



10,000 Steps Working Paper Series

Paper 21: Awareness of the 10,000 Steps Program 2018

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EXECUTIVE SUMMARY

This report details the awareness levels of the 10,000 Steps program within Australian adults in 2018. The report also examines associations between demographic variables and the level of awareness.

An online omnibus survey (OmniPulse) of 1009 adults was conducted by Research Now, in April 2018. The omnibus survey targets a nationally representative sample of adults aged 18 years balanced by gender, age and region (state).

- In 2018, 55.9% of the Australian adult population were aware of the 10,000 Steps program.
- Awareness was higher among women compared with men.
- Adults aged 45-54 years reported lower 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.
- This study identified sub-groups which can be targeted for further promotion of 10,000 Steps. These include: men, individuals who were retired, student, unemployed, home duties or receiving the pension, and people participating in no physical activity.



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.

10,000 Steps provides information regarding physical activity, promotional materials, resources and support via the interactive 10,000 Steps website (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 with an updated website including new features such as the ability to sync steps with a Fitbit account, updated promotional materials and new mobile application. As of June 2018, the 10,000 Steps program has had over 370,000 individual members and over 13,000 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 (2009, 2014-2018). 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 annually since 2014. From 2005 to 2017 awareness was examined via Computer Assisted Telephone Interviewing (CATI) system by the Population Research Lab at CQUniversity. 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 [2-14]. 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. Due to the closure of the Population Research Lab at the end of 2017, awareness in 2018 was examined using different methodology outlined below. This is the first report investigating awareness with new online omnibus survey methodology.

Purpose of Study

The purpose of this study was to examine the awareness of the 10,000 Steps program across Australia in 2018. In addition, the study examined if demographic variables (i.e. gender, age, location, years of education, annual household income, occupation, body mass index (BMI) category and physical activity) were associated with program awareness.

Survey Method

Conducted by Research Now, the Omnipulse omnibus survey is a weekly multi-client survey aimed at obtaining public opinion on a range of topics held by a nationally representative sample balanced on age, gender and region (state). It is an online survey targeting 1,000 adults aged 18 years and over. The omnibus survey is comprised of core demographic questions (gender, age, location, etc.) and client sponsored questions. 10,000 Steps sponsored nine questions in the omnibus survey conducted from Friday 20th April until Sunday 22nd April 2018.

Participants are recruited from an online panel through a sampling platform, Research Now's router. The router employs a variety of technologies and data to route respondents to surveys with functionality including business rules, project selection and real-time profiling (See Figure 1).



Figure 1. Research Now's router process



Everyone that enters Research Now's router is assessed against business rules designed to ensure quality and maintain compliance with government regulations. Examples include:

- Geography detection and validation
- Respondent identification
- Respondent participants limits and fraud prevention
- Device detection (smartphone, tablet, desktop/laptop)

Once a respondent passes business rules, they are matched to a list of projects based on various criteria. For example:

- Respondent profile data
- Project sample requirements

Respondents can be further evaluated to collect project of project-specific pre-screening data. However, this was not required for this project. If the panel member meet all rules in each of the steps they can participate in the survey.

Data Treatment

Awareness of 10,000 Steps was examined by gender, age, years of education, household income, occupation, BMI and physical activity levels. 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 Steps program?' Participant self-reported height and weight was used to calculate BMI which was further categorised into healthy weight (BMI < 25) and overweight or obese (BMI ≥ 25).

Physical Activity Levels

Physical activity levels were determined using the following single item physical activity measure [15]; 'In the past week, on how many days have you done a total of 30 min or more of physical activity, which was enough to raise your breathing rate? This may include sport, exercise and brisk walking or cycling for recreation or to get to and from places, but should not include housework or physical activity that may be part of your job'. Responses included 0-7 days.

