Western Bulldogs Community Foundation
Daughters of the West
Program Evaluation 2018

WESTERN BULLDOGS Community FOUNDATION

VICTORIA UNIVERSITY
MELBOURNE AUSTRALIA

The Western Bulldogs Community Foundation offers thanks to all who assisted in the delivery of the 2018 Daughters of the West program. In particular, the Western Bulldogs Community Foundation recognises the efforts of the City of Ballarat, Brimbank City Council, Hobsons Bay City Council, Maribyrnong City Council, Maryborough District Health Service, Melton City Council and Wyndham City Council.

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Evaluation of the DOTW 2018 program was commissioned by the Western Bulldogs Community Foundation and completed by the Institute for Health and Sport at Victoria University.

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Acknowledgment of Country

Victoria University and the Western Bulldogs Community Foundation acknowledge, recognise and respect the Elders, families and forebears of the Boonwurrung, Wadawurrung and Wurundjeri of the Kulin Nation who are the traditional owners of land where the Daughters of the West programs meet.

Contents

DAUGHTERS OF THE WEST

What did we achieve in 2018?

8 PROGRAM LOCATIONS IN THE WEST

- Footscray
- Melton South
- Melton West
- St Albans
- Werribee
- Laverton
- Ballarat
- Maryborough

450 WOMEN ATTENDED THE PROGRAM IN 2018

82% OF PARTICIPANTS GRADUATED

42%

OF PARTICIPANTS WERE BORN IN A COUNTRY OTHER THAN AUSTRALIA

OR

HAD AT LEAST ONE PARENT BORN IN A COUNTRY OTHER THAN AUSTRALIA

Most common Countries of Birth :

AUSTRALIA
ENGLAND
INDIA
MALTA
PHILIPPINES
VIETNAM

75% OF PARTICIPANTS HAVE AT LEAST ONE HEALTH CONCERN

OUR PARTICIPANTS WERE:

- EMPLOYED
- STAY AT HOME PARENTS
- RETIRED
- STUDENTS
- UNEMPLOYED

81% FELT MORE CONNECTED TO THEIR LOCAL COMMUNITY

96% BETTER UNDERSTAND SERVICES OFFERED BY LOCAL HEALTH SERVICES

ON AVERAGE **88%** FELT MORE KNOWLEDGEABLE ABOUT EACH OF THE HEALTH TOPICS

Executive Summary

Background

The western region of Victoria experiences poor health outcomes including lower life expectancy, higher proportions of overweight people, and a high prevalence of chronic disease (HealthWest, 2015). Sedentary lifestyles, lack of engagement in physical activity, and poor dietary health increase the risk of chronic disease development. These behaviours are often best addressed via preventative programs.

For the past five years, the Western Bulldogs Community Foundation has run a gender-sensitised preventative health program targeted at men who might not access traditional health services. This model has achieved success in modifying lifestyle behaviours associated with poor health, and a correspondence a female-targeted program called *Daughters of the West (DOTW)* was piloted in 2017. In 2018 the Western Bulldogs Community Foundation partnered with Council and/or Community Health Services to collaboratively deliver the program in eight locations in Western Victoria from July to September.

DOTW is a holistic (physical, mental and social) health program delivered across ten weekly sessions. The program is run in community venues and consists of two hours contact time per week with an hour of health education followed by an hour of physical activity. DOTW operates as a gender-sensitised program including the consideration of gender-specific ways of engaging with health information and reducing health-related stigma.

Aims of the Evaluation

The 2018 evaluation is based on a DOTW Program Outcomes Framework that aligns to the priorities of local health and community partners. It focusses on five program outcome areas including participants' health behaviours, connection to community, mental wellbeing, and gender equity. The evaluation aimed to uncover the strengths of the program and areas of improvement for future programs. A mixed-method design was used to gather quantitative and qualitative data, pre- and post-program. The evaluation was undertaken by Victoria University on request from the Western Bulldogs Community Foundation. Quantitative data from more than 60% of total program participants, and qualitative data from a wide range of participants was analysed.

Findings

The DOTW program is an effective program for increasing health literacy and making positive changes in health behaviours from pre-program to post-program.

Attendance

The DOTW program appears to be extremely popular within the community. Online registration reached capacity in a short period of time, resulting in a number of women who were unable to attend in 2018 expressing interest in the possibility of attending any future programs.. On average over 350 women attended the program each week. Participants were from a wide age range with an average age of 50 years. Participants were from employed and unemployed groups, and showed some cultural diversity, with 42% of women either born overseas or having a parent born overseas. Over half of the sample indicated that they had one or more current health concerns.

Clinical Governance and Risk Management

The DOTW operates with a Clinical Governance Committee that allows for review of safety incidents. The number of incidents within the program (nine reported incidents across all sites) was low, with most incidents occurring within the earlier physical fitness sessions.

Outcomes

DOTW demonstrates an ability to effect the following change:

- An increase in participants meeting Victorian Government physical activity guidelines in the short-term (from pre-program to post-program).
- An increased sense of willingness to participate in community activities and an understanding of how to do this.
- An increased sense of psychological wellbeing and increased mental health literacy for those who participate in the program.
- Movement towards positive health behaviours in the short-term (from pre-program to post-program), most especially in adherence to healthy dietary guidelines and physical activity guidelines.
- A possible increase in understanding of gender equity within participants from culturally and linguistically diverse backgrounds.

Factors facilitating success

The program appears to model a socio-ecological model of behaviour change, which recognises that change needs to be facilitated across multiple social levels: individual, interpersonal, organisational, and community. A number of strengths of the program were identified on at each level including:

- Individual: sessions were modified to each person's health needs, and individuals were followed-up by staff when required.
- Interpersonal: speakers were chosen to be relatable to participants, facilitators encourage a welcoming atmosphere within the groups.
- Organisational: professional and knowledgeable staff from WBCF, Councils, and partners, and high-quality program content.
- Community: community partners embedded within the program, accessible after the program, and low cost activities promoted.

Recommendations

Recommendations for minor adjustments and further investigation in future DOTW programs are made to maximise the reach and effectiveness of the program.

The following recommendations are made:

1. Consider targeting recruitment efforts towards subgroups that are underrepresented in the program. There is evidence that the program engages a diverse range of women based on age, geographical, or cultural diversity demographics. However, there is need to specifically target subgroups that are more vulnerable and in need of preventative interventions. Given the WBCF takes a partnership approach, it would be beneficial to work collaboratively with partnering Councils and Community Health Organisations to identify and access target groups, including:

    a. Women of culturally diverse backgrounds, and;

    b. Women of Aboriginal and/or Torres Strait Islander origin.

2. Use community leaders as mentors and to encourage women from culturally and linguistically diverse backgrounds to join the program. Consider information sheets in other languages, advertising in culturally relevant locations, and increasing informal socialisation at the start of the program.

3. Consider use of a more specific measure of changes in activity levels as a result of the program. Data on a small sample of 50 women (>10% of the population) would be a suitable representative sample.

4. Offer some broad guidance to physical activity staff on the structure of the physical activity program to ensure that a consistent, measurable effect can be seen.

5. Ensure simple English is used by physical activity instructional staff and try to keep the level of complexity of all exercises low within all the intensity levels.

6. Continue to have the community-based organisations involved in the exercise component and provide a reminder of activities which were involved in the first half of the program. Provide reminders of how to join these activities towards the end of the program in order to maximise women's motivation to explore them after the program concludes.

7. Consider factors that might enable socialisation, such as the table or chair set up, within each session. Ensure at least one opportunity to engage with others each session.

8. Encourage social interaction in the physical activity sessions through choice of activities and use of games.

9. Find moments during the session times where informal socialisation can be included.

10. Consider reviewing the gender equity measures used to collect data on the changes in knowledge and behaviour as a result of the sessions focussed on respectful relationships (gender equity sessions).

11. Consider including more behaviour focussed and detailed strategies to information on ways to address problematic relationships within the gender equity sessions.

12. Maintain focus on the social support components of the program and consider increasing them.

13. Revise healthy eating content so that it is applicable to multiple cultures, or make available supplementary material that would be suitable.

14. Consider the age of the cohort when giving out information about access to services, and make sure to provide information for both younger and older women.

Introduction

Background to the Daughters of the West

The western region of Victoria experiences poor health outcomes including lower life expectancy, higher proportions of overweight people, and a high prevalence of type 2 diabetes (HealthWest, 2015). Sedentary lifestyles, lack of engagement in physical activity, and poor dietary health increase the risk of developing chronic disease.

Although health data shows an overall improvement in health behaviours for the general population of Australia, there remains a gap, with those considered disadvantaged **less likely to access traditional health programs** (Ding et al., 2016). For the past five years the **Western Bulldogs Community Foundation** has successfully run a gender-sensitised preventative health program targeted at men who are considered hard-to-reach for traditional health services. This program – *Sons of the West (SOTW)* – shows positive outcomes in physical health, psychological health, social connectedness, and community impact (Vassallo et al., 2018). Based on the SOTW model, The *Daughters of the West* (DOTW) women's health program was piloted in 2017. Using the brand of a professional sporting organisation to engage local communities in preventive programs is becoming increasingly prevalent both in an Australian and international context (Drygas et al., 2013; Hunt, Wyke, et al., 2014).

The program takes a place-based approach, partnering with Council and/or community health services **to deliver ten weekly sessions** in an accessible local venue. Each session consists of a one-hour presentation delivering health information, including lived experience speakers, and one-hour of physical activity supervised by exercise physiologists and personal trainers, catering to all ability levels. The program is asset-based in that it focuses on strengths that individuals and the community can bring to the program to promote health behaviour change.

The DOTW program also operates as a *gender-sensitised* health promotion program. Gender-sensitisation involves the consideration of gender-specific ways of engaging with health information, and ways to reduce stigma about health promoting behaviours. The DOTW program provides opportunities for women to take time to meet new people in their community, socialise, support each other, and strengthen their health literacy. **Education topics are decided upon in collaboration with local councils and health partners to ensure they are responsive to local women's health needs.** Participants were also provided with the opportunity to learn more about local health services and existing community activities for ongoing engagement after the program. **Working collectively with community partners** sustains the health and social impacts of the program by strengthening community integration and community outreach for program participants.

Evaluation Aims and Methods

Aims and Methodology

The DOTW pilot program in 2017 was evaluated by Victoria University for its feasibility, applicability to participants' needs, and ability to demonstrate short-term change. The evaluation focused on the outcome areas recommended by Peer Academy, an organisation subcontracted throughout the co-design phase.

In 2018 the WBCF and program partners collectively developed a DOTW Program Outcomes Framework that aligned to the priorities of local health and community partners and the health needs of the community, as well as the input from women in the co-design phase. Please refer to Appendix A for further details of the DOTW Program Outcomes Framework.

The 2018 program evaluation focussed on five primary outcome areas that were identified in the DOTW Outcomes Framework shown in Figure 2 (below). The evaluation aimed to uncover strengths of the program and areas of improvement for future programs.

Figure 2: DOTW Outcomes Framework 2018

Sustained participation in physical activity.

The program encourages participants to exercise and demonstrates ways to exercise outside of the program. Building confidence and increasing enjoyment to exercise maximises the likelihood of increasing exercise frequency and sustained engagement.

Connection to community.

The program is intended as a conduit for community programs and social groups to sustain community engagement. It focusses on exploring the importance and value of community diversity, giving back, and ongoing engagement.

Good mental wellbeing.

The program promotes psychological health literacy and mental health service awareness, and challenges negative attitudes surrounding mental health.

Sustained positive health behaviours.

Promotion of direct behaviour change aims to close the gap between current lifestyle patterns and recommended healthy guidelines for areas such as physical activity, healthy eating and routine health checks. Increases in confidence, knowledge, and understanding of services relating to health outside of the program are goals.

Women's representation in leadership and decision-making roles.

The program emphasises a shift to positive gender attitudes and understanding gender inequity, including increased confidence in challenging negative attitudes and behaviours towards women.

