



# 10,000 Steps Working Paper Series

## **Paper 20: Awareness of the 10,000 Steps Program 2017**

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## EXECUTIVE SUMMARY

This report details the awareness levels of the 10,000 Steps program within Australian adults in 2017. The report also examines associations between demographic variables and the level of awareness.

A Computer-Assisted-Telephone-Interview (CATI) survey of 1265 adults was conducted by the Population Research Laboratory, CQUniversity in July to August 2017.

The survey, the National Social Survey (NSS), randomly selected adults aged 18 years and over living in a dwelling unit in Australia who were able to be contacted by direct-dialled landline or mobile telephone service.

- In 2017, 67.7% of the Australian adult population were aware of the 10,000 Steps program, an increase from 63.8% in 2016.
- Awareness was higher among women compared with men.
- Adults aged 35 years and older reported higher levels of awareness in comparison to 18-34 year olds.
- Adults with 13 years or more of education reported higher levels of awareness in comparison to those with less than 13 years of education.
- People who were retired, students, unemployed, home duties or on a pension reported lower levels of awareness in comparison to adults working in professional and white collar occupations. Blue collar workers showed the lowest level of awareness of 10,000 Steps.



## INTRODUCTION

### Background

Funded by Queensland Health, 10,000 Steps Rockhampton was Australia's first 'whole of community' physical activity health promotion project. In 2001, the Rockhampton region was chosen for a two year trial of the project. The trial successfully increased physical activity levels in Rockhampton [1]. Since 2003, Queensland Health has continued to provide funding for 10,000 Steps to be developed as a sustainable state-wide initiative [1].

10,000 Steps provides information regarding physical activity, promotional materials, resources and support via the interactive 10,000 Steps website ([www.10000steps.org.au](http://www.10000steps.org.au)). Workplaces and community groups have since adopted and implemented 10,000 Steps across Queensland and beyond to promote physical activity and raise awareness of the health benefits associated with physical activity. Individuals are also able to access the program by using the interactive online Step Log to record and monitor their physical activity levels. At the start of 2017, the program launched a re-branded look along with an updated website with new features such as the ability to sync steps with a Fitbit account. As of August 2017, the 10,000 Steps program has had over 351,000 individual members and over 12,000 Providers (organisations and community groups) registered with the 10,000 Steps website.

Awareness levels of the 10,000 Steps program have been monitored specifically in Queensland (2005-2014) and have now extended to Australia wide (2014-2017). This aligns with the continued expansion of the project beyond Queensland, as such it is appropriate to assess the awareness of 10,000 Steps at a national level. National awareness has been monitored since 2014. The results have shown a significant increase in awareness of the 10,000 Steps program from 33.5% across Queensland in 2005 to 70.6% in 2017. The awareness Australia-wide has increased from 56.0% in 2009 to 67.7% in 2017 [2-10]. As the program continues to expand to Queensland and beyond, it is appropriate to continue to assess the awareness of 10,000 Steps at a national level.

### Purpose of Study

The purpose of this study was to examine the awareness of the 10,000 Steps program across Australia in 2017. In addition, the study examined if demographic variables (i.e. gender, age, location, years of education, annual household income and occupation, body mass index (BMI) category and physical activity) were associated with program awareness.

### Survey Method

Conducted by the Population Research Laboratory (PRL) at CQUniversity, the National Social Survey (NSS) is an annual series of cost-shared surveys aimed at obtaining public opinion on a range of topics held by a random sample of Australian residents. The NSS is comprised of core questions (e.g. publicity and social capital), demographic questions and a series of sponsored questions. This survey allows researchers and community organisations to access a credible, reliable and relatively low-cost data-collection vehicle. 10,000 Steps sponsored a series of questions on the NSS in 2017.

The NSS was administered through the Computer-Assisted-Telephone-Interview (CATI) system housed in the PRL. In 2017 the NSS was conducted in July and August. The target population was all individuals who were 18 years or older, lived in a dwelling unit in Australia and could be contacted by a direct-dialled land-based or mobile telephone service. This population was divided into eight sub-samples across the states and territories that make up Australia. A random sample approach was undertaken to ensure that each member of the target population had an equal chance



of selection. The survey received ethical clearance from the Human Research Ethics Committee at CQUniversity Australia (HREC H14/09-203).