Physical activity data was categorised as follows:

- 1) No activity (Reported 0 days of physical activity in the past week);
- 2) Insufficient Activity (Reported between 1 and 4 days of physical activity in the past week);
- 3) Sufficient Activity (Reported 5 or more days of physical activity in the past 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 (See Appendix – Table 1) shows that 50.5% of the participants were women, 35.7% were aged 55 years and older, and that 41.2% of the respondents earned an annual household income between \$45,000 and \$99,999. Self-report data showed that 57.4% of participants reported being overweight or obese, and that 29.6% 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 the omnibus survey a total of 955 were included in the adjusted logistic regression analysis (Table 3).

National Awareness of the 10,000 Steps Program

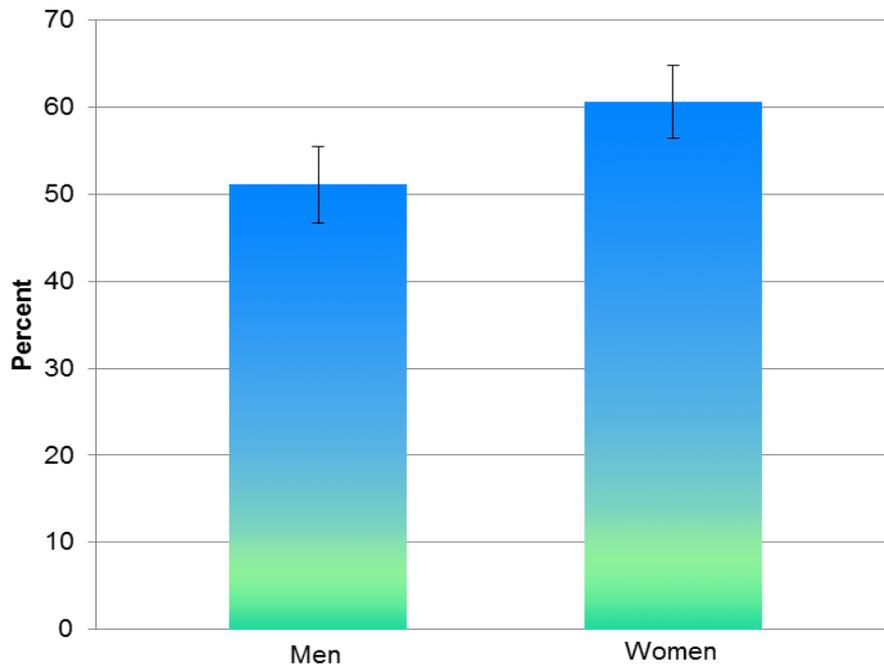
In 2018 the overall level of awareness was 55.9%. The prevalence of awareness across gender, age, years of education, household income, occupation, BMI and physical activity variables is shown in Table 2 (See Appendix – Table 2). Significant associations were found between awareness and gender, age group, years of education, household income, occupational level and physical activity level. When adjusting for all other demographic variables, significant associations remained between awareness and gender, occupational level and physical activity level (See Appendix – Table 3). The following sections discuss these results in detail.

Gender

A higher percentage of women (60.6%) were aware of the 10,000 Steps program than men (51.1%). Figure 2 shows the proportion of men and women aware of 10,000 Steps in 2018. The logistic regression analysis revealed that women were significantly more likely to be aware of 10,000 Steps than men (Table 3).