Evaluation Procedure

Evaluation of the 2018 program was reviewed and approved by the Victoria University Human Research Ethics Committee, and completed using Victoria University researchers including staff, research students and placement students. Prior to the DOTW program commencing, outcomes and indicators were developed and refined by an evaluation working group with representatives from partnering LGAs and community health services.

A mixed methodological design was used to evaluate the program. Questionnaires were piloted and refined prior to the program with three women of culturally and linguistically diverse backgrounds. Pre-program questionnaires were administered up until Week 3 of the program. Post-program questionnaires were completed in Week 10. Qualitative data was collected using focus groups and interviews conducted following the close of the program (2-4 weeks post program). The focus group discussions and interviews also focused on the five key outcome areas utilising questions developed in conjunction with the Western Bulldogs Community Foundation's Health and Wellbeing team.

Figure 3 shows how the two forms of data were then triangulated to form the results of this report as recommended with studies of this nature (Creswell, 2011).

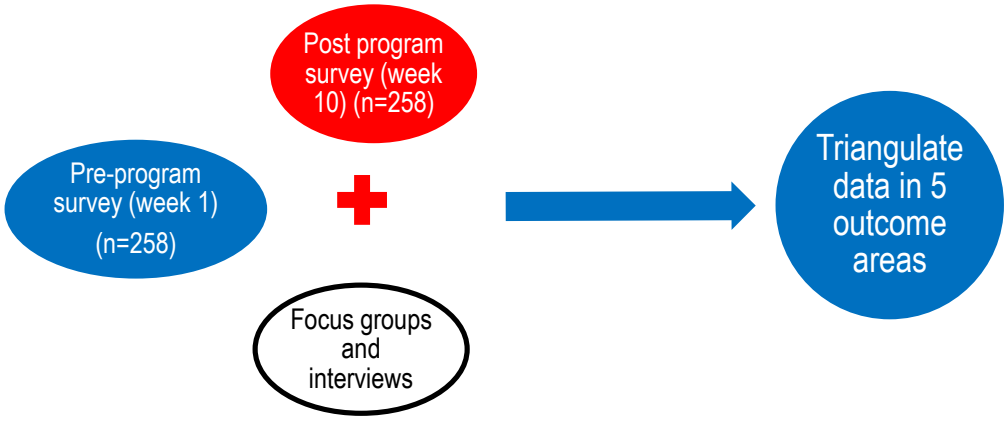


Figure 1. Convergent parallel mixed methods design, adapted from Creswell, (2011)

Participation in the evaluation was optional. All data was de-identified and matched using a unique participant identifier. Data reported by VU was collected, stored, and reported on in accordance with the Victorian Government's Health Privacy Principles. Descriptions of each of the scales used and justification can be found in Appendix B.

A total of 450 participants registered and attended at least one session of the program. 368 participants (82% of the cohort) completed the pre-program survey and 323 participants (72% of the cohort) completed the post-program survey. Data were screened to remove duplicates and pre and post program data were matched using a unique identifier. The number of responses able to be matched varied because of missing answers or missing identifiers on different sections of the survey. The number able to be matched was between 249 and 264 participants for each item. All results presented in the report are indicative of the matched data.

Focus groups and interviews were conducted 2-4 weeks after the last session of the program. A total of 17 women took part in the focus groups or interviews and were selected using purposive sampling to ensure that a spread of ages and local government areas were represented. Three focus groups were conducted in the areas of Footscray (two focus groups) and Melton. Three telephone interviews were conducted with participants from Ballarat or Maryborough. The LGAs that were represented in the focus groups were Melton, Hobsons Bay, Maribyrnong, Brimbank, Ballarat and Maryborough. As diversity was a special interest for the program, one of the focus groups was conducted for culturally diverse women from the program (n=6). They had attended at either Footscray and St Albans locations and were from Vietnamese, Malaysian, Maori, Indian and Mauritian backgrounds.

Analysis

Changes in outcome areas were evaluated using comparative analysis of change between the matched pre-program and post program scores from the survey. Paired samples t-tests were used where applicable.

The focus groups and interviews were analysed using thematic analysis, identifying themes relating to the five outcome areas and program recommendations. In addition, the culturally diverse group discussed aspects of the program that could be improved to make it more appropriate and appealing to women from culturally and linguistically diverse backgrounds. Patterns were identified through a rigorous process of data familiarisation, data coding, and theme development, triangulation of themes between the two researchers and revision. Relevant excerpts of participants' discussion are provided for contextual examples.

Limitations

Although a high response rate was achieved in this evaluation, it is acknowledged that language barriers and literacy barriers can cause problems for reporting accuracy in culturally and linguistically diverse groups and where people have low English proficiency.

In addition, the scales used to measure outcomes for gender equity may not accurately reflect change because the most appropriate questions related to the content of the program in these areas are still under development.

The questions used to measure physical activity also has limitations. The single item question enquires about the number of days per week a person participates in at least 30 minutes of moderate physical activity. It is possible that physical activity levels of the DOTW participants increase more than is shown in the results as the total number of minutes engaged in per week is not captured via this question. However, this question does capture participants who changed from engaging in no or very little physical activity to some physical activity.

The focus groups were used to increase reporting accuracy of the quantitative data. A commonly observed limitation in recruitment for qualitative research is an effect in which participants with stronger opinions about a program are likely to volunteer to be interviewed (Robinson, 2014).

Participant Demographics & Attendance Rates

Program Participation Rates

Attendance

In 2018 the DOTW program was delivered over a ten-week period from July until September. Consistent interest in the DOTW program has seen the program continue to grow within a short time frame. Given the high community demand in the pilot program in 2017, the DOTW program expanded with four additional program locations added in 2018.

Programs were delivered in the areas of:

- City of Brimbank
- City of Hobsons Bay
- City of Maribyrnong
- City of Melton (two locations within Melton)
- City of Wyndham
- City of Ballarat
- Maryborough

A total of 450 women registered for the DOTW program in 2018. On average 351 women attended the program each week. As seen in Figure 5 (below), attendance numbers dropped slightly in week seven, eight and nine, rising again in week 10.

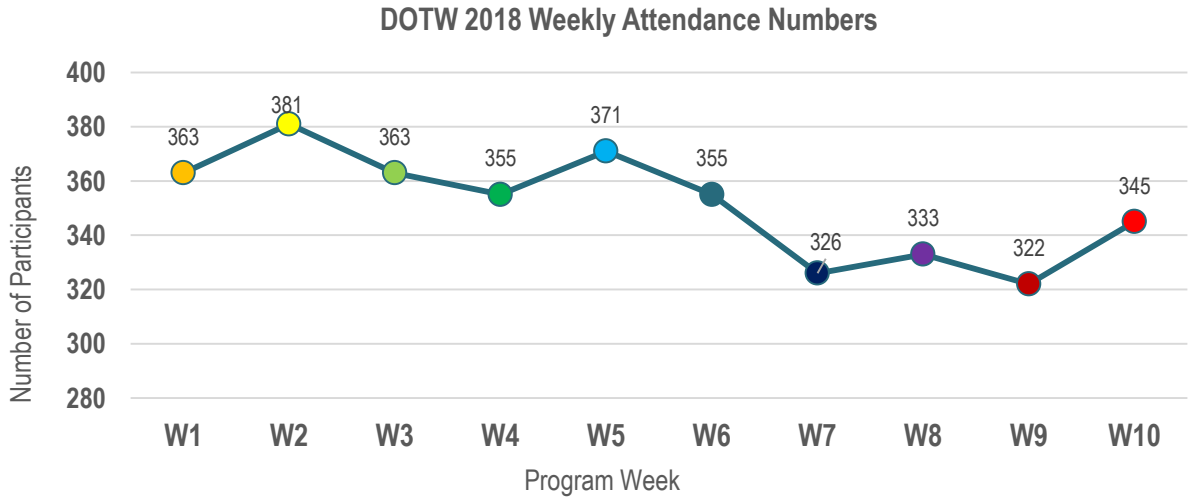


Figure 2. DOTW18 Weekly Attendance Numbers

The DOTW program has set a high industry benchmark for health promotion program attendance and retention. Reflecting the high graduation rates seen in the pilot program in 2017, 82% of the women who attended were eligible to "graduate" (attended at least 7 out of 10 sessions).

Participants who attended three or less sessions in the first half of the program and did not return are considered to have withdrawn from the program. 8.5% of program participants (n=38) attended three or less sessions in 2018. Participants with low attendance rates received a phone call from the DOTW team checking in.

Location	Number of Participants
Brimbank	56
Hobsons Bay	46
Maribyrnong	61
Melton Early	56
Melton Late	69
Wyndham	48
Ballarat	55
Maryborough	59

Table 1: Number of Participants

Participant Demographics

Age

The average age of 2018 participants (*n*=450) was 49.9 years (min=18. max=87).

LGA	LGA DOTW session Location 2018	Average age of DOTW participants in LGA
Brimbank	St Albans	48.2
Hobsons Bay	Laverton	50.4
Maribyrnong	Footscray	46.6
Melton	Melton (afternoon 12:30pm)	56.1
Melton	Melton (evening 7pm)	54.1
Wyndham	Werribee	51
Ballarat	Sebastopol	44.4
Maryborough	Maryborough	48.4

Table 2: DOTW18 Age per LGA

The youngest cohorts attended the program in Sebastopol and Footscray. As anticipated, the eldest cohorts attended the daytime session in Melton. This was followed by Melton's evening session and the Laverton session. The daytime session was piloted in 2017 to target women who may; be retired, have caring responsibilities, are unemployed, be shift-workers or in a part time role.

Employment Status

Of the 425 participants who listed their occupation, 60% of participants were employed at the time of program delivery. Retirees or pensioners comprised 22% of participants, whilst 2% of participants stated they were unemployed at the time of the program. In addition, 11% of the program identified they were "stay at home Mothers" or "Home makers".

Cultural Diversity

Approximately one third of the population living in North Western Melbourne region in 2016 were born in a country other than Australia. To determine whether the DOTW program has been engaging with a representative sample of women from Culturally and Linguistically Diverse (CALD) backgrounds, participants were asked to identify their Country of Birth (COB) and the COB of both their Mother and Father upon commencement of the program. Data shows that approximately half of participants were born in Australia with both parents also born in Australia (55%). In contrast, 42% of participants identified that either themselves or at least one of their parents were born in a country other than Australia.

21% of participants were born in a country other than Australia, listing one of 35 different countries of birth.

21% identified at least one of their parents were born in a country other than Australia.

Of the 94 participants who identified they were born in a country other than Australia, the five most prominent countries of birth were:

- England (15%),
- India (12%),
- Malta (8.5%),
- Philippines (5%)
- Vietnam (5%)

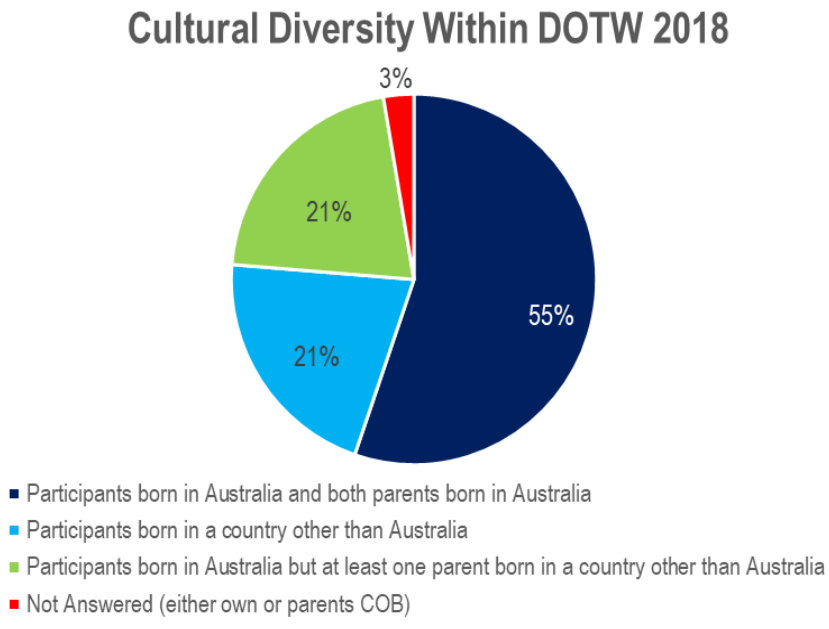


Figure 6: Cultural Diversity in the DOTW Program 2018

In addition, seven participants identified as Aboriginal origin. This equates to 1.6% of the DOTW cohort in 2018. Based off the Australian Bureau of Statistics Census data (2016), the Estimated Resident Population (ERP) of Aboriginal and/or Torres Strait Islander Australians was 0.8%. The Census data indicates that the percentage of people identifying as Aboriginal and/or Torres Strait Islander within the program is representative of the wider community. However, as the DOTW program ultimately aims to contribute to good health and wellbeing for 'disadvantaged communities', additional targeted promotion and culturally sensitive strategies to increase engagement of women of Aboriginal and/or Torres Strait Islander backgrounds should be considered for future programs.