### **Data Quality**

In 2017, the total number of complete responses was 1265. The Response Rate was 24%, slightly down from 26% in 2016.

#### *Estimated Sampling Error*

The sampling error (ESR) is a measure of the validity of the descriptive statistics that are observed in a sample. The estimated sampling error, at the 95% confidence level, for the sample of 1265 respondents and a 50/50 binomial percentage distribution is plus or minus 2.8 percentage points.

### **Data Treatment**

Awareness of 10,000 Steps was examined by geographical location (Australian states and territories), gender, age, years of education, household income, occupation, BMI and physical activity levels. Participant self-reported height and weight was used to calculate BMI. Awareness of the 10,000 Steps program was determined through the following question using a yes/no response format; 'Have you heard of the Ten Thousand (10,000) Steps program?'

#### *Physical Activity Levels*

Physical activity data was collected using the Active Australia Survey [11]. Following standard scoring protocols for the Active Australia Survey physical activity was categorized as follows:

- 1) No activity (Reported no walking, moderate- or vigorous-intensity activity in the prior week);
- 2) Insufficient Activity (Reported less than 150 minutes of physical activity or reported more than 150 minutes of activity but in less than five sessions in the prior week);
- 3) Sufficient Activity (Reported a minimum of 150 minutes of activity conducted in five or more sessions in the prior week).

#### *Statistical Analyses*

Prevalence estimates are presented as a percentage of the population who report being aware of 10,000 Steps. Binary logistic regression was used to examine the associations between awareness and selected demographic measures assessed in the study. The association is presented as an odds ratio in comparison to a reference group and indicates the increased or decreased likelihood of a sub-group in the population to report being aware of 10,000 Steps. In the current analysis compared to the reference group, an odds ratio greater than 1.00 indicates that a particular group or subgroup is more likely to report being aware of 10,000 Steps, and an odds ratio less than 1.00 indicates that a group or subgroup is less likely to report being aware of 10,000 Steps. Each odds ratio has a 95% confidence interval and if the lower and upper confidence intervals include 1.00 (e.g., 0.80 – 1.28) the association is not statistically significant. If the odds ratio does not include 1.00 (e.g., 0.40 – 0.97, or 1.34 – 1.92) the association is statistically significant.



## RESULTS

### Sample

Table 1 shows that 54.8% of the participants in 2017 were aged 55 years and older, 52.7% were women, and that 31.1% of the respondents earned an annual household income of \$52,000 or over. Self-report data showed that 55.9% of participants reported being overweight or obese, and that 48.0% reported being sufficiently active for health benefits. Further demographics of the sample are presented in Table 1 (See Appendix – Table 1). Due to the availability of complete responses in NSS a total of 856 were included in the adjusted logistic regression analysis (Table 3).

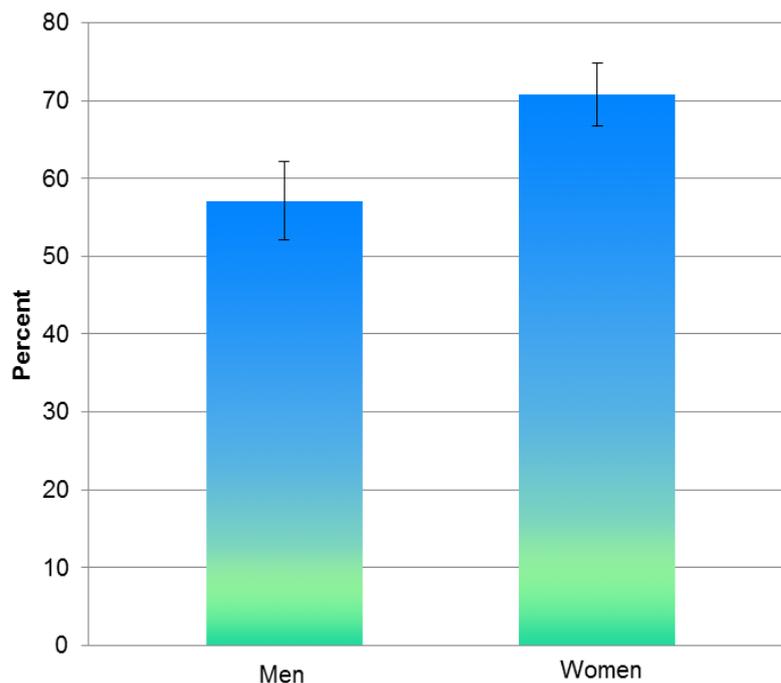
### National Awareness of the 10,000 Steps Program

In 2017 the overall level of awareness was 67.7%. The prevalence of awareness across gender, age, years of education, household income, occupation, BMI and physical activity variables is shown in Table 2 (See Appendix – Table 2). Significant associations were found between awareness and gender, age group, years of education, occupational level and physical activity category when adjusting for other demographic variables. The following sections discuss these results in detail.