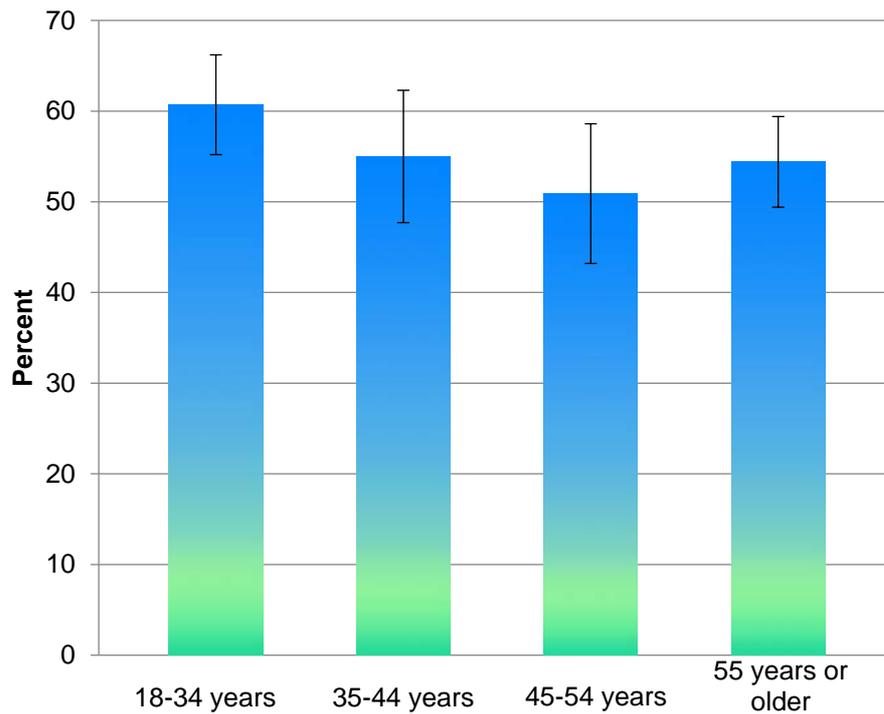
Figure 2. Percentage of respondents aware of 10,000 Steps by gender in 2018.



Age Group

Participants aged 18-34 years reported the highest levels of awareness (60.7%), while adults aged 45-54 years had the lowest levels of reported awareness (50.9%). Figure 3 shows the levels of awareness by age categories in 2018. There was no association between age and awareness in 2018 (Table 3).

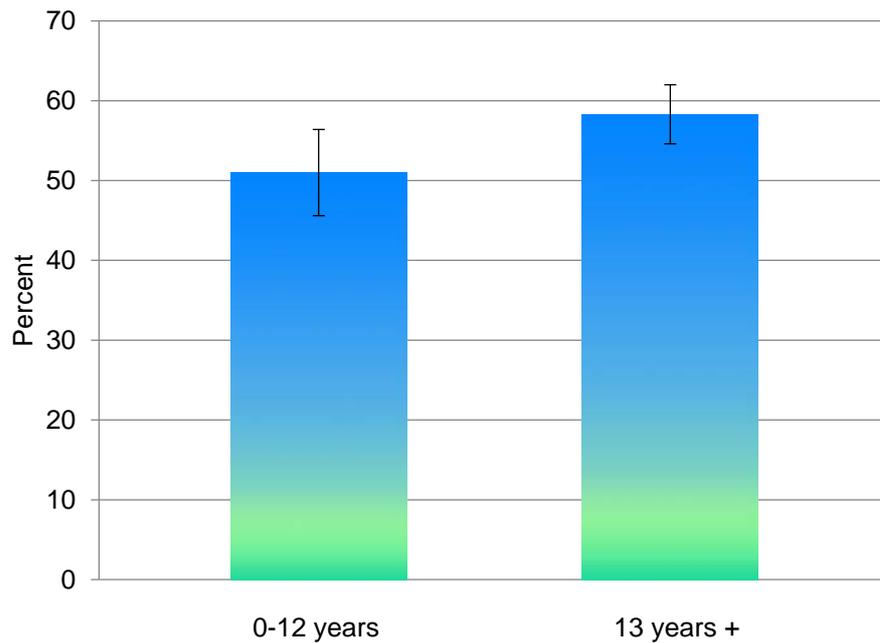
Figure 3. Percentage of respondents aware of 10,000 Steps by age in 2018.



Years of Education

Participants with 13 years or more of education reported a higher level of awareness of the 10,000 Steps program (58.3%) than participants with less than 13 years of education (51.0%). Figure 4 shows the levels of awareness by education categories in 2018. When adjusting for all demographics, there was no association between years of education and awareness in 2018 (Table 3).