Self-Reported Health Status

Upon registration participants were asked to provide details of their medical history and disclose any information that could potentially impact their safety and participation in the program. In 2018, only 24% stated they had no health concerns. 76% of participants were classified as either moderate or high risk. Almost one in five participants (19%) were classified as "high risk" and 57% were considered "moderate risk", indicating they had more than one or more health concerns.

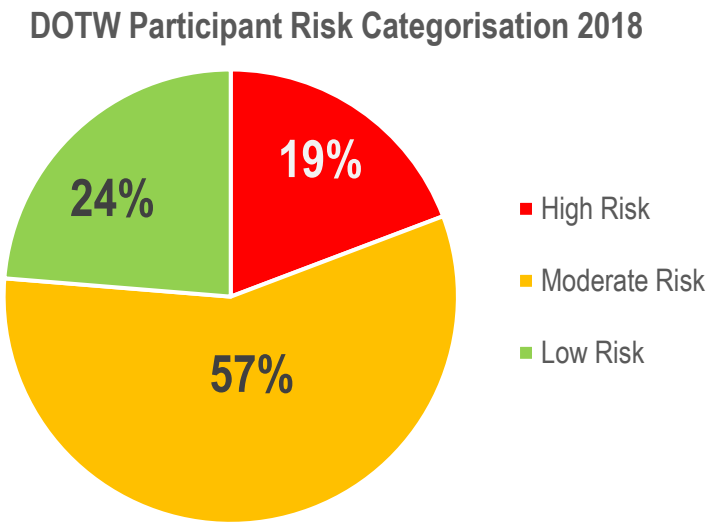


Figure 7: Participant Risk Categorisation DOTW Program 2018

Findings

Findings: Sustained Participation in Physical Activity

The following section outlines the impact of the program in relation to participation in physical activity.

Participants meeting physical activity guidelines

To evaluate whether the program assisted in increasing physical activity levels the participants were asked how many days a week they exercised at a moderate intensity for at least 30 minutes (the VicHealth indicator for physical activity). Paired testing (n= 258) showed a significant increase in the number of days of exercise that the women perform at least 30 minutes of exercise (in an average week) by almost one day per week (0.84 (SD=1.92). At the start of the program, the mean exercise level for the DOTW participants was 2.63 days (SD=1.92) per week. At the end of the program, this increased to 3.47 days per week (SD= 1.78) (t(258) = -8.74,p<0.001).

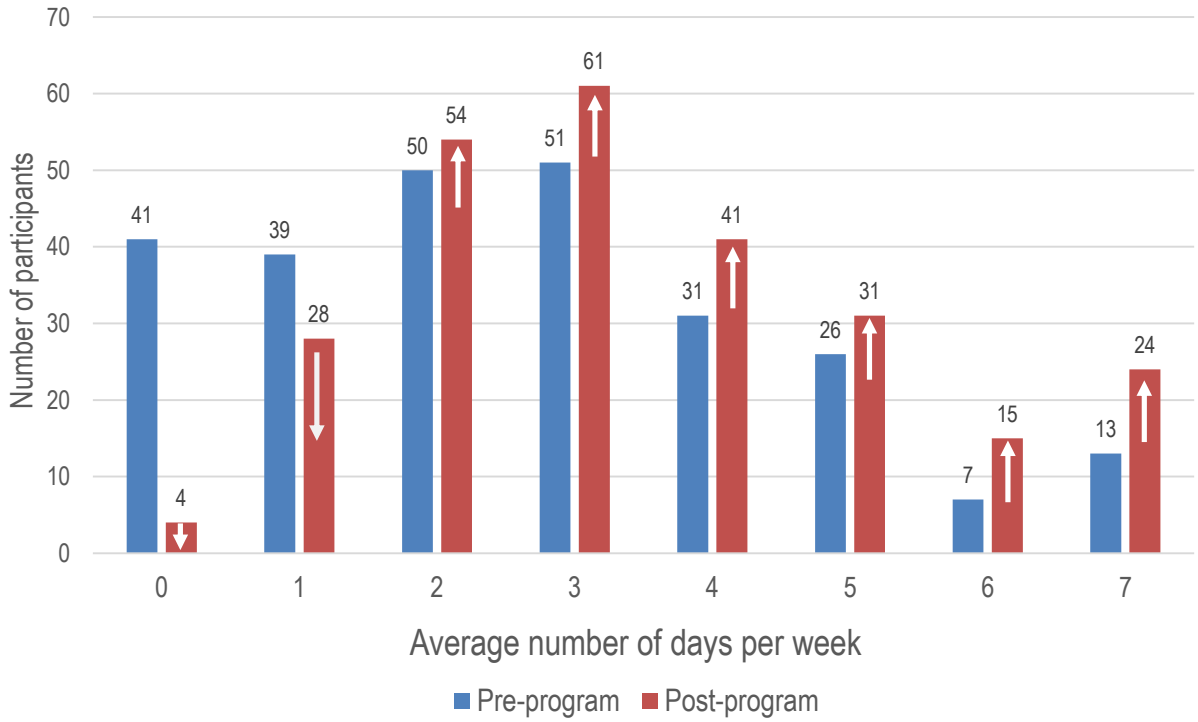


Figure 8. Days of moderate intensity physical activity per week (n=258 matched).

Figure 8 (above) shows that there was a greater proportion of women doing more physical activity at the end of the program. It is interesting to note that 70% of women who were undertaking one day or less per week at the start of the program reported doing at least 2 days per week of physical activity by the end of the program. This is a demonstration of the ability of the program to assist inactive women to increase their physical activity levels.

It was difficult to interpret the increase in days per week for those who were already active because the scale used is poor at reporting improvements in physical activity at higher levels. The focus groups also verified that some women who did not increase their physical activity levels were already active prior to joining.

Reduced barriers to physical activity

Participants were asked about their confidence to perform physical activity at the start and at the end of the program. The percentage of women who agreed or strongly agreed with the modified Self-Rated Abilities for Health Practices (SRAHP) statements in the survey pre and post-program are below.

Results showed that participants reported a significant increase in their motivation to exercise when tired or not feeling like it (p=.001). There was also increase in participants' confidence to find enjoyable exercises to engage in (p=.001). Women also felt more confident to fit exercise into their regular routine (p=.001) and find accessible places to exercise in the community (p=.001).

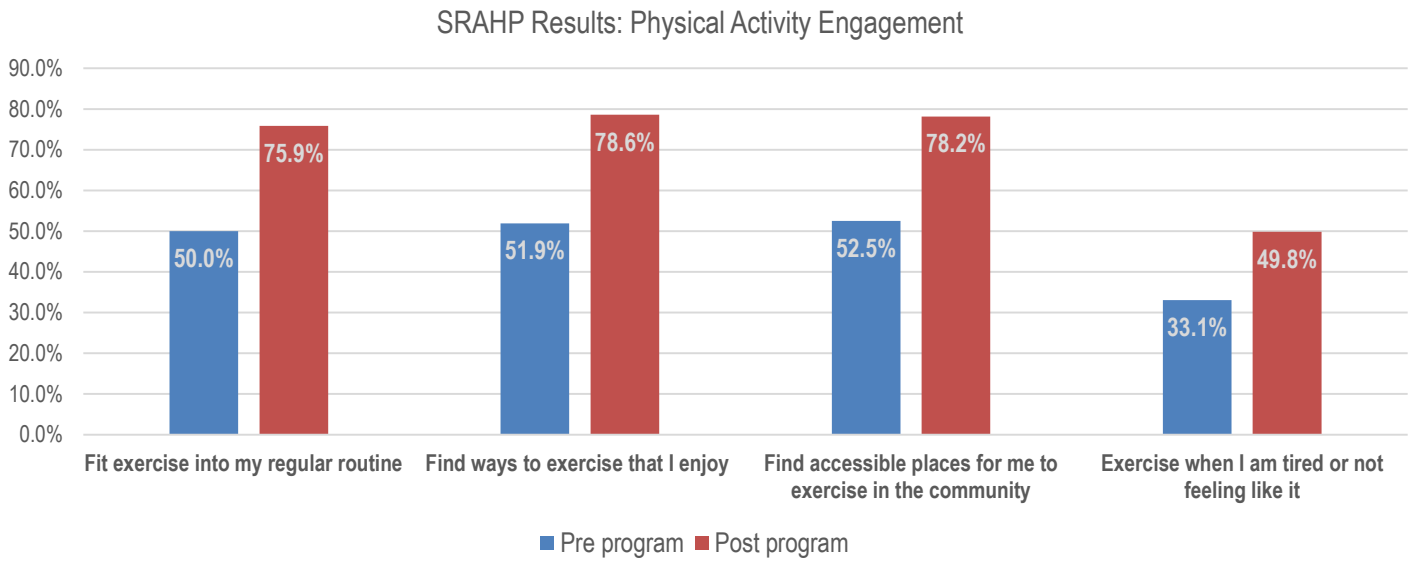


Figure 9. Change in participants' exercise self-efficacy

The data shown above demonstrates that nearly one quarter of participants who took part in the program felt that they improved various aspects of exercise self-efficacy. When the four questions were combined for the subscale demonstrating exercise self-efficacy (exercise self-confidence), the maximum score could be 20. Change between scores pre-program (M=13.5, SD= 4.4) and post program (M=15.9, SD = 3.3) was shown to increase significantly (t 263) = 10.28, p<0.01) which further supports the findings above. These survey findings also link to the focus group discussions. Key themes which emerged from the focus groups highlight the **socially supportive group dynamic** and **enjoyable nature of sessions**:

a) motivates participation in physical activity in the program and;
b) increases self- esteem and motivation to do more outside the program.

The **variety of exercises** offered in the program allowed the participants to try new enjoyable activities. The **home exercise tips** also increased self-esteem about exercising alone and motivated women to do more exercise on their own outside of the program.

> *"It was the social side [of the sporting activities] that I really enjoyed and I felt really encouraged and felt really positive and like ····· "I'm going to go out and do this, and you know what, I did it!!"*
>
> - Melton focus group participant

> *"I went for pole dancing .. so I found something out there for me and I absolutely love it … I actually started after [the program] … I've had such a confidence boost from it … if I hadn't done the [DOTW] class I don't think I would have gone for pole dancing."*
>
> - Melton focus group participant

Regular commitment of an activity appeared to be important especially for women who do not usually enjoy exercise.

> *". [Do you guys feel like your physical activity levels changed from being in the group?]. Definitely... the motivation of the group, you know...to get up and go 'I'm going'...you know..... so...yeah. Every Tuesday I was ready to go and so that...and I didn't want to let anyone...not let anyone down..."*
>
> -Hobsons Bay/Maribyrnong focus group participant

Uptake of physical activity in the community

Another important aspect of the program is that it aims to link participants in with opportunities to engage in physical activity in their local community. This helps to sustain physical activity levels and engagement in sport after the program has finished. In the surveys, women were asked whether they had been involved in any organised community activity in the last month. This included local sporting clubs, Heart Foundation walking groups and local gym fitness classes.

