman SE, Walter S, Glymour MM. The role of literacy in the association between educational attainment and depressive symptoms. *SSM-population health*. 2017;3:586–93.
20. Beer A, Faulkner D, Law J, Lewin G, Tinker A, Buys L, et al. Regional variation in social isolation amongst older Australians. *Regional Studies, Regional Science*. 2016;3(1):170–84.
21. Directorate AH. *ACT General Health Survey 2021 Statistical Report* ACT Government, Canberra ACT2023 [
22. Wolters NE, Mobach L, Wuthrich VM, Vonk P, Van der Heijde CM, Wiers RW, et al. Emotional and social loneliness and their unique links with social isolation, depression and anxiety. *Journal of Affective Disorders*. 2023;329:207–17.

# 7 Appendices

## 7.1 QUANTITATIVE CONTENT ANALYSIS CODEBOOK

### 7.1.1 Socialisation

Responses are coded under Socialisation when participants indicate that the Man Walk:

- Provides an opportunity to connect with others
- Helps address feelings of social isolation
- Supports the development of social bonds
- Fosters a sense of group identity and/or belonging
- Encourages engagement with the broader community
- Offers opportunities for discussion or sharing of interests

Example Quotes	Justification
<i>"Look forward to meeting up with the guys on Monday mornings and being part of the banter. I also enjoy the community aspects."</i>	Highlights regular group interaction and appreciation of community involvement.
<i>"It's great catching up for coffee and chats outside the walk itself as well."</i>	Indicates that social connections extend beyond the walk.
<i>"Great fellowship of like-minded gentlemen, with similar interests. Also diversity in careers before retirement."</i>	Emphasises shared interests and diverse backgrounds as a basis for connection.
<i>"The mixture of personalities ensures the group's discussions cover a variety of topics and knowledge."</i>	Points to the value of diverse conversations within the group.
<i>"To meet people in my area and discuss all aspects of men's health."</i>	Mentions both meeting others and engaging in meaningful discussions.
<i>"I love my Man Walk family. Helped me through COVID lockdowns and we organise social events and outings."</i>	Highlights emotional support, social events, and a strong sense of belonging.

### 7.1.2 Mental health

Responses are coded under Mental Health when they include any of the following:

- Experiencing, managing, or recovering from mental health challenges
- Seeking emotional or social support
- References to difficult life transitions, such as divorce or the death of a loved one
- Mentions of "wellbeing"
- Self-improvement or self-betterment



- Mentions of “health” without specifying physical or mental—these should be dual coded under both Physical Health and Mental Health.

Example Quotes	Justification
<i>“As stated earlier, attempted suicide off a cliff last May, but somehow survived.”</i>	Indicates a serious mental health crisis.
<i>“To help myself and men in my community.” (Also code to To Provide Support)”</i>	Suggests personal mental health and a desire to support others.
<i>“Going through a divorce at the time. Needed to get out and talk with others. Was able to talk with men that understood what I was going through.” (Also code to Socialisation)</i>	Mentions a difficult life transition and the value of peer support.
<i>“For the health benefits it gave me.” (Also code to Physical Health)</i>	General reference to health.
<i>“To meet other men and for wellbeing.” (Also code to Socialisation)</i>	Mentions general wellbeing and social connection.
<i>“To better myself.”</i>	Suggests a personal goal of self-improvement.
<i>“The support of the local group has been very helpful during my illness.”</i>	Indicates emotional support during a period of illness, likely mental health-related.
<i>“To talk about my problems and meet other people who may be going through similar things to me so we can support each other.” (Also code to To Provide Support)</i>	Seeks mutual emotional support through shared experiences and providing support to others.

### 7.1.3 Physical health

Participant quotes are coded under Physical Health where they include the following:

- Engagement in physical exercise
- Participation for injury rehabilitation
- Mentions of “health” without specifying physical or mental—these should be dual coded under both Physical Health and Mental Health

Example quotes	Justification
<i>“Noticed info on FB and thought it may be good as an exercise option.”</i>	Indicates interest in physical activity.
<i>“Meet local men and help start healthy routine” (Also code to Socialisation and Mental Health)</i>	Suggests establishing a health-focused routine, with a social component.
<i>“After heart trouble I decided I needed some structured regular exercise.”</i>	Mentions health issues and the need for regular exercise.
<i>“Original for injury recovery”</i>	Indicates physical rehabilitation as the reason for participation.