Figure 4. Percentage of respondents aware of 10,000 Steps by years of education in 2018.

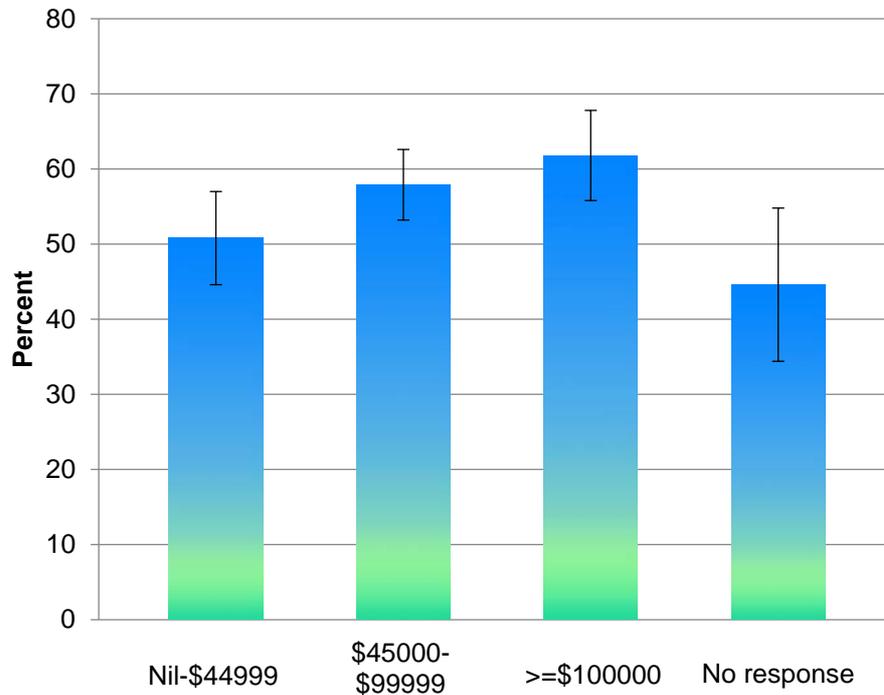


Household income

Participants with an annual household income of \$100,000 or over had the highest levels of awareness of the 10,000 Steps program (61.8%). This was followed by participants earning \$45,000-\$99,999 (57.8%) and those earning \$44,999 or less (50.8%). Participants who did not wish to report on their household income reported the lowest awareness of the 10,000 Steps program at 44.6% (Figure 5). When adjusting for other demographic factors, there was no significant association between household income and awareness.



Figure 5. Percentage of respondents aware of 10,000 Steps by household income in 2018.