Prior to commencing the program, 203 women (57% of respondents) had not attended any community programs. At the end of the program, some of these women (n=33) had tried or joined a new community activity. The highest uptake of new activities appeared to be local sporting clubs and local fitness classes. The results can be seen in Table 3 below.

Number of women joining community exercise activities during DOTW	
Local sporting club	10
Heart Foundation walk group	3
Local gym/fitness class	12
Other (Aqua, badminton, walking groups, Step-tember)	8
Total	33

Table 3: Community Activities Outside of DOTW

Table 3 shows the number of women who joined community physical activities by the end of the DOTW program. These women were not previously involved in a community activity related to exercise before taking part in DOTW. Note that some women may have joined more than one activity.

The focus groups demonstrated that the linking participants in with low cost external opportunities was important for continuation of exercise after the DOTW, especially for those women who were previously inactive:

> *"Well I do the Wednesday night [exercise session]... that's good. Yep and I also do swimming. I am not a swimmer and I'm now learning how to swim, so that's been [good]… DOTW has really been awesome for me in terms of personal growth, I'm really confronting fears."*
>
> - Culturally Diverse focus group participant (Maribyrnong)

Findings: Connection to Community

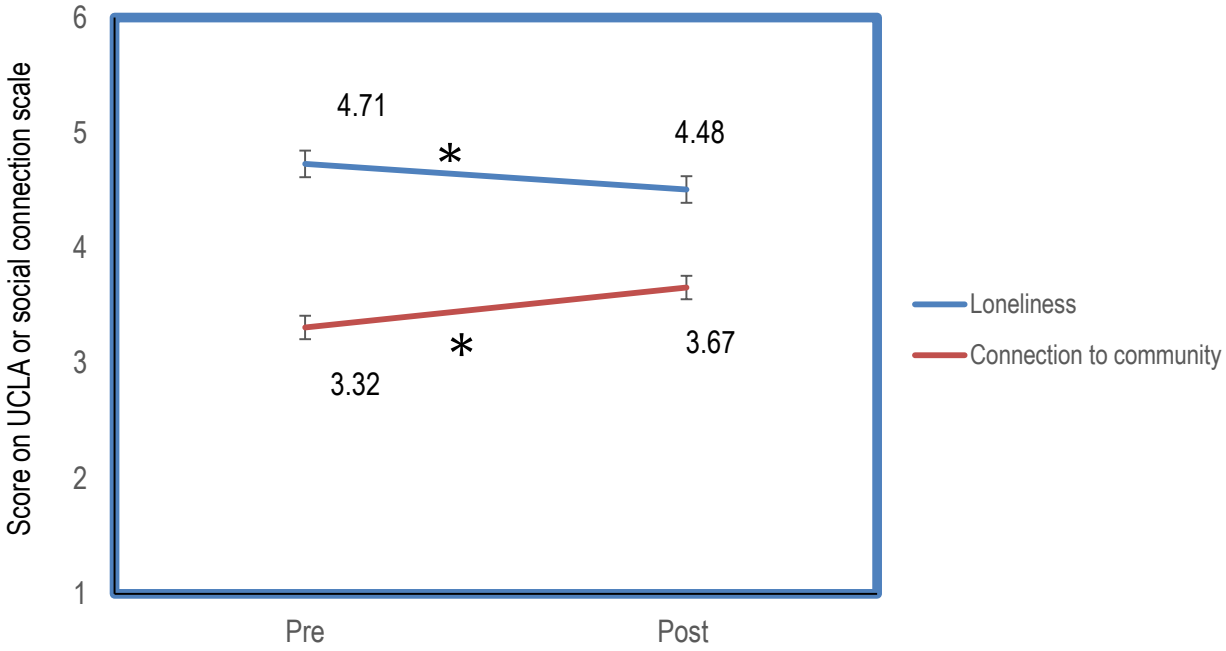
The following section outlines results in relation to DOTW participants' perceptions of social connections and their connection to their community.

Social support and connection to community

The two key aspects of connection to community through the DOTW program come from development of social bonds **within the program** and those **outside the program**. *Social connection* and *loneliness* were outcome measures used to investigate the overall change in participants self-perceived social connection.

Loneliness was measured by the UCLA Loneliness Scale and community connection was measured using a single item pictorial scale (developed by the WBCF and VU) to cater for participants with low English literacy.

Figure 10 (below) shows the DOTW program had a significant impact in reducing self-reported loneliness and improving connection to community (pictorial scale). In addition a single item question relating to connection to community showed that at the women who agreed or strongly agreed that they felt valued by their community rose from 49% to 54% by the end of the program, which is a small but significant change (t.(240)=-5.04, p=0.00)



Loneliness paired results (n=256: Pre M=4.71 SD=1.83; Post M=4.48 SD=1.78; t(256)=2.37 p<0.05. Mean reduction of 0.22 SD=1.51

Community Connection paired results: Pre M=3.32 SD=1.6; Post M=3.67 SD=1.5; p<0.01

Feeling valued by community: significant increase from 3.63 SD 1.0 to 3.93 SD 0.9

Figure 10. Changes in loneliness and connection across the DOTW program.

Loneliness

The percentage of women who were considered "not lonely" by the end of the program increased by 7% (see Figure 11 below).

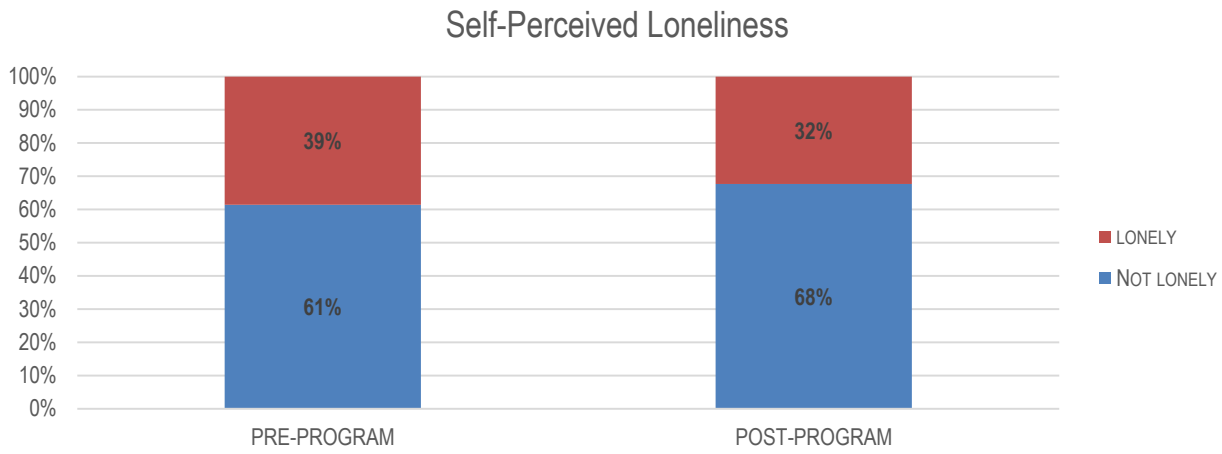


Figure 11. Change in percent of women in loneliness categories.

It is likely that the full extent of change in social connection and loneliness is not captured in this result as qualitative information collected in focus groups further indicates positive change in social connection. The focus group discussion around social connection highlighted that the thriving social atmosphere of the DOTW group was an important enabler. This theme reflects a conceptualisation from the women about a) all the women being in one room b) being respected and c) being an accepting group.

For most women, the social aspect was a primary reason for joining the DOTW. It was also the major contributing factor for women improving their health and wellbeing in the program. Social interactions were highly valued by all – to make new friends, allow for sharing stories and experiences. It was especially valid and important for those women who were previously isolated or who had suffered significant life events such as moving, illness, partner death or partner illness or retirement.

> *"…It was nice to come together with a group of girls and you could see that some of them were struggling it was really good to be all there and be able to support the ones that were."*
>
> - Ballarat focus group participant

> *"Not staying at home and doing the same thing all the time. I was normal, I was getting out and talking to other people and meeting other people and it was all for me."*
>
> - Melton focus group participant

> *"I go out to do something for myself and leave my children and they grew up a bit now and I came out to socialise with other people and I found that Daughters of the West can be socialising for myself. I made a lot of friendships for two seasons. We not just be friends in the group but we make contact after the group, we go out for coffee and we live around in other suburbs and not just in this suburb and we go out for a coffee once a month."*
>
> - Diverse focus group participant (Maribyrnong)

In addition to the validated tools used to capture changes in social connection and reduction in loneliness, women were asked whether they agreed with the following statements:

a) cultural diversity definitely makes my community better
b) the DOTW program is an inclusive program.

The percentage of women who agreed or strongly agreed that *"cultural diversity definitely makes my community better"* **increased from 81% to 86%** by the end of the program. The percentage of women who agreed or strongly agreed that the DOTW was an inclusive program **increased from 85% at the beginning of the program to 93% at the end of the program**. Both of these items are particularly important for fostering the social atmosphere created by the DOTW program.

Community connection outside the program

A key objective of the DOTW program is to foster connections to community outside of the program. Connections arose in the form of involvement in new community activities or participants connecting with more people in the community than before they started the program. Participants were asked if they had attended any other activities run in the local community centres in the last month. Six women who had not attended any community activities at the start of the program stated that had joined a community activity during the DOTW program. As the participants completed the survey in week 10 of the program, this number is likely to increase because many women may join new activities once the DOTW program finished.

In the focus groups (facilitated a few weeks after program completion) approximately half the women mentioned that as a result of the program they had begun or tried other community activities. Many stated they hadn't known about the activities prior to the program. The women who did not try new activities stated that they were already well connected prior to joining the program.

> *"At the end of our session [What's In Your Backyard?] there was a lot of things. Because I worked full-time prior to getting sick I didn't know what was out there. It was like wow, this was amazing. So I actually did woodwork but there are other classes around doing these extended exercises."*
>
> - Brimbank focus group participant

> *"This gave us everything. We went to the Hub and they had all that stuff at that place, all the brochures ... and then ... our City of Hobson's Bay had the ... Spring into Life for two weeks and so when we were at our thing they gave us the booklet .. we did everything everyday … we tried all the different things in our area that I would never have."*
>
> - Hobsons Bay focus group participant

> *"I'm disappointed I didn't know that [about the community activities available] before. Especially me, because I'd just spent that money, for a year member at the gym … and I could've got all this stuff."*
>
> - Hobsons Bay focus group participant

> *"I was actually excited about it, because of my illness, I've been sick for nearly 2 years and not working, not socialising, not doing anything. Why didn't I know about this? … I could get in a taxi and get out and it's like a lot of things you didn't have to physically do, but it was just the socialising and I think that's the whole thing."*
>
> - Brimbank focus group participant

> *"There's definitely connection with the community. For me it's reconnection. Well, yeah it is probably for everybody like we're all older people ... so you do all that stuff when you've got younger kids and then you just go to work so ... you're not focussing on the ... community. So it's definitely a big part of the Daughters … Every time you leave [a DOTW session] like a little group of women are going 'oh you've got this you've got that' ... and I tried things."*
>
> - Hobsons Bay focus group participant

It was especially relevant for women who had been feeling isolated prior to the program or for those who were experiencing significant life events:

> *"It was just a matter of me getting an outlet and from that I've gone to other things but even so many aspects of the library, what you can find out there … that's amazing, and I've used that too."*
>
> - Melton focus group participant

Findings: Good Mental Wellbeing

The following section outlines the results in relation to DOTW participants' mental wellbeing and understanding of how to engage in positive mental health behaviours and access local services for support.

Psychological distress

General psychological distress was measured using the Kessler-10 (K-10) scale. The Australian Bureau of Statistics (ABS) categorises K-10 scores into degrees of psychological distress (or likelihood of having a mental health disorder). These ranges are shown in Figure 12. The K-10 was completed by 356 respondents pre-program and 309 post-program.