### 7.1.4 To provide support

Responses are coded under To Provide Support when participants express a motivation to:

- Help others
- “Give back” to the community

- Listen to or be available for others
- Address men’s health issues
- Provide emotional or practical support to others

Example quotes	Justification
<i>“I’m a pretty fortunate boke, I feel lucky to have a great family, network or friends etc. Not everyone has that, so I thought it was a simple way to help a few other men have access to the same support opportunities that I have had.”</i>	Wants to provide support to others who may lack it.
<i>“I’m a private person but I thoroughly enjoy my bi weekly walks and chats.. developing friendships and trust.. I get satisfaction from listening and possibly offering advice to others in need.”</i> (Also code to Socialisation)	Indicates enjoyment in offering support and listening to others and developing friendships.
<i>“To give back to my local community. To be available to talk and listen to others.”</i>	Expresses a desire to support others and contribute to the community.
<i>“To get moving and be there to help other blokes.”</i>	Combines physical activity with a desire to support others.
<i>“to help combat men’s ill-health and men’s suicidality in our community.”</i>	Shows concern for men’s health issues.

### 7.1.5 Suggestions for program improvement

This category captures participant suggestions or ideas for improving the Man Walk program. These may include recommendations for activities, structure, resources, outreach, or support services.

Example quotes	Justification
<i>“Would like to see the group grow and do more than just walk.”</i>	Suggests expanding the program’s activities beyond walking.
<i>“Like more training and visitors”</i>	Recommends additional resources or events, such as training sessions or guest speakers.

### 7.1.6 Irrelevant

Responses are coded as Irrelevant when they do not directly relate to either:

- The benefits of or motivations for involvement in the Man Walk, or
- Recommendations for program organisers.
- If a quote is coded under Irrelevant, it must not be coded under any other category.

Example Quotes	Justification
<i>“My mate invited me.”</i>	Describes how the participant joined, but not why or what benefit they gained.



<i>"I like the idea of it."</i>	Vague; does not specify what aspect of the idea was appealing or beneficial.
<i>"Was there before it was the Man Walk."</i>	Historical reference; does not explain motivation, benefit, or recommendation.
<i>"Just try and enjoy each day."</i>	General life philosophy; not specific to the Man Walk.
<i>"The best thing in and around Shellharbour."</i>	Positive sentiment, but too vague to determine relevance to motivation or recommendation.
<i>"All of the people I've met on the Man Walk are proactive in dealing with and finding solutions to the personal issues they are confronted with."</i>	Describes others' behaviour, not the participant's own motivation or experience.

### **7.1.7 No data**

This category is used when a participant did not provide any response or entered text that is entirely absent or blank. If a quote is coded under No Data, it must not be coded under any other category.

## 7.2 COHEN'S KAPPA CALCULATION

Category	Agreement	Expected Agreement	Kappa	Std. Err.	Z	Prob > Z
<b>Socialise</b>	89.19%	63.04%	0.7075	0.1626	4.35	0.0000
<b>Mental health</b>	81.08%	50.40%	0.6186	0.1582	3.91	0.0000
<b>Physical</b>	75.68%	50.69%	0.5067	0.1430	3.54	0.0002
<b>Provide support</b>	91.89%	71.00%	0.7204	0.1637	4.40	0.0000
<b>Suggestions</b>	91.89%	91.89%	0.0000	.	.	.
<b>Irrelevant</b>	100.00%	94.74%	1.0000	0.1644	6.08	0.0000
<b>No data<sup>3</sup></b>	—	—	—	—	—	—