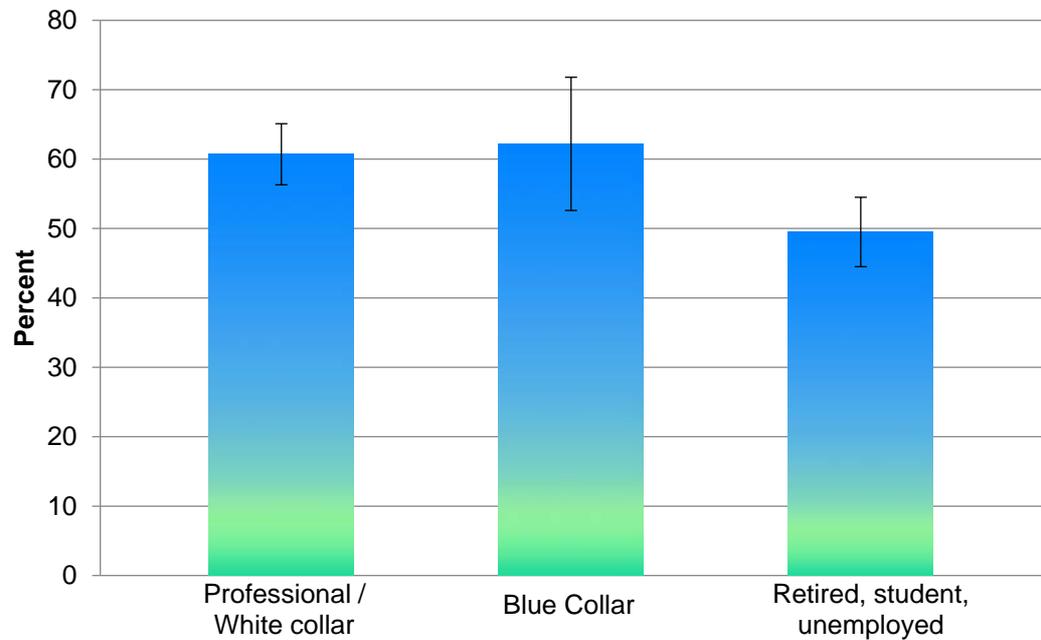


Occupation

Blue collar workers reported the highest levels of awareness of the 10,000 Steps program (62.2%), followed by professional and white collar workers (60.7%) and finally, those who were retired, student, unemployed, home duties or receiving the pension (49.5%). Figure 6 shows the levels of awareness by occupational category in 2018. When adjusting for all demographic variables those who were retired, student, unemployed, home duties or receiving the pension were significantly less likely to be aware of 10,000 Steps than professional and white collar workers (Table 3).



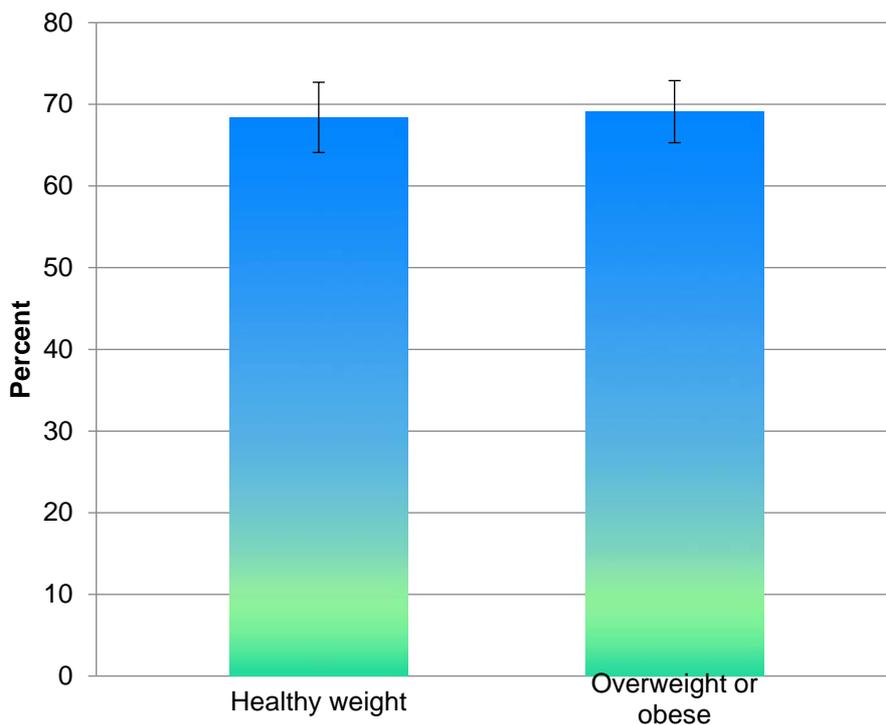
Figure 6. Percentage of respondents aware of 10,000 Steps by occupational level in 2018.



BMI Category

Awareness of the 10,000 steps program was slightly higher in health weight participants (58.5%) than overweight or obese participants (54.0%) Figure 7 shows the awareness level by BMI category in 2018. There was no association between BMI and awareness in 2018 (Table 3).