Figure 12. K-10 distress categories as described by the ABS.

Range	10-15	16-21	22-29	30-50
Description	Low distress	Moderate distress	High distress	Very high distress

Results from matched pairs showed that average group distress levels decreased by a small amount from the start (M=18.4) to the end of the program (M=16.86) for the data that was able to be matched (n=249; T1=18.4 SD=7.55; T2=16.86 SD=6.98; t(249) =5.04, p<0.001).

Figure 13 show those rates in comparison to the percentages of Victorian women in each distress category in ABS prevalence data (ABS, 2015). At the beginning of the program average K-10 scores indicated that a greater proportion of women in DOTW were considered highly distressed compared to the Victorian average.

This demonstrates the DOTW program can engage with sub-groups of the population who are vulnerable and at need of opportunities to engage in health promoting activities. From pre to post program, there was a 19% reduction in the number of participants in the high/very high distress categories, and in turn, a 27% increase in women in the low distress category.

These findings suggests a clinically significant effect of increased wellbeing from participation in the program.

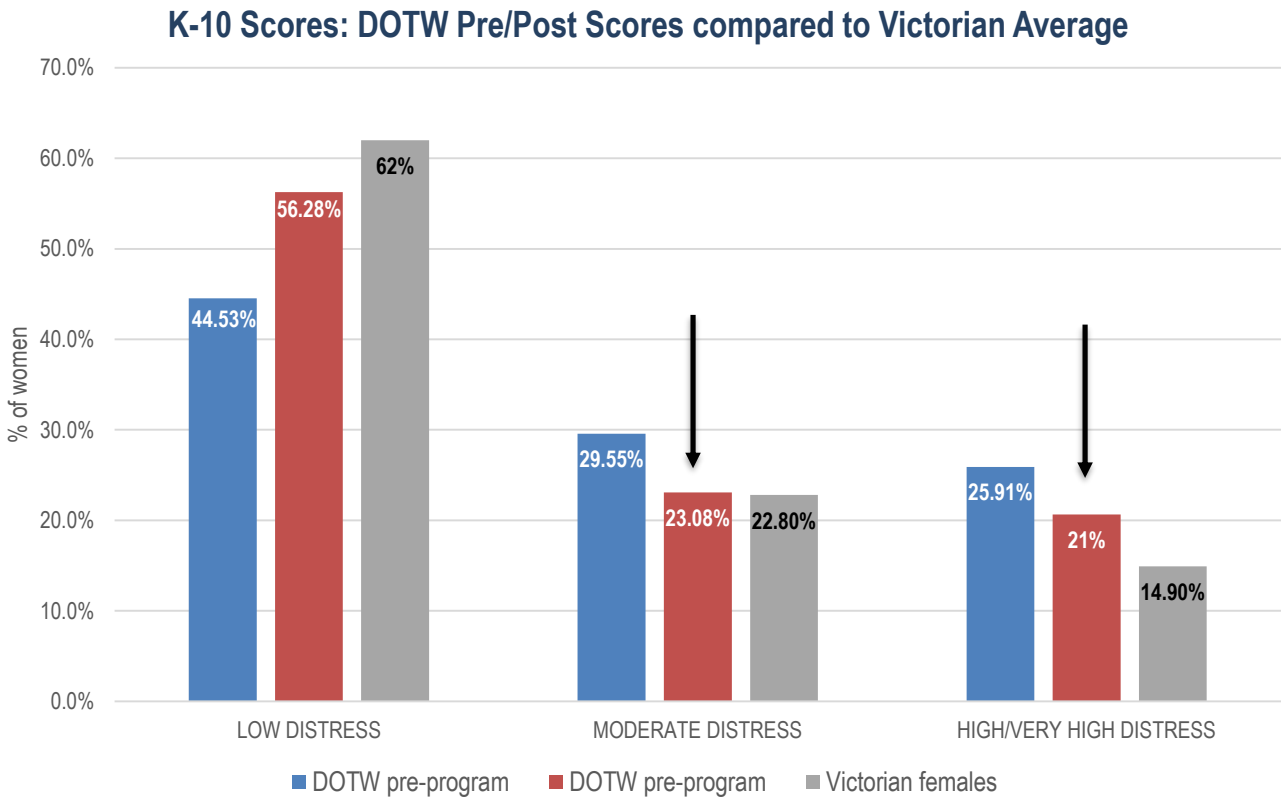


Figure 13. K-10 measure categories for matched program participants.

Mental health behaviours

Surveys also asked participants about their confidence in implementing behaviours that contribute to positive mental health. The percentage of participants who felt *confident* or *very confident* undertaking positive mental health behaviours increased for each of the following statements.

I feel confident to…

- **Figure out things I can do to help me relax when I am stressed (↑ by 11%)**
- **Know where to get help for my relationships (↑ by 18%)**
- **Know when I should speak to someone about how I am feeling (↑ by 16%)**
- **Know where to get help for my mental health (↑ by 11%)**

Most of the women who took part in the focus groups felt that the program helped them to achieve personal growth (expressed as either **better self-confidence** or **better self-care**). The **social and fun** aspects of the program also offered enjoyment for all women no matter their backgrounds or interests.

The DOTW program was also seen to reduce stigma around mental health and managing stress. Some women talked about the enablers and how easy, free access to counselling and the embedded Victoria University *Change Room* group therapy program assisted with management of mental health issues that they would not have otherwise addressed.

> *"It was good that they offered the sessions with [VU DOTW Provisional Psychologist] so I took her up on that and at that time I was having issues with my personal life [before the program] I would have been too proud to do that, even though I work in the medical profession."*
>
> - Diverse focus group participant (St Albans)

> *"You can turn to somebody even on that night … you could relate and you don't feel alone and you don't feel like it's just me … You could be the type of person that would say 'yeah I'll make use of that' but then you never do. Your intentions are there but it's like you've got to go out of your comfort zone again to do that. But for them to approach you or to be there ... right there and then when you need them."*
>
> - Hobsons Bay/Maribyrnong focus group participant

> *"The [VU provisional psychologist] she said that if you had a problem you could go and speak to her. Sometimes it comes down to money you know to go and see a psychologist and all that and you can get some free sessions through the GP … they made it a prominent theme and referring back to it when they did the mental fitness session."*
>
> - Melton focus group participant

> *"I took a lot from that session, like I'm one of those people who bottles up those emotions. And at one point it just explodes like a volcano erupting but they gave us techniques to distress and I'm using those techniques a lot of the time. "*
>
> - Melton focus group participant

> *"The [DOTW] program was really good; it made me more aware of ... keeping mindful of my emotions and how I'm coping with things. Halfway through the program I ended up having [a traumatic event] … because of the program I was able to realise that I needed time off work and to look after myself."*
>
> - Telephone interview participant (Ballarat/Maryborough)

Findings: Sustained Positive Health Behaviours

The following section outlines results in relation to participants' health behaviour change, healthy lifestyle choices and access of health services to address any health concerns.

Change in Health-Related Knowledge

A 5-point scale was used to investigate whether the program improved participants' knowledge of key health topics. At the end of the program, participants were asked to indicate whether the respective session had improved their knowledge of the topic. Table 4 (below) shows that for all sessions, over 80% of participants agreed they have more knowledge about the health topic because of the DOTW program.

	My knowledge of this topic has improved because I attended the DOTW program…			
DOTW Health Education Session	**Disagree**	**Unsure**	**Agree**	**No. of Responses**
Women's Health with the Cancer Council	2.04%	7.82%	90.14%	294
Let's Talk Food with a local Dietitian	2.34%	11.37%	86.29%	299
Cooking Masterclass	2.77%	16.26%	80.97%	289
Mental Fitness with the DOTW Psychologists	2.39%	10.92%	86.69%	293
Respectful Relationships	3.08%	12.33%	84.59%	292
Let's Get Active with the local Exercise Physiologist	2.41%	8.97%	88.62%	290
Inspirational Women	2.46%	5.95%	91.5%	285
Money Minded with SaverPlus (*St Albans only)	0%	7.5%	92.5%	40
Setting the Pace with the Heart Foundation (*all sites except St Albans)	1.5%	7.14%	91.35%	266
What's in Your Backyard	1%	12.8%	86.2%	203

Table 4. Feedback on DOTW education sessions.

Moreover, within the survey, participants were asked to rate how confident they were to put their understanding about positive health behaviours in four areas into practice (four subscales in the modified SRAHP). Results showed that **women became significantly more confident** to perform positive nutrition, physical health behaviour, mental health and exercise behaviours from the beginning to the end of the program (see Figure 14).

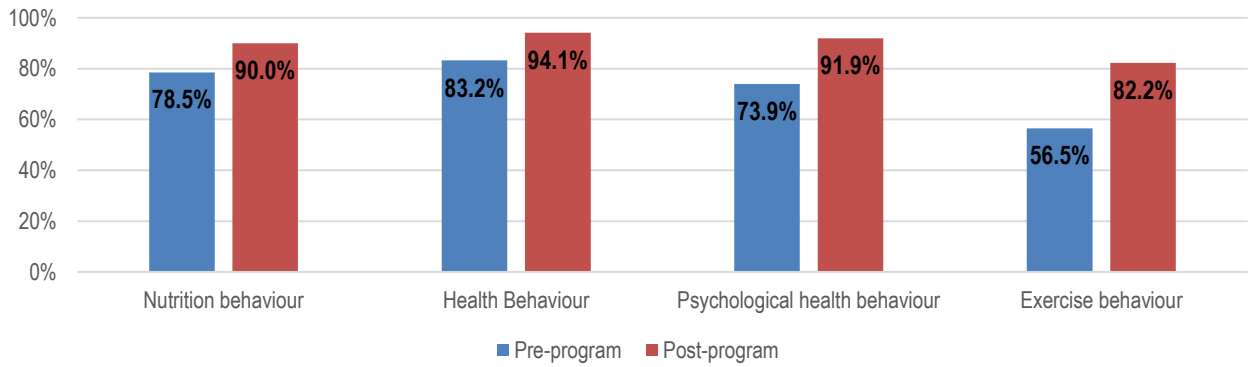


Figure 14. Percent of women who felt confident to perform positive health behaviours pre/post program

Self-care and access to services

Self-care and access to services were assessed in the survey and the percentage of women who were *confident* or *very confident* regarding self-care and accessing services increased. Positive responses to the following statements shows that several women felt the program gave them skills and confidence to act on important aspects of managing their health and wellbeing.

- **Find information on how to take care of my health (↑ by 15%)**
- **Watch for changes in my body or how I am feeling (↑ by 18%)**
- **Recognise what symptoms should be reported to a doctor (↑ by 13%)**
- **Know where to get help for my physical health (↑ by 17%)**

In addition, 98 women (21% of participants) visited a general practitioner for a health check. Health issues discussed or checked included; blood pressure, cholesterol, blood glucose levels, weight, exercise levels, skin, cervical and breast cancer/screening, bladder and bowel screens, smoking cessation, mental health and referral to specialists (i.e. Dermatologist, Physiotherapist).

Self-care was a largely discussed topic in the focus groups. Women felt they were more confident to look after themselves and their health as a result of the program. This primarily arose from the **positive social environment** of the program. Many people achieved personal growth through **increased self-confidence** and **self-care**. The program also offered **enjoyment** and "**time-for-self**" for women who were previously may not have allocated time for themselves.

"I can say no to my husband and my children - I'm going out and you stay at home … it's just sometimes… I have my social life back."

- Diverse focus group participant

"… I think the program helps you help yourself."

- Melton focus group participant

Diet

The number of women who were *confident* or *very confident* to prepare and consume a healthy balanced diet increased in each of the four subscale items regarding nutritional health behaviours (below).

- **Find healthy foods that are within my budget (↑ by 11%)**
- **Understand what foods are good for me by reading food labels (↑ by 18%)**
- **Eat daily recommended servings of fruit and vegetables (2 fruit and 5 vegetables) (↑ by 16%)**
- **Cook and prepare a healthy meal regularly (↑ by 11%)**

Nearly all the women in the focus groups agreed that they were taking more notice of their diet, especially in striving for a more balanced diet, lower salt and fat intake, more fruit and vegetables and reading food labels to make more informed choices.