#### Gender

A higher percentage of women (73.1%) were aware of the 10,000 Steps program than men (61.8%). Figure 1 shows the proportion of men and women aware of 10,000 Steps in 2017. The logistic regression analysis revealed that women were significantly more likely to be aware of 10,000 Steps than men (Table 3).

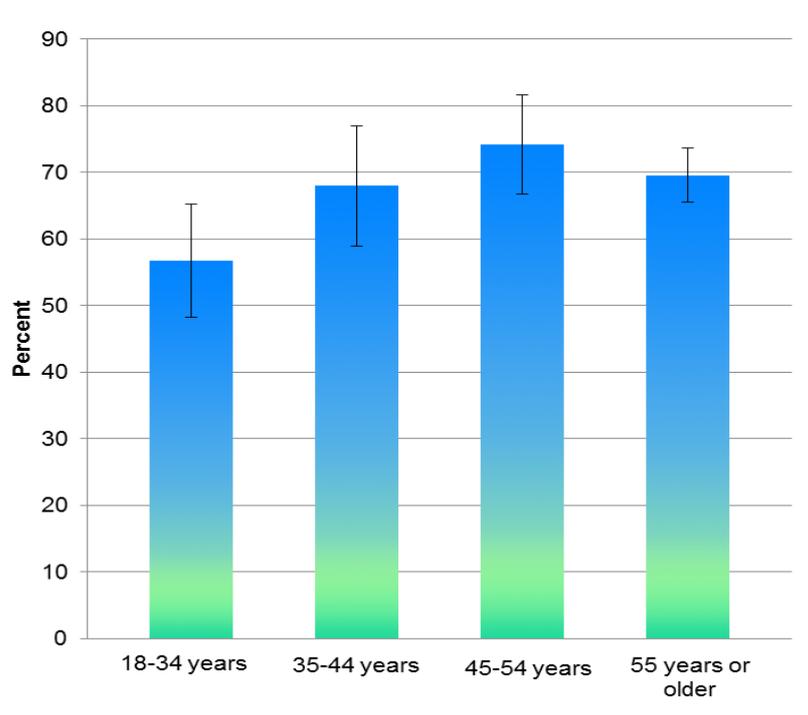
Figure 1. Percentage of respondents aware of 10,000 Steps by gender in 2017.



### Age Group

Participants aged 18-34 years had the lowest levels of reported awareness (56.7%), and the highest levels were reported by adults aged 45-54 years (74.2%). Figure 2 shows the levels of awareness by age categories in 2017. When adjusting for other socio-demographic factors those aged 45 years and older were significantly more likely to be aware of the 10,000 Steps program than those aged 18-34 years (Table 3).

Figure 2. Percentage of respondents aware of 10,000 Steps by age in 2017.