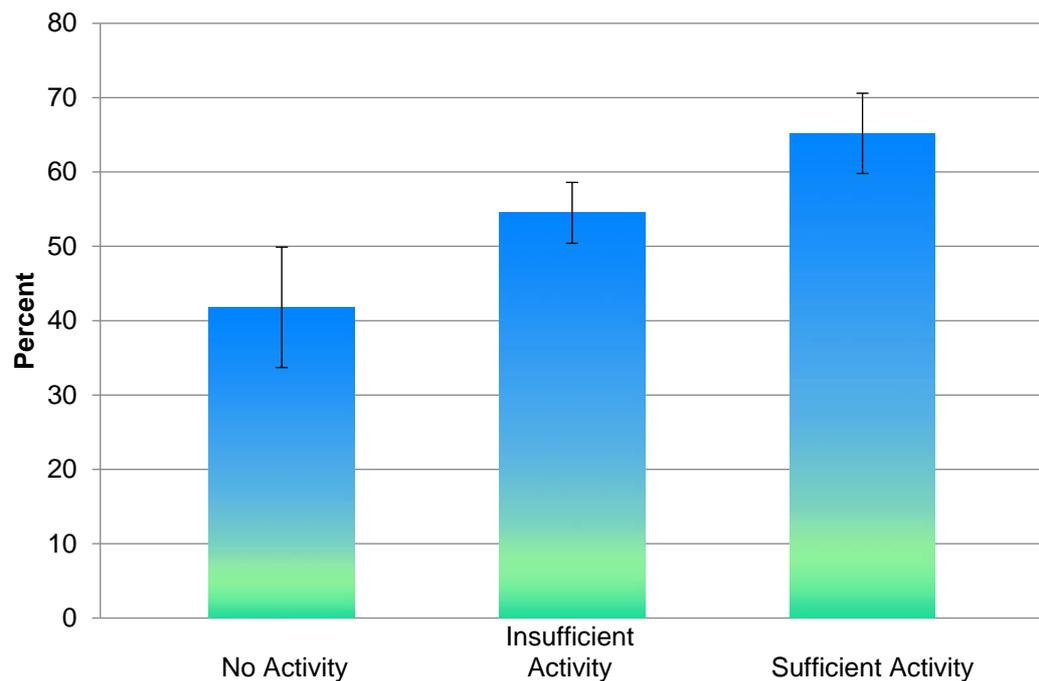
Figure 7. Percentage of respondents aware of 10,000 Steps by BMI category in 2018.



Physical Activity Levels

Levels of awareness were lowest (41.8%) in those reporting no physical activity, and increased in those reporting insufficient physical activity (54.5%) and sufficient physical activity (65.2%; Figure 8). 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 8. Percentage of respondents aware of 10,000 Steps by physical activity levels in 2018.