"I can look after myself a bit better and I start to look a bit more at the healthy food. Like I'm not big but … all my food I love deep friend and oily but now I started to have like steamed vegetables for myself and my children."

- Diverse focus group participant

"We're more mindful of what we eat and we're trying to organise meals and meal prep to have ... a healthier lifestyle with the ... rush and the shift changes. So that sort of helped."

- Telephone interview participant

"I've done that and have taken more notice of the food I eat ... so dropped a few carbs out of the diet and not so many sweet treats and things like that."

- Telephone interview participant

Findings: Challenging Gender Inequity

In 2018, program partners agreed the DOTW program should incorporate core activities to promote gender equity and empower women to further their leadership skills.

Evaluation questions were included to measure participants' knowledge and awareness of gender equity. The evaluation also sought to gain understanding of participants' beliefs surrounding rigid gender roles and their perceptions of family violence in their community. Participants were asked to indicate how they felt about three statements based on those asked in the National Community Attitudes Survey (NCAS) (2013), VicHealth Indicators Survey (2015) and questions devised by M. Flood (2017). Responses were recorded on a Likert scale where 1=strongly disagree and 5=strongly agree.

The results below show that women mostly strongly agree that:

a) *family violence is a problem in the community*

b) *men and women can both be good community leaders*

Most women also strongly disagree that *"women prefer a man to be in charge of the relationship"* and this did not change as a result of the program.

Question	Time asked	M	SD (SEM)	Significance of change
I think family violence is a problem in the community (matched n=238)	Pre-program	4.37	0.88 (0.06)	Not Significant (NS)
	Post-program	4.40	0.94 (0.06)	
Men and women can both be good community leaders (matched n=252)	Pre-program	4.78	0.74 (0.05)	NS
	Post-program	4.88	0.49 (0.03)	
Women prefer a man to be in charge of the relationship (matched n=244)	Pre-program	1.80	1.09 (0.07)	NS
	Post-program	1.78	1.09 (0.07)	

Table 5. Attitudes towards gender equity pre/post program

Knowledge and awareness

Most of the participants in the focus groups agreed that the program encouraged them to be respectful of everyone and understand differences in others. This was attained through the **group environment** across the program and the leaders were seen to assist with this. Some participants felt that **the self-care and confidence gained within the program flowed over into home relationships**. They were better able to challenge gender roles within personal relationships, with the objective of taking more care of themselves. These changes were especially noted in the culturally diverse focus group.

> *"[From DOTW] I've learned that … I thought I was good at self care [but] no! It's also about confronting bullies - husband included - I suppose it's confidence and I suppose it's trusting your decisions a bit more … and that has health implications as well."*
>
> - Diverse focus group participant

However, some women also felt they didn't benefit from the gender equity sessions because they could not relate the experiences talked about to their own lives. Some women felt those sessions could have been more detailed in order to allow them to learn from more nuanced information.

Feedback from the Culturally Diverse Focus Group

To ensure that the DOTW program is engaging and informative for all participants, a focus group of women from culturally and linguistically diverse backgrounds was conducted. This group was convened to gather feedback on how to make the program engaging, accessible, and useful for women from various cultural backgrounds and ensure the DOTW program is engaging with a representative cohort.

Women who took part in the diverse focus group felt there were two main ways that the DOTW program could be improved for a diverse audience. The first suggestion as **increasing the reach of the program** to access more diverse participants. The second was to **foster a sense of inclusivity** for diverse women within the program. There was comment that some women started the first few sessions but didn't feel they were included enough so they discontinued their involvement.

Suggestions made by the focus group for future DOTW programs included:

Increasing the reach of the program:

- Participants felt that there could be ***use of greater number of culturally relevant advertising locations.*** Some examples were given such as local shopping centres, Braybrook Community Hub, Salvation army, AMES, Women's Health West and the Vietnamese Women's Association.
- For advertising to draw a culturally diverse audience and ensure trust is developed with these communities, it was suggested that ***both a physical presence for advertising as well as and written collateral*** (such as posters) should be used to advertise the program.
- There was a strong agreeance that ***community leaders should be utilised*** as ambassadors of the program. They have good links with the local communities and knowledge to assist with program development.
- One caveat of expansion was given to development of the program being that the capping of program participants (via online registration) suggests that the program capacity has already been reached and that this should be addressed prior to trying to expand to include a more diverse group.

Inclusivity:

- ***Consider cultural barriers to engagement*** within program (e.g. it was mentioned that there is a strong cultural barrier in some Asian cultures to interjecting in information sessions). Instructors could be trained on cultural barriers to engagement in certain cultures. For example, look for hands up during information sessions.
- ***Language***
  - Information sessions were overwhelming for some women, and it was suggested that the presenters should be mindful of language used and use translated information sheets to assist with inclusion where possible.
  - Consider language in the physical activity sessions as this component of the program became confusing in some sessions.
- Use ***more social activities*** and encourage diverse connections to foster inclusivity.
- *The **diet aspect of the program** was not culturally relevant.*

Incident Report

Clinical Governance: Risk Report 2018

The WBCF governance structure includes a Clinical Governance Committee. The purpose of the Clinical Governance Committee is to maintain accountability, support and advise on effective systems to monitor and improve the quality of the WBCF Health and Wellbeing programs (i.e. Sons and Daughters of the West).

The WBCF have been encouraged to disseminate lessons learned from incidents and risk mitigation strategies implemented in its community programs. In each instance of a near miss, hazard or incident which occurred throughout the DOTW program in 2018, an incident report was completed and addressed in collaboration with program partners during the Clinical Governance Committee meetings.

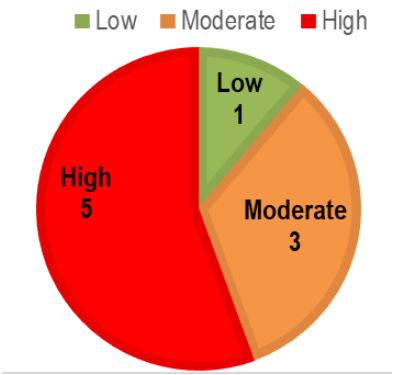
In 2018, a total of 80 DOTW program sessions were delivered. 9 incident reports were completed. Incidents were allocated a rating based on their severity (ISR=Incident Severity Rating, seen in the table below).

Incident Severity Rating		Example	Number of incidents
1	**Severe/death**	Nil	Nil
2	**Moderate**	Ambulance was called secondary to participant fainting or complaint of chest pain.	Nil
3	**Mild**	Participant sought GP follow up secondary to mild musculoskeletal injury.	1
4	**No harm/near miss**	Participant lost footing during exercise but returned to feet immediately with nil complaint of pain.	8

Table 6: Incident Severity Rating DOTW 2018

Figure 15: Risk Categorisation for Incidents

Of the incidents that occurred, five occurred with participants who were considered high risk, three with participants who were classified as moderate risk and one occurred with a low risk participant (seen in Figure 15).



Seven incidents occurred during the physical activity sessions. Three of these incidents were reported in the Getting Active group and four in the Active group. Two incidents did not occur during the physical activity component of the program.

Similar to the SOTW program in 2018, the majority of incidents occurred in the first five weeks of the program (highlighted in Figure 16 below).

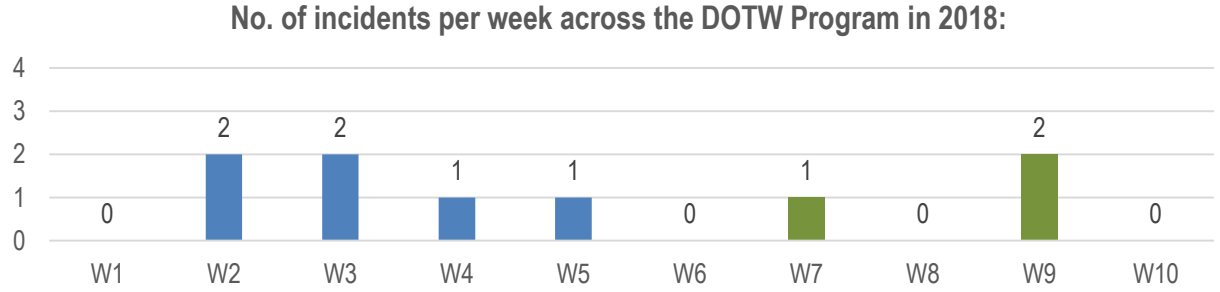


Figure 16: Incidents reported per week of the DOTW program in 2018

This trend indicated that further risk mitigation strategies could be implemented to address the higher incident rates at the beginning of the program. For example, mandatory physical activity screening procedures conducted for all new participants in their first session or implementation of a *DOTW Safety Guide* provided to participants with a checklist of things to check before exercising (i.e. supportive footwear).

Conclusion & Recommendations

Conclusions and Recommendations

The DOTW program demonstrates it has the capacity to engage women living in the West of Victoria and assist them to improve their health literacy, self-efficacy, and encourage positive behaviour change. These changes are aligned with the DOTW Outcomes Framework and reflect Victorian State Government health and wellbeing priorities and the priorities of program partners.

The findings in the 2018 evaluation suggest that DOTW program can affect the following specific change:

A. **Sustained physical activity** in the short-term (throughout the 10-week program).

B. **Increased sense of willingness to participate in community** and understanding of how to do this.

C. **Increased sense of psychological wellbeing** for those who participate in the program and increased mental health literacy.

D. Movement towards **positive health behaviours** throughout the 10-week program, most especially in adherence to healthy dietary guidelines and physical activity guidelines.

E. A **possible increase in understanding of gender equity** within participants from culturally and linguistically diverse backgrounds.

Factors facilitating success

The factors that facilitated the success of the program in the five outcome areas model the socio-ecological model of behaviour change, which recognises that there are multiple levels required to consider when designing effective behaviour change programs.

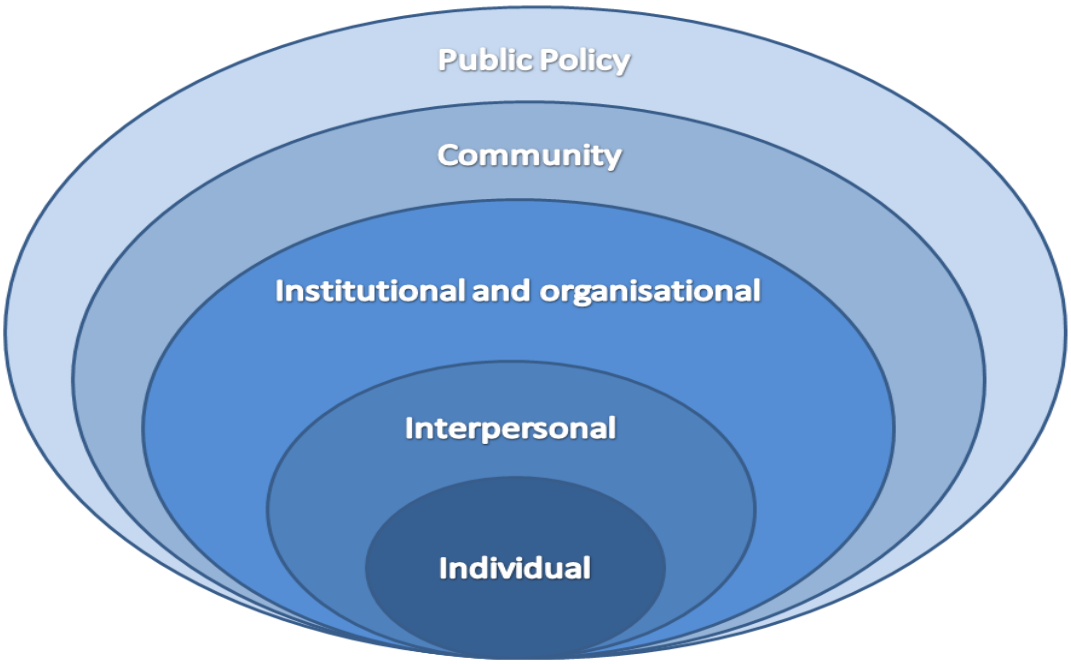


Figure 17. Social Ecological Model of Behaviour Interventions (adapted from McLeroy et al).