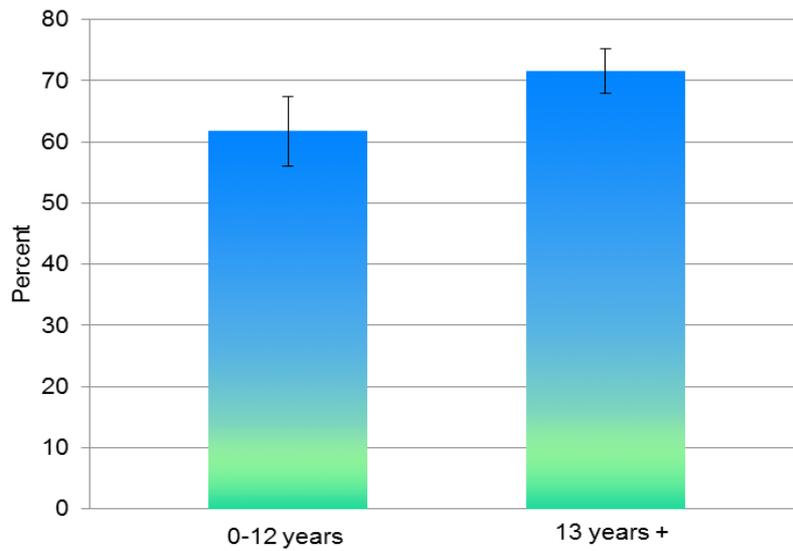


### Years of Education

Participants with 13 years or more of education reported a higher level of awareness of the 10,000 Steps program (71.6%) than participants with less than 13 years of education (61.8%). Figure 3 shows the levels of awareness by education categories in 2017. When adjusting for socio-demographics, participants reporting 13 years or more education were significantly more likely to be aware of 10,000 Steps in comparison to participants with less than 13 years of education (Table 3).



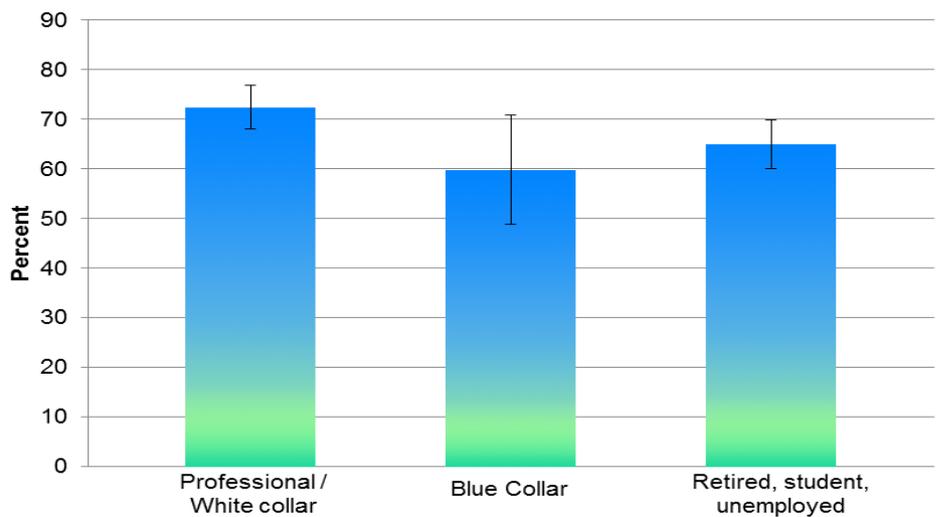
Figure 3. Percentage of respondents aware of 10,000 Steps by years of education in 2017.



**Occupation**

Professional and white collar workers reported the highest levels of awareness of the 10,000 Steps program (72.4%), followed by those who were retired, student, unemployed, home duties or receiving the pension (65.0%) and finally, blue collar workers (59.8%). Figure 4 shows the levels of awareness by occupational category in 2017. Professional and white collar workers were significantly more likely to be aware of 10,000 Steps.

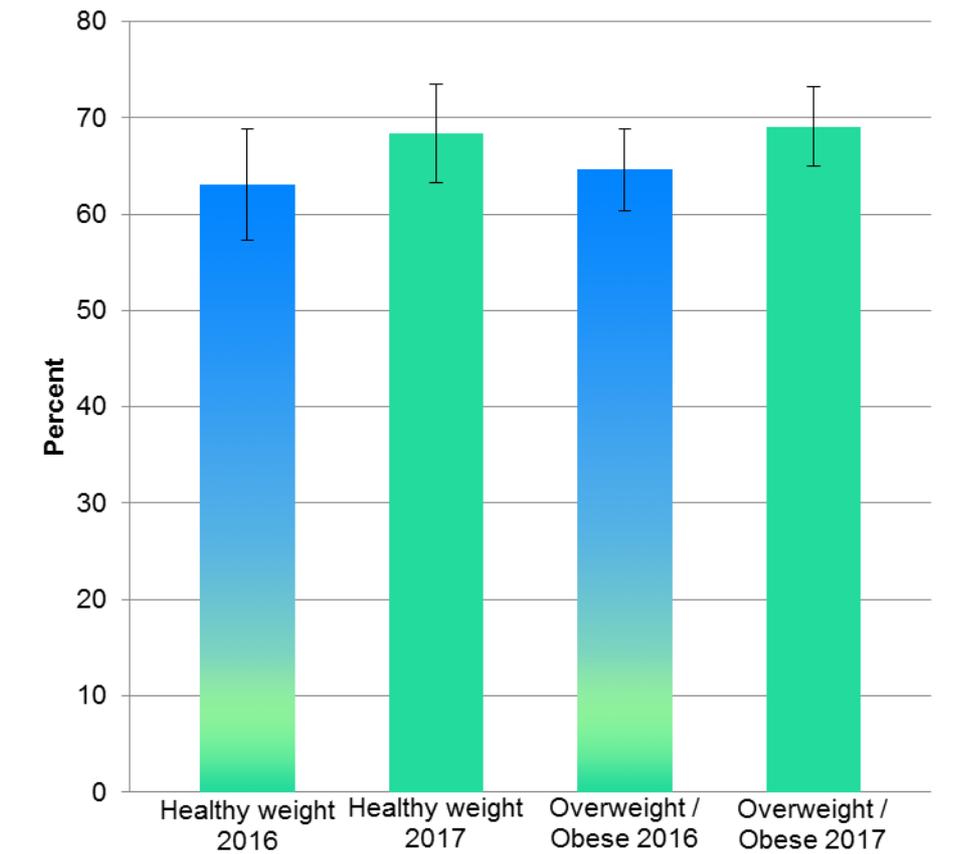
Figure 4. Percentage of respondents aware of 10,000 Steps by occupational level in 2017.