10,000 Steps Awareness compared to other health related initiatives

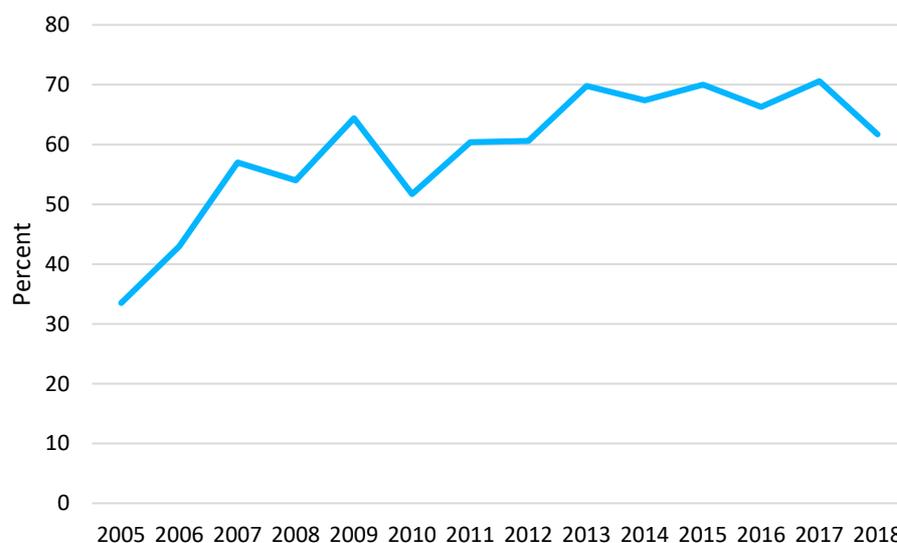
During the 2018 omnibus survey respondents were also asked about their awareness of other similar physical activity and health and wellbeing programs. Awareness of 10,000 Steps (55.9%) was higher compared to the other programs assessed. Participants were most aware of the Heart Foundation Walking program (35.8%), Queensland “Healthier. Happier.” program (12.8%), Australian Shape Up campaign (10.5%), and Queensland My health for life program (8.8%), while fewer participants were aware of Happy Body at Work (7.5%), the Get Healthy Coaching Service (6.6%), Swap it (4.8%) and the Travel ‘n’ Well program (2.9%). Half of all respondents (49.9%) 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 (QSS) from 2005 to 2014, the National Social Survey (NSS) from 2015 to 2017 and the omnibus survey in 2018. The national sample was divided into states to determine awareness in Queensland adults. In 2018, awareness in Queensland was found to be 61.7%. Awareness of Queensland respondents from 2005 to 2018 has increased from 33.5% to over 60% (Figure 9). The decrease observed from 2017 to 2018 will be discussed in the Conclusions and Recommendations.



Figure 9. Percentage of Queensland respondents aware of 10,000 Steps – 2005 to 2018



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 2018 omnibus survey, 55.9% of Australian residents are aware of the 10,000 Steps program.

A decline in awareness was observed this year (55.9%) from the 2017 national awareness levels (67.7%). This awareness level is similar to that found in 2009 [7]. This decrease was also observed in the Queensland sub-sample. It is unclear if this is a true drop in awareness levels or if the change is due to the different survey methodology used. This year, an online omnibus survey was used instead of previous CATI system used in both the QSS and NSS. The participants were also sampled differently with the omnibus survey recruiting a nationally representative sample from an online panel, while the QSS and NSS used a telephone random sample approach to ensure that each member of the target population had an equal chance of selection.

The 2018 awareness levels were associated with gender as previously found [2-14]. Differences in awareness between genders were also found in 10,000 Steps projects conducted in Belgium [16-17]. 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 people who like and follow the 10,000 Steps Facebook page. While membership (on the Website and Facebook) favours the female gender, in 2018 over 50% of men were aware of the program. 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.

In the 2018 online omnibus survey, physical activity levels were determined using one item. This will provide different results in comparison to the full Active Australia Questionnaire [18] used to determine physical activity in the previous QSS and NSS CATI surveys. Despite differences in measuring physical activity, those that were more physically active were also found to be more aware of 10,000 Steps. This was a trend observed in 2015, 2016, and 2017. While there is an association between these two variables it cannot be determined if participants are more active because they are aware of 10,000 Steps or vice versa. However it indicates that those individuals with no physical activity are less likely to be aware of the program and therefore strategies could be implemented to target them specifically. People undertaking no physical



activity are a primary target group for the 10,000 Steps program as any increase in physical activity (and steps) will provide significant health benefits for participants.

While not significant, differences were also observed in the awareness levels of age subgroups. Previously in the 2014-2017 NSS and the 2007-2013 QSS, participants aged 18-34 years reported the lowest levels of awareness. However, this year they were observed to have the highest levels of awareness. This could be from the higher proportion of young people included in the online participant sample (30%) which is much greater than the previous NSS 18-34 years sample sizes of 16-19%. Reaching younger adults is also a known challenge of CATI surveys, where older people are more likely to participate.