It can be seen in the thematic evaluation of the focus group data that the factors contributing to the success of the DOTW program occur across the spectrum, affected by all four inner levels of the Social Ecological Model of Behaviour Interventions. This is shown in Figure 18 (below). It is important to note that the change is enabled by the **content** and the **group environment** of the program as well as characteristics of the **WBCF/Delivery Partners**, and by the integration of the **community partners** involved. All four levels work together to impact health behaviours.

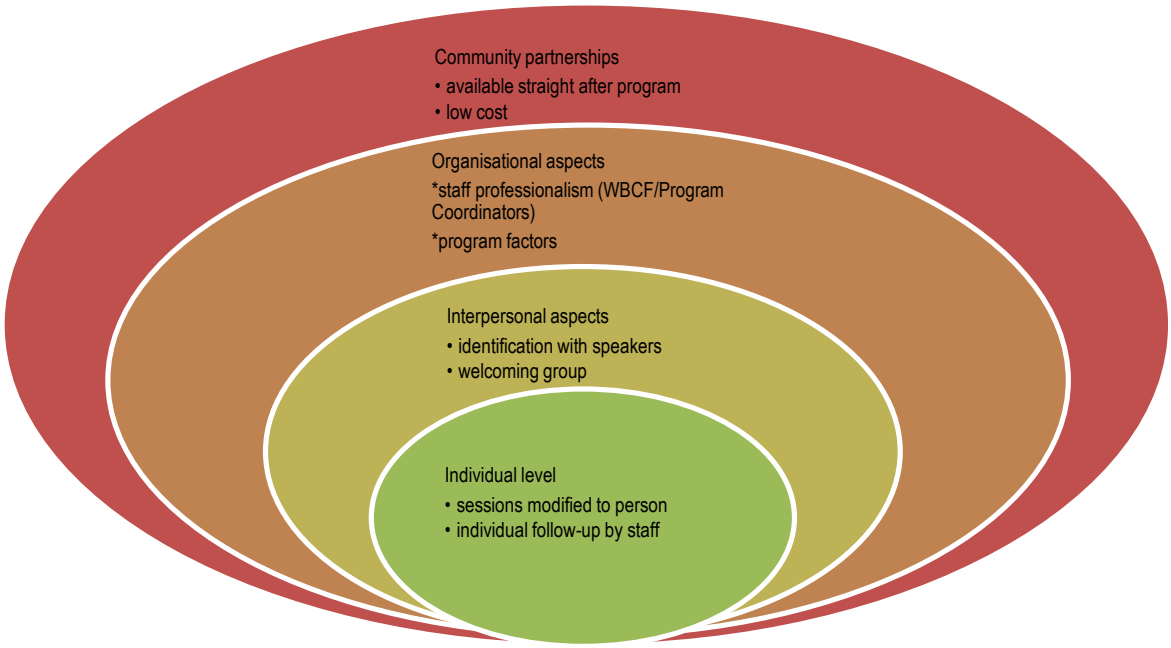


Figure 18. Factors contributing to success of the DOTW program.

Recommendations are made regarding the engagement with a hard-to-reach demographic, and within the five outcome framework areas.

Demographics and engagement

The DOTW program is successful in its ability to target a demographic which is difficult for mainstream health services to reach. This is apparent in its ability to engage women who have low or non-existent physical activity levels, higher levels of psychological distress, and lower levels of community engagement than Victorian norms. However there remain challenges regarding cultural, disability, and to some extent, age diversity within the groups. This was noted by a number of women in the focus groups, who expressed a hope for a more diverse cohort which further reflects their community. Some women suggested allowing for family members including children to attend some of the sessions. This needs to be contrasted with feedback with some women who enjoyed the fact that the DOTW sessions were a space just for them.

Recommendation: Consider targeting recruitment efforts towards subgroups that are underrepresented in the program.

Recommendation: Use community leaders as mentors and to encourage women from culturally and linguistically diverse backgrounds to join the program. Consider information sheets in other languages, advertising in culturally relevant locations, and increasing informal socialisation at the start of the program. These recommendations also echo a recent qualitative study examining factors that can enable underrepresented older adults to engage in physical activity (Smith, B et al, 2017)

Physical activity

The program shows good potential to increase physical activity levels, secondary to greater levels of physical activity reported by participants at the end of the program. This change is especially evident in non-active women and thus this is an important strength of the program. However, at present it is not known whether women are able to sustain this activity or increase it over the longer term. Using the current single-item tool has been shown in previous research to poorly capture any changes in physical activity at a higher level (Zwolinsky, 2015). Accelerometers are a more accurate way to test physical activity but come with significant cost and participant burden. The International Physical Activity Questionnaire short form 'past 7 days' version is currently the recognised best multi-item physical activity scale (Silsbury et al, 2015).

Recommendation: Use of a multi-item self-report measure OR accelerometer that could measure more specific changes in activity levels as a result of the program. Data on a small sample of 50 women (>10% of the population) would be a suitable representative sample.

Discussion in the focus groups showed variation across the LGAs in the content of the physical activity sessions. This could make it difficult to generalise conclusions regarding the impact of the physical activity sessions.

Recommendation: Offer some broad guidance to physical activity staff on the structure of the physical activity program to ensure that a consistent, measurable effect can be seen.

The exercise sessions offered appeared to vary greatly in complexity within the three levels of (low, moderate, and high). There was feedback in the focus groups of the complexity of sessions being too high for the experience of participants, and examples where the difficulty of the session was a barrier to participation. There were also examples of when the necessity to stop sessions was a barrier to people with high levels of fitness from getting full benefit from the sessions.

Recommendation: Ensure simple English is used by physical activity instructional staff and try to keep the level of complexity of all exercises low within all the intensity levels.

Partnerships with a variety of physical activity groups in the community is important for the continuation of the women's exercise journey post program.

Recommendation: Continue to have community-based organisations involved in the exercise component and provide a reminder of activities which were involved in the first half of the program. Provide reminders of how to join these activities towards the end of the program, in order to maximise women's motivation to explore them after the program concludes.

Participation in community

The findings demonstrate that the program can impact on individual experiences of loneliness as well as connection to community. However, participant uptake of existing community programs as a result of the DOTW program was difficult to interpret because the question included in the survey was broad and asked about both physical activity and social community activities in one question.

Feedback from participants in the focus groups was that they would benefit from further opportunities for social interaction because it was recognised as being key to enjoyment and benefit. There is a large body of evidence supporting the importance of social connectivity and social support for health, wellbeing and physical activity levels (Lindsay-Smith, et. al., 2017; Haslam et al, 2017; Huxhold et al, 2014). It was clear that the accepting social atmosphere of the group was key

to much of the benefit gained from the program. This group dynamic effect and the importance of the social side of activity programs has been shown previously in similar health promotion programs (Farrance et al, 2016; Bunn et al, 2018). Women sometimes felt that there was not enough time to build on social interactions to create more permanent relationships. Often those with work or family commitments missed the informal socialisation which occurred prior to the formal start time of the program. Some ways that focus group participants felt that this could be improved are included as recommendations here.

Recommendation: Consider factors that might enable socialisation, such as the table or chair set up, within each session. Ensure at least one opportunity to engage with others each session.

Recommendation: Encourage social interaction in the physical activity sessions through choice of activities and use of games.

Recommendation: Find moments during the session times where informal socialisation can be included.

Recommendation: Separate the community involvement questions (included in the evaluation survey) into physical and non-physical activities and align them with the activities offered through community partnerships for best aligned evaluation of impact.

Gender equity

There were mixed results from the quantitative and qualitative data on the impact of the gender equity program. There was no change observed pre to post program in any of the three gender equity items used in the survey. It should be noted that these are single item measures that may not be entirely applicable to program content. Feedback from the focus groups in regards to the sessions focussed on gender equity was more positive. An interesting finding is that the concept of general respect for others seemed to increase as a result of the holistic nature of the program. More specific benefit of the sessions was particularly noticeable in the focus group of women from culturally and linguistically diverse backgrounds, who found the material on respectful relationships useful. For many women, they felt that the sessions were needed but the information provided was too general and they requested more detail.

Recommendation: Consider reviewing the gender equity measures used to collect data on the changes in knowledge and behaviour as a result of the sessions focussed on respectful relationships (gender equity sessions).

Recommendation: Consider including more behaviour focussed and strategies to address problematic relationships within the gender equity sessions.

Psychological wellbeing

The mental health sessions appeared to be valued and findings show the DOTW program has a clinically significant impact on psychological wellbeing. The involvement of VU Provisional Psychology students, including the resilience education sessions and the support service offered (Change Room group therapy and individual therapy sessions), was an important component. However, many of the women indicated that the social atmosphere was key to the changes made to their health literacy and mental health self-care. This is consistent with existing literature on psychological resilience and mental health and suggests that the program has a holistic impact (Lindsay-Smith, O'Sullivan, Eime, et al, 2018; Park et al, 2015). In the focus group and interviews, few women had suggestions for changes to the mental health component to the program.

Recommendation: Maintain focus on the social support components of the program and consider increasing them.

Positive health behaviours

The education sessions on health and diet appears to have an impact on participants. In focus groups few women had suggestions for changes. The participants all seemed to enjoy the opportunity to interact in the cooking sessions and learn more about diet in an informal manner. A small change suggested was to include the cost of foods in the cooking class, and emphasise foods that are low in cost. The diverse focus group specifically noted that some of the recommendations regarding diet were not culturally appropriate for them. Additionally, there were examples where the younger women in the group felt that the health issues targeted were not relevant for their age group.

Recommendation: Revise healthy eating content so that it is applicable to multiple cultures, or make available supplementary material that would be suitable.

Recommendation: Consider the age of the cohort when giving out information about access to services, and make sure to provide information for both younger and older women.

References

Annesi, J. J., & Tennant, G. A. (2013). Mediation of social cognitive theory variables in the relationship of exercise and improved eating in sedentary adults with severe obesity. *Psychology, Health and Medicine*, *18*(6), 714–724.

Becker, H., Stuifbergen, A., Hyun, S., & Hall, S. (1970). Self-rated abilities for health practices: A health self-efficacy measure. *Health Values: The Journal of Health Behavior, Education & Promotion, 17,* 42-50.

Bunn, C., Donnachie, C., Wyke, S., Hunt, K., Brennan, G., Lennox, J., . . . Gray, C. M. (2018). Can professional football clubs deliver a weight management programme for women: a feasibility study. BMC Public Health, 18(1), 1330. doi:10.1186/s12889-018-6255-2

Ding, D., et al., The economic burden of physical inactivity: a global analysis of major non-communicable diseases. The Lancet, 388(10051), 1311-1324.

Drygas, W., Ruszkowska, J., Philpott, M., Bjorkstrom, O., et al. (2013). Good practices and health policy analysis in European sports stadia: results from the 'Healthy Stadia' project. *Health Promotion International, 28(2)*, 157–165.

Ernsting, A., Knoll, N., Schneider, M., & Schwarzer, R. (2015). The enabling effect of social support on vaccination uptake via self-efficacy and planning. *Psychology, Health and Medicine*, *20*(2), 239–246.

Evans, M., Haussegger, V., Halupka, M., & Rowe, P. (2017). From girls to men: Social attitudes to gender equality in Australia. Part 1: Quantitative Findings. Canberra: 50/50 by 2030 Foundation, University of Canberra.

Farrance, C., Tsofliou, F., & Clark, C. (2016). Adherence to community based group exercise interventions for older people: A mixed-methods systematic review. Preventive Medicine: An International Journal Devoted to Practice and Theory, 87, 155-166. doi:10.1016/j.ypmed.2016.02.037

Haslam, C., Cruwys, T., Haslam, S. A., & Jetten, J. (2017). Social connectedness and health Encyclopedia of geropsychology (pp. 2174-2182).