<sup>3</sup> Too few rating categories

### 7.3 REMOTENESS CLASSIFICATION

Remoteness	Postcode	State	Suburb / Locality (Main)	
<b>Outer regional / remote</b>	0800	NT	Darwin (CBD, The Gardens, Larrakeyah)	
	0810	NT	Casuarina, Rapid Creek	
	0812	NT	Karama, Malak	
	0820	NT	Fannie Bay, Parap, Stuart Park	
	0832	NT	Palmerston (Driver, Gray, Moulden)	
	0836	NT	Humpty Doo (rural Darwin region)	
	0870	NT	Alice Springs	
	0873	NT	Alice Springs (PO Boxes / extended delivery)	
	0875	NT	Tennant Creek	
	2441	NSW	North Haven, Laurieton (Mid-North Coast)	
	2550	NSW	Bega	
	3904	VIC	Bairnsdale region (East Gippsland)	
	4869	QLD	Edmonton (Cairns south)	
	4879	QLD	Trinity Beach, Kewarra Beach (Cairns north beaches)	
	7270	TAS	Exeter (Tamar Valley, near Launceston)	
	7315	TAS	Sheffield	
	7316	TAS	Railton	
	<b>Inner regional</b>	2315	NSW	Nelson Bay, Shoal Bay, Fingal Bay (Port Stephens)
		2428	NSW	Forster, Tuncurry
2440		NSW	Kempsey	
2444		NSW	Port Macquarie	
2533		NSW	Kiama	
2534		NSW	Gerringong, Gerroa	
2540		NSW	Nowra, Huskisson, Vincentia, Jervis Bay area	
2541		NSW	Nowra Hill, Bomaderry, Cambewarra	
2575		NSW	Bowral	
2577		NSW	Moss Vale, Sutton Forest	
2580		NSW	Goulburn	
2582		NSW	Yass	
2583		NSW	Crookwell	
2640		NSW	Albury (NSW side)	
2641		NSW	Lavington, Thurgoona (NSW side of Albury-Wodonga)	
2650		NSW	Wagga Wagga	
2651		NSW	Forest Hill (RAAF base near Wagga)	
2850		NSW	Mudgee	
3222		VIC	Newcomb (Geelong East)	
3226		VIC	Ocean Grove	
3228		VIC	Torquay	
3350		VIC	Ballarat	
3690		VIC	Wodonga	
3691		VIC	Baranduda (near Wodonga)	
3764		VIC	Wallan	
3996		VIC	Wonthaggi (Bass Coast Shire)	
6280		WA	Busselton	
<b>Major city</b>		2016	NSW	Redfern, Darlington
		2019	NSW	Alexandria, Beaconsfield

2032	NSW	Kingsford
2036	NSW	Chifley, Matraville, Malabar, La Perouse
2039	NSW	Rozelle
2096	NSW	Curl Curl, Freshwater
2120	NSW	Pennant Hills
2155	NSW	Kellyville
2226	NSW	Gymea Bay
2259	NSW	Wyong, Tuggerah (Central Coast)
2282	NSW	Warners Bay
2285	NSW	Glendale, Cardiff
2290	NSW	Charlestown
2320	NSW	Maitland, Rutherford
2323	NSW	East Maitland
2500	NSW	Wollongong
2502	NSW	Cringila
2515	NSW	Thirroul, Austinmer
2516	NSW	Clifton, Scarborough
2517	NSW	Wombarra
2518	NSW	Coledale
2519	NSW	Corrimal
2525	NSW	Mount Keira
2526	NSW	Unanderra
2527	NSW	Albion Park
2528	NSW	Warilla
2529	NSW	Shellharbour
2530	NSW	Dapto
2600	ACT	Canberra CBD
2605	ACT	Curtin
2607	ACT	Mawson
2611	ACT	Weston Creek, Stromlo
2902	ACT	Kambah
2903	ACT	Wanniassa
2905	ACT	Bonython, Isabella Plains
2906	ACT	Banks, Conder
3030	VIC	Werribee
3088	VIC	Greensborough
3114	VIC	Research
3172	VIC	Springvale
3177	VIC	Dandenong North
3179	VIC	Rowville
3212	VIC	Lara
3213	VIC	Anakie
3214	VIC	Norlane
3215	VIC	Bell Post Hill
3216	VIC	Belmont, Grovedale
3217	VIC	Waurm Ponds, Armstrong Creek
3218	VIC	Newtown (Geelong)
3219	VIC	Breakwater, East Geelong



3220	VIC	Geelong
3224	VIC	Leopold
3810	VIC	Pakenham
4017	QLD	Brighton, Sandgate
4019	QLD	Redcliffe
4020	QLD	Margate, Woody Point
4021	QLD	Scarborough
4022	QLD	Clontarf
4034	QLD	Chermside
4055	QLD	Ferny Hills
4165	QLD	Redland Bay
4300	QLD	Springfield Lakes, Ipswich
4301	QLD	Goodna
4503	QLD	Kallangur, North Lakes
4504	QLD	Narangba
4508	QLD	Deception Bay
4509	QLD	North Lakes, Mango Hill
4510	QLD	Caboolture
4556	QLD	Buderim
4557	QLD	Mooloolaba
5050	SA	Bellevue Heights (Sturt University campus area)
5051	SA	Blackwood
5052	SA	Belair
6000	WA	Perth CBD
6019	WA	Scarborough (Perth)
6026	WA	Kingsley
6028	WA	Joondalup

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## 7.4 QUOTES – SUGGESTIONS FOR PROGRAM IMPROVEMENT

*“Would like to see the group grow and do more than just walk.”*

*“Like more training and visitors”*

*“would prefer a 7.00 am start please”*

*“Id like to see more men attracted to our weekly catch up – I’m unsure how the group is promoted”*

*“Keep innovating”*

*“a great initiative – keep it going”*

*“Great idea, support group is weekly but friendly. message group available for outside walk time contact would be handy, as fully reliant on social media Facebook for notification of walk locations”*