Overall, the current data indicates that 10,000 Steps has been reasonably well promoted across Queensland with flow on effects to other states largely as a result of workplaces with multi-state locations. Despite a drop in the last 12 months which could be due to the change in survey methodology, overall awareness of the 10,000 Steps program across Australia has increased since initially assessed in 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

From the data, the following sub-groups have been identified as those which should be prioritised in future marketing strategies: men, individuals who were retired, student, unemployed, home duties or receiving the pension, and people participating in no physical activity. 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 2018

Characteristic	2018 n ^a	2018 %
Gender		
Men	499	49.5
Women	510	50.5
Age Group		
18-34 years	308	30.5
35-44 years	180	17.8
45-54 years	161	16.0
≥55 years	360	35.7
Years of Education		
0-12 years	335	33.2
≥13 years	674	66.8
Household Income (per annum)		
Nil-\$44,999	252	25
\$45,000-\$99,999	416	41.2
≥\$100,000	249	24.7
No response	92	9.1
Occupational Level		
Professional / White Collar	473	49.4
Blue Collar	98	10.2
Retired, student, unemployed, home duties, pension	386	40.3
BMI Category		
Healthy weight	429	42.6
Overweight or Obese	578	57.4
PA Levels		
No Activity	141	14.0
Insufficient Activity	569	56.4
Sufficient Activity	299	29.6

^a n = 1009



Table 2. National awareness and crude odds ratios for awareness by demographic variables 2018

Variable	n Aware	% Aware	Crude OR	95% CI
Gender				
Men	255	51.1	1	Reference
Women	309	60.6	1.47	1.15-1.89
Age Group				
18-34 years	187	60.7	1	Reference
35-44 years	99	55.0	0.79	0.55-1.15
45-54 years	82	50.9	0.67	0.46-0.99
≥55 years	196	54.4	0.77	0.57-1.05
Years of Education				
0-12	171	51.0	1	Reference
≥13	393	58.3	1.34	1.03-1.75
Household Income (per annum)				
Nil-\$44,999	128	50.8	1	Reference
\$45,000-\$99,999	241	57.9	1.33	0.97-1.83
≥\$100,000	154	61.8	1.57	1.10-2.24
No response	41	44.6	0.78	0.48-1.26
Occupational Level				
Professional / White collar	287	60.7	1	Reference
Blue Collar	61	62.2	1.07	0.68-1.67
Retired, student, unemployed, home duties, pension	191	49.5	0.64	0.48-0.83
BMI Category				
Healthy weight	251	58.5	1	Reference
Overweight or Obese	312	54.0	0.83	0.65-1.07
PA Levels				
No Activity	59	41.8	1	Reference
Insufficient Activity	310	54.5	1.66	1.15-2.42
Sufficient Activity	195	65.2	2.61	1.73-3.93



Table 3. Adjusted odds ratios for national awareness by demographic variables 2018

Variable	2018 Adjusted OR	2018 95% CI
Gender		
Men	1	Reference
Women	1.69	1.26-2.25
Age Group		
18-34 years	1	Reference
35-44 years	0.86	0.58-1.27
45-54 years	0.80	0.52-1.21
≥55 years	1.28	0.88-1.86
Years of Education		
0-12	1	Reference
≥13	1.24	0.92-1.67
Household Income (per annum)		
Nil-\$51,999	1	Reference
\$52,000-\$104,000	1.16	0.82-1.66
>\$104,000	1.24	0.81-1.89
No response	0.58	0.34-1.00
Occupational Level		
Professional / White Collar	1	Reference
Blue Collar	1.20	0.74-1.92
Retired, student, unemployed, home duties, pension	0.68	0.49-0.96
BMI Category		
Healthy weight	1	Reference
Overweight or Obese	0.96	0.73-1.27
PA Levels		
No Activity	1	Reference
Insufficient Activity	1.47	0.98-2.18
Sufficient Activity	2.24	1.45-3.47



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