### BMI Category

There was no association between BMI and awareness in 2017 (Table 3). Figure 5 shows the awareness level by BMI category in 2017.

Figure 5. Percentage of respondents aware of 10,000 Steps by BMI category in 2016-2017.

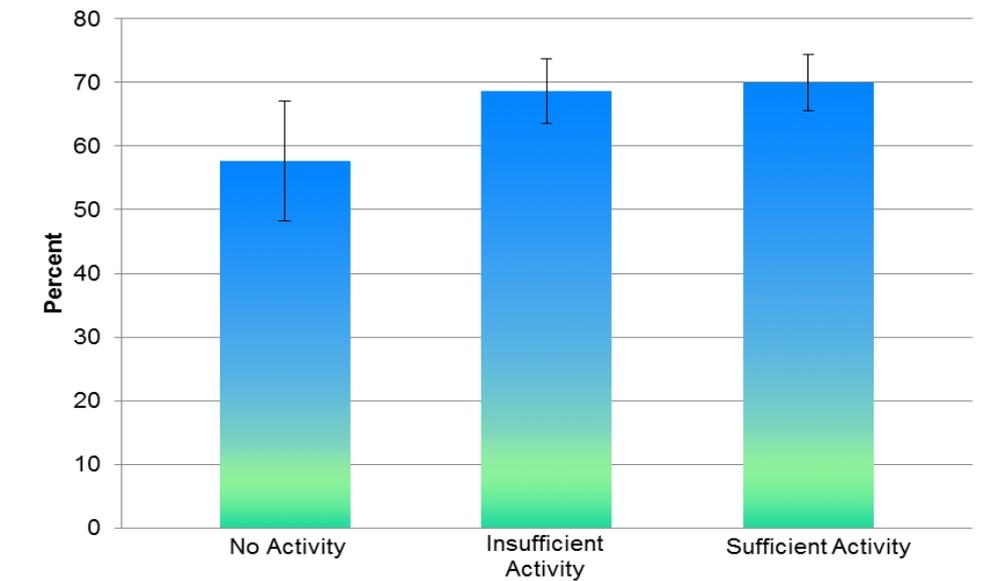


### Physical Activity Levels

Levels of awareness were lowest (57.7%) in those reporting no physical activity, and increased in those reporting insufficient physical activity (68.6%) and sufficient physical activity (70.0%) (Figure 6). Logistic regression analysis revealed that, relative to those people reporting no activity, those reporting sufficient physical activity had significantly higher levels of awareness (Table 3).



Figure 6. Percentage of respondents aware of 10,000 Steps by physical activity levels in 2017.