Healthwest. (2015). Report Population Health Data. Healthwest Catchment: Brimbank, Hobsons Bay, Maribyrnong, Melton, and Wyndham. Melbourne: Author.

Hunt, K., Wyke, S., Gray, M., Anderson, A., et. al. (2014). A gender-sensitised weight loss and healthy living programme for overweight and obese men delivered by Scottish Premier League football clubs (FFIT): a pragmatic randomised controlled trial. *The Lancet, 383(9924),* 1211-1221.

Huxhold, O., Miche, M., & Schüz, B. (2014). Benefits of Having Friends in Older Ages: Differential Effects of Informal Social Activities on Well-Being in Middle-Aged and Older Adults. The Journals of Gerontology: Series B, 69(3), 366-375. doi:10.1093/geronb/gbt029

Kessler RC, Barker PR, Colpe LJ, Epstein JF, Gfroerer JC, Hiripi E, Howes MJ, Normand SL, Manderscheid RW, Walters EE, & Zaslavsky AM. (2003). Screening for serious mental illness in the general population. *Archives of General Psychiatry, 60(2)*,184-189.

Kleim, B., Vauth, R., Adam, G., Stieglitz, R. D., Hayward, P., & Corrigan, P. (2008). Perceived stigma predicts low self-efficacy and poor coping in schizophrenia. *Journal of Mental Health*, *17*(5), 482–491.

Li, J., Theng, Y.-L., & Foo, S. (2016). Exergames for older adults with subthreshold depression: Does higher playfulness lead to better improvement in depression? *Games for Health*, *5*(3), 175–182. https://doi.org/10.1089/g4h.2015.0100

Lindsay Smith, G., Banting, L., Eime, R., O'Sullivan, G., & Uffelen, J. (2017). The association between social support and physical activity in older adults: A systematic review. International Journal of Behavioral Nutrition and Physical Activity. 14. 10.1186/s12966-017-0509-8.

Lindsay-Smith, G., O'Sullivan, G., Eime, R., Harvey, J., & van Uffelen, J. G. Z. (2018). A mixed methods case study exploring the impact of membership of a multi-activity, multicentre community group on social wellbeing of older adults. BMC Geriatr, 18(1), 226. doi:10.1186/s12877-018-0913-1

Lozano-Sufrategui, L., Pringle, A., Carless, D., & McKenna, J. (2017). 'It brings the lads together': a critical exploration of older mens experiences of a weight management programme delivered through a Healthy Stadia project. *Sport in Society, 20(2),* 303-315.

Marks, R., Allegrante, J. P., & Lorig, K. (2005). A Review and Synthesis of Research Evidence for Self-Efficacy-Enhancing Interventions for Reducing Chronic Disability: Implications for Health Education Practice (Part II). *Health Promotion Practice*, *6*(2), 148–156. https://doi.org/10.1177/1524839904266792

McAuley, E., Jerome, G. J., Elavsky, S., Marquez, D. X., & Ramsey, S. N. (2003). Predicting long-term maintenance of physical activity in older adults. *Preventive Medicine*, *37*(2), 110–118. https://doi.org/10.1016/S0091-7435(03)00089-6

Park, H. K., Chun, S. Y., Choi, Y., Lee, S. Y., Kim, S. J., & Park, E. C. (2015). Effects of social activity on health-related quality of life according to age and gender: an observational study. Health Qual Life Outcomes, 13, 140. doi:10.1186/s12955-015-0331-4

Perry, E., Thomas, H., Samra, H., Edmonstone, S., Davidson, L., Faulkner, A., Petermann, L., Manafo, E., & Kirkpatrick, S.I. (2017). Identifying attributes of food literacy: a scoping review. *Public Health Nutrition, 20(13),* 2406-2415. doi: 10.1017/S1368980017001276.

Prochaska, J.O., & DiClemente, C.C. (2005). The transtheoretical approach. In Norcross, J.C., & Goldfried, M.R. *Handbook of psychotherapy integration.* Oxford series in clinical psychology (2nd ed.). Oxford: Oxford University Press.

Robertson, S.M., Amspoker, A.B., Cully, J.A., et al. (2013). Affective symptoms and change in diabetes self-efficacy and glycaemic control. *Diabetic Medicine, 30(5),* e189-e196.

Robinson, O. C. (2014). Sampling in Interview-Based Qualitative Research: A Theoretical and Practical Guide. Qualitative research in psychology, 11(1), 25-41. doi:10.1080/14780887.2013.801543

Sacco, W. P., Wells, K. J., Vaughan, C. A., Friedman, A., Perez, S., & Matthew, R. (2005). Depression in adults with type 2 diabetes: The role of adherence, body mass index, and self-efficacy. *Health Psychology*, *24*(6), 630–634.

Schopp, L. H., Bike, D. H., Clark, M. J., & Minor, M. A. (2014). Act Healthy: Promoting health behaviors and self-efficacy in the workplace. *Health Education Research*, *30*(4), 542–553. https://doi.org/10.1093/her/cyv024

Schwarzer, R. (2008). Modeling health behavior change: How to predict and modify the adoption and maintenance of health behaviors. *Applied Psychology*, *57*(1), 1–29.

Smith, B. (2017). Engaging Underrepresented Groups of Older Adults in Physical Activity. MOVE muscle, bone & joint health. Retireved: https://www.msk.org.au/vaap/

Silsbury Z, Goldsmith R, Rushton A. (2015). Systematic review of the measurement properties of self-report physical activity questionnaires in healthy adult populations. *BMJ Open 2015*; 5:e008430. doi: 10.1136/bmjopen-2015-008430

Sriramatr, S., Silalertdetkul, S., & Wachirathanin, P. (2016). Social cognitive theory associated with physical activity in undergraduate students: A cross-sectional study. *Pacific Rim International Journal of Nursing Research*, *20*(2), 95-105.

Valois, R. F., Umstattd, M. R., Zullig, K. J., & Paxton, R. J. (2008). Physical Activity Behaviors and Emotional Self-Efficacy: Is There a Relationship for Adolescents? *Journal of School Health*, *78*(6), 321–327.

White, A., & Whitty, K. (2009). Men's under use of health services - finding alternative approaches. *Patient Education & Counseling, 6(2),* 95-97.

Wong, E.C., Collins, R.L., Cerully, J.L., Yu, J.W., Seelam, R. (2018). Effects of contact-based mental illness stigma reduction programs: age, gender, and Asian, Latino, and White American differences. *Social Psychiatry and Psychiatric Epidemiology, 53(3),* 299-308.

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment, 52(1),* 30-41.

Appendix A: Daughters of the West Outcomes Framework 2018

	Sustained Participation in Physical Activity	Connection to Community	Good Mental Wellbeing	Sustained Positive Health Behaviours	Women's representation in leadership and decision-making roles
Outcomes: Long Term 12 months - 3 years post program					
Outcomes: Intermediate Term 6-12 months post program	• Increased participation of women in sport and physical activity • Increased percentage of participants meeting weekly physical activity guidelines • Increased numbers of women attending regular Heart Foundation /DOTW Walking Groups	• Increased participation in community activities • Stronger social networks • Increased confidence to try community activities • Increased for passion for community involvement and 'giving back'	• Improved self-efficacy (MH) • Improved confidence and comfort in talking to others • Reduced stigma surrounding discussing mental health	• Self-reported behaviour changes • Increased access to health services • Increased self-efficacy (confidence) in ability to change behaviour • Percentage of participants meeting recommended fruit and vegetable consumption	• Strengthen and promote positive, equal, gender-equitable, respectful relationships • Improved positive attitudes towards gender equity • Increase in people feeling able, safe and willing to report violence • Increased proportion of community and cultural leaders who are women
	INDICATORS: • Vic Health Physical Activity Indicators asked pre/post program • Open ended responses	INDICATORS: • Qualitative data	INDICATORS: • JV PhD findings (longitudinal) • Improved K-10 scores	INDICATORS: • Self-reported changes in behavior • Qualitative data • Mid-season review participation rates • VicHealth indicator: F & V consumption	INDICATORS: • VU research re: Gender Equity • Self-reported changes in attitudes • Open ended responses
Outcomes: Immediate (program end)	• Increased opportunities to engage in supported physical activity • Improved knowledge of the importance of exercise for good health • Increased self efficacy • Improved knowledge of exercises to do for fitness level • Increased enjoyment associated with physical activity • Barriers to physical activity reduced	• Increased participation in community activities • Stronger social networks • Increased confidence to try community activities • Increased for passion for community involvement and 'giving back'	• Increased awareness of good mental health • Increased knowledge of mental health services and how to access local services • Increased understanding of tools and strategies to promote mental health	• Increased knowledge of health promoting behaviour • Increased knowledge of health services • Increased understanding of how to access local services	• Increased awareness and understanding of the extent and impact of gender inequality on girls and women • Increased understanding of how to access local services • Increased understanding of what constitutes healthy, supportive and safe relationships
	INDICATORS: • Improved scores on the • SHRAP Questionnaire pre/post program • Qualitative data	INDICATORS: • Increased connection to community • MSPSS scores pre/post program • VicHealth indicator – social support • Community participation and Leadership Academy case studies	INDICATORS: • K-10 scores • SHRAP scores • MSPSS Scores • Self-reported changes in knowledge	INDICATORS: • Self-reported changes in behavior • Qualitative data • Mid-season review participation rates	INDICATORS: • Self-reported changes in participant knowledge •

Appendix B: DOTW Outcome Measures 2018

WBCF participant data: including participant demographics (i.e. age, health status, and cultural diversity) and program attendance data.

Physical activity: Measured using a question suggested by Vic Health evaluating number of days per week each participant has completed at least 30 minutes of exercise in a usual week.

Good Mental Wellbeing: The Kessler Psychological Distress Scale (K10) is a short, widely used instrument measuring a widely used scale of general psychological wellbeing. The scale is used by the Australian Bureau of Statistics (ABS) for national and state health surveys (ABS, 2003). The K-10 has sound psychometric properties including good internal reliability (Kessler et al., 2003) and validity (Andrews & Slade, 2001; Sunderland et al., 2012).

Connection to community: Measured using a pictorial Inclusion of Community in the Self (ICS) scale (Mashek, Cannaday, & Tangney, 2007). This has been shown to be shown to be valid and reliable in various populations, and allows for adaptation to ask specifically about the participants' own community.

Community connection was also measured through a standard loneliness scale commonly used in research. Loneliness is described as a perceived feeling of lack of desirable relationships compared to perceived actual relationships. Loneliness is a predictor of increased risk of morbidity and mortality (Zarei, Memari, Moshayedi, & Shayestehfar, 2015). The University of California Los Angeles (UCLA) Three-Item (3 question) Loneliness Scale is a condensed version of the most widely used 20 item UCLA loneliness scale and displays satisfactory reliability and both concurrent and discriminant validity.

Sustained Positive Health Behaviours: A modified version of the Self-Rated Abilities for Health Practices (SRAHP) (Becker, Stuifbergen,Oh, & Hall, 1993). This questionnaire measures four domains of health behaviours including nutrition, physical activity, health seeking and psychological help-seeking. The sixteen-item inventory measures several facets for each of the four domains. The scales asks participants to report their confidence in performing various facets of each of the four health domains. They answers were given on a Likert scale of one to five where one is not at all confident and five is very confident.

Gender Equity: Participants were asked three questions relating to respectful relationships, family violence and ability of females to be leaders. Questions are answered on a Likert scale from strongly disagree to strongly agree. These were based on the National Community Attitudes Survey (NCAS) (2013), VicHealth Indicators Survey (2015) and indicators developed by M. Flood (2017).

Other questions: Additional questions were developed by the WBCF Evaluation Working Group and VU. These addressed community engagement as a key outcome indicator of WBCF programs, as well as evaluative questions on health behaviours and knowledge change.