*“Yes I have enjoyed the Bulli group, we all visited the Mr Perfect group last week and enjoyed the weekend BBQ/beer format. A more relaxed setting perhaps something that should be promoted/funded to attract and retain participants. Guidance to participants on how to promote and guide conversations, especially when talking through difficult conversations perhaps should be considered. Advice on where to point someone when professional advice required.”*

*“Its good but don't make it too involved....It's a walk with the boys....and a drink a talk afterwards....”*

*“Great initiative. I understand the complexities however I think it would be good to have more events for the local MW group. Maybe events with guest speakers and a lunch or morning tea. I think the local library can provide a venue at low cost or free of charge. The other option may be the local tavern which seems quiet of a morning and sells coffee etc.”*

*“please keep it simple. Thats why it works.”*

*“The team where I attend are amazing people, we need to be encouraged to meet a new person or group when we do the walk and to be receptive to having fellow man walk participants join and mix with others. Staying in the same group all the time is in my opinion not necessarily beneficial.”*



## 7.5 POLICY BRIEF

### The Man Walk – A Scalable Community-Based Approach to Men’s Health and Wellbeing

#### 7.5.1 Purpose

This brief summarises key findings from the 2025 evaluation of The Man Walk, an Australian men’s health initiative, and provides recommendations for policymakers, health services, and community organisations to improve men’s health and social connection.

#### 7.5.2 Background

- Men’s mental health is a significant public health issue in Australia, with high rates of anxiety, depression, and loneliness.
- Men are less likely than women to seek help for mental health concerns.
- Community-based programs that combine physical activity and social connection show promise in promoting wellbeing and reducing isolation.

#### 7.5.3 The Man Walk Initiative

- The Man Walk is a free, informal walking group for men, designed to foster social connection, routine physical activity, and mental wellbeing.
- The program operates at over 80 locations across Australia, including major cities, regional, and remote areas, with more than 135,000 registered participants.
- Walks are promoted via social media and local organisers. No registration is required; men simply attend a scheduled walk. Organisers (“Manbassadors”) welcome and support new members.

#### 7.5.4 Key findings

- **Social connection is central:** Loneliness (both emotional and social) is a major risk factor for poor mental health. Seventy-three percent of participants cited socialisation as the main benefit of the Man Walk.
- **Physical and mental health benefits:** Most participants strongly agreed that the program improved their physical and mental health.
- **Sustained engagement matters:** Long-term participants (3+ years) were significantly more likely to walk regularly and report better health outcomes.
- **Vulnerable groups may benefit most:** Older men, regional residents, and those from lower socioeconomic backgrounds may gain the most benefit from the Man Walk.

- **Alcohol use:** At-risk drinking was associated with poorer health and less frequent participation.
- **Holistic impact:** Participants experienced interconnected benefits across physical, mental, and social domains.

### 7.5.5 Policy recommendations

#### 1. **Scale and replicate community-based programs**

- Support the expansion of the Man Walk and similar initiatives in urban, regional, and remote communities.
- Prioritise informal, low-cost models that reduce barriers to participation.

#### 2. **Focus on sustained engagement**

- Invest in strategies to retain participants, such as regular communication, flexible scheduling, and peer leadership (e.g. “Manbassadors”).
- Encourage ongoing involvement rather than one-off participation.

#### 3. **Prioritise social connection**

- Design activities that foster meaningful relationships and group cohesion.
- Address loneliness directly through targeted outreach and group facilitation.

#### 4. **Target vulnerable groups**

- Tailor support for older men, regional residents, and those from disadvantaged backgrounds.
- Ensure accessibility for men with chronic illness or limited mobility.

#### 5. **Promote healthy behaviours**

- Integrate optional health literacy and mental health education into program activities while retaining the programs core components.
- Provide opportunities for social connection that do not revolve around alcohol.

#### 6. **Maintain program simplicity**

- Preserve the informal, accessible nature of the program, which is highly valued by participants.
- Avoid over-complicating with excessive structure or requirements.

#### 7. **Support ongoing research and evaluation**

- Fund longitudinal studies to assess long-term impacts on health, wellbeing, and social outcomes.



- Investigate unexpected findings (e.g., links between alcohol use and loneliness, regional differences in self-rated health).

### **7.5.6 Conclusion**

The Man Walk model illustrates how informal, community-led initiatives can successfully engage men, reduce social isolation, and contribute to better health outcomes. Policymakers and practitioners should support and adapt similar programs to meet men's health needs, particularly for those at risk of isolation or poor health.