#### 10,000 Steps Awareness compared to other health related initiatives

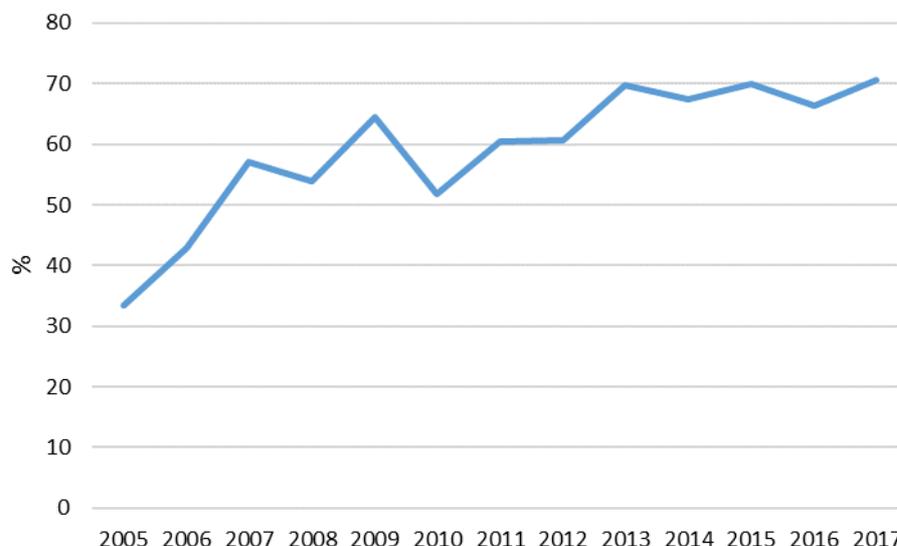
During the 2017 National Social Survey respondents were also asked about their awareness of other similar physical activity and health and wellbeing programs. Awareness of 10,000 Steps was higher compared to the other programs assessed. Participants were most aware of the Queensland “Healthier Happier” campaign (8.9%), Queensland “Workplaces for Wellness” campaign (7.5%) , Australian Shape Up (7.4%) , “Swap It, Don’t Stop It” campaign (4.4%) , while fewer participants were aware of the Get Healthy Coaching Service (1.7%), Happy Body at Work (1.9%) and the Travel ‘n’ Well program (1.1%). A high proportion of respondents (77.7%) reported that they were not aware of any of the other similar physical activity and health and wellbeing programs.

#### 10,000 Steps Awareness in Queensland

Awareness of 10,000 Steps has been determined using the Queensland Social Survey from 2005 to 2014 and the National Social Survey from 2014 to 2017. Awareness of Queensland respondents from 2005 to 2017 has increased from 33.5% to 70.6% (Figure 7).



Figure 7. Percentage of Queensland respondents aware of 10,000 Steps – 2005 to 2017



## CONCLUSIONS AND RECOMMENDATIONS

With the continued promotion of the 10,000 Steps program across Queensland, it is important to investigate and monitor awareness of the program in the general population. Based on the 2017 NSS, 67.7% of Australian residents are aware of the 10,000 Steps program.

A large part of the 10,000 Steps marketing plan is social media, including Facebook and Twitter. This increasing online presence of the program results in less geographical boundaries and therefore may contribute to the awareness of individuals outside of Queensland.

2017 awareness levels were associated with gender. The disparity between awareness reported from men and women is also reflected in 10,000 Steps membership levels, where women make up nearly 70% of membership. Women also make up over 80% of the fans who like and follow the 10,000 Steps Facebook page. While membership (on the Website and fans on Facebook) favours the female gender, in 2017 nearly 60% of men were aware of the program. This percentage continues to increase over the years and suggests that while awareness is higher in women, men are also aware of the message. Future initiatives and promotions of the program could look at specifically encouraging the involvement of men to see if the awareness gap can be closed between genders.

The upward trend observed in 10,000 Steps awareness could be associated with the significant increase in household access to the internet within Australia over time [12]. Statistics show that household access to the internet has increased from 44% in 1998 to 86% in 2015 [12]. As the internet becomes more accessible and the use of social media becomes more common, more people may be exposed to 10,000 Steps as the program has a strong online presence and marketing strategy.

Overall, the current data indicates that 10,000 Steps has been well promoted across Queensland with flow on effects to other states largely as a result of workplaces with multi-state locations. Awareness of the 10,000 Steps program across Australia has increased since 2005. This provides further evidence that the promotion strategies adopted have been valuable for promoting the program to individuals, workplaces, organisations and community groups. As the promotion of the 10,000 Steps program



across the state continues it is predicted that levels of awareness will continue to rise across Queensland and nationwide.

### **Future Recommendations**

The increased awareness observed in 2017 shows the promotion strategy of the 10,000 Steps program is effective. From the data, the following sub-groups have been identified as those which should be prioritised in future marketing strategies: men, individuals with fewer than 13 years of education and individuals aged 18-34 years. These groups are less likely to be aware of the 10,000 Steps program compared with other demographic groups.

Continued examination of the awareness of 10,000 Steps across Queensland and nationwide should be conducted to monitor the promotion strategy of the project and to identify socio-demographic groups that could be prioritised in future promotional efforts.



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## APPENDIX: TABLES

Table 1. Demographic characteristics of the total sample of participants 2017

Characteristic	2017 n <sup>a</sup>	2017 %
<b>Gender</b>		
Men	598	47.3
Women	667	52.7
<b>Age Group</b>		
18-34 years	233	18.4
35-44 years	153	12.1
45-54 years	178	14.1
55+ years	693	54.8
<b>Years of Education</b>		
0-12 years	453	35.8
≥13 years	800	63.2
<b>Household Income (per annum)</b>		
Nil-\$51,999	302	23.9
\$52,000-\$104,000	164	13.0
>\$104,000	230	18.1
No response	569	45.0
<b>Occupational Level</b>		
Professional / White Collar	559	44.2
Blue Collar	127	10
Retired, student, unemployed, home duties, pension	572	45.2
<b>BMI Category</b>		
Healthy weight	462	36.5
Overweight or Obese	707	55.9
<b>PA Levels</b>		
No Activity	182	14.4
Insufficient Activity	473	37.4
Sufficient Activity	607	48.0

<sup>a</sup> n = 1265



Table 2. National awareness and crude odds ratios for awareness by demographic variables 2017

Variable	n Aware	% Aware	Crude OR	95% CI
<b>Gender</b>				
Men	369	61.8	1	Reference
Women	487	73.1	1.68	1.32-2.13
<b>Age Group</b>				
18-34 years	132	56.7	1	Reference
35-44 years	104	68.0	1.62	1.06-2.49
45-54 years	132	74.2	2.20	1.44-3.36
≥55 years	481	69.6	1.75	1.29-2.38
<b>Years of Education</b>				
0-12	280	61.8	1	Reference
≥13	571	71.6	1.55	1.22-1.98
<b>Household Income (per annum)</b>				
Nil-\$51,999	209	69.2	1	Reference
\$52,000-\$103,999	113	68.9	0.99	0.65-1.49
>\$104,000	171	75.0	1.34	0.91-1.96
No response	363	63.8	0.78	0.58-1.06
<b>Occupational Level</b>				
Professional / White collar	404	72.4	1	Reference
Blue Collar	76	59.8	0.57	0.38-0.85
Retired, student, unemployed, home duties, pension	371	65.0	0.71	0.55-0.91
<b>BMI Category</b>				
Healthy weight	316	68.4	1	Reference
Overweight or Obese	487	69.1	1.03	0.80-1.33
<b>PA Levels</b>				
No Activity	105	57.7	1	Reference
Insufficient Activity	324	68.6	1.6	1.13-2.28
Sufficient Activity	425	70.0	1.71	1.22-2.41



Table 3. Adjusted odds ratios for national awareness by demographic variables 2017

Variable	2017 Adjusted OR	2017 95% CI
<b>Gender</b>		
Men	1	Reference
Women	1.77	1.36-2.32
<b>Age Group</b>		
18-34 years	1	Reference
35-44 years	1.46	0.92-2.34
45-54 years	2.01	1.26-3.21
≥55 years	2.37	1.62-3.47
<b>Years of Education</b>		
0-12	1	Reference
≥13	1.54	1.16-2.05
<b>Household Income (per annum)</b>		
Nil-\$51,999	1	Reference
\$52,000-\$104,000	1.10	0.71-1.72
>\$104,000	1.27	0.81-1.99
No response	0.90	0.65-1.25
<b>Occupational Level</b>		
Professional / White Collar	1	Reference
Blue Collar	0.89	0.57-1.41
Retired, student, unemployed, home duties, pension	0.72	0.51-1.01
<b>BMI Category</b>		
Healthy weight	1	Reference
Overweight or Obese	1.06	0.81-1.40
<b>PA Levels</b>		
No Activity	1	Reference
Insufficient Activity	1.49	1.01-2.18
Sufficient Activity	1.66	1.14-2.41



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