# Evaluation of the B-Well Staff Behaviour Change Programme

# Background

# National Policy Context

Under the national Healthy Ireland Framework<sup>1</sup>, a Health and Well-Being (Workplace Well-Being) Bill was signed off at Cabinet in June 2015<sup>2</sup> that will require public sector employers to develop a healthy workplace policy to promote the physical, mental and social well-being of employees. The Bill acknowledges the diversity of workplaces suggesting each workplace develop initiatives appropriate to their own setting. Physical activity was chosen as a means of promoting staff well-being because according to Healthy Ireland's National Physical Activity Plan, the promotion of physical activity in workplaces can provide benefits for employers in terms of better rates of employee retention, reduced absenteeism due to ill health and increased productivity. Employees can benefit through lower incidences of chronic health problems, reduced stress and improved mental health outcomes.<sup>3</sup>

# Physical Activity amongst Staff in Trinity

In 2014, a Trinity Sport staff member undertook a Masters dissertation<sup>4</sup> which assessed the lifestyle habits of Trinity staff including rates of physical activity as well as the amount of time Trinity staff spend sitting. 662 staff (response rate = 22%) responded to the online survey.

Rates of physical activity amongst the Trinity staff who responded to this survey are very high compared to national rates but comparing rates of physical activity amongst Trinity staff with national data is difficult. A full discussion of how the comparison was done is available in Appendix A. 84.5% of Trinity staff are Minimally or HEPA Active (see Appendix A for definitions) compared to 55% nationally in the SLAN survey and 31.3% nationally in the Irish Sports Monitor. Given that all who participated in the Trinity survey are in employment and could be expected to have a higher average level of education than the general population, a higher rate of physical activity in Trinity is unsurprising. Such a large difference to the national levels however, coupled with 27% of respondents reporting doing 1.5-2 hours of physical activity per week suggests that the convenience sampling used in the Masters meant that there was a disproportionate response from people who are already physically active. Even with this bias, 15.5% of staff who responded to the survey were insufficiently active and non-email based staff who are likely to have lower rates of physical activity outside work were not included.

<sup>&</sup>lt;sup>1</sup> Department of Health and Children (2013). *Healthy Ireland-a framework for improved health and wellbeing 2013-2025*. Dublin: Hawkins House.

<sup>&</sup>lt;sup>2</sup> Department of Health and Children (2015) Varadkar announces new Healthy Workplace initiative to get staff more active-Policy aims to get people fit, improve diets & switch to sustainable travel [press release]. Hawkins House, Dublin, 23rd June 2015. Accessed 29/07/2016 from <u>http://health.gov.ie/blog/press-release/varadkar-announces-new-healthy-workplace-initiative-to-get-staff-more-active/</u>

<sup>&</sup>lt;sup>3</sup> Get Ireland Active (2016) *National Physical Activity Plan for Ireland*. Accessed from <u>http://www.getirelandactive.ie/Professionals/National-PA-Plan.pdf</u> on 29/7/2016

<sup>&</sup>lt;sup>4</sup> Available on request by emailing Deirdre Mullen on <u>deirdre.mullen@tcd.ie</u>

Rates of sitting amongst Trinity staff are high. The mean duration of sitting was 8.26 hours per day. In 2016<sup>5</sup>, the American Heart Association acknowledged that the evidence on sedentarism is limited but the data emerging suggests that prolonged sitting appears to have a deleterious effect on health. Their review of evidence suggests that interventions focused solely on reducing sedentarism may be more effective at reducing sedentary behaviour than those that include both strategies for increasing physical activity and reducing sedentary behaviour. This advice corroborates the conclusions of an Australian assessment of the challenges and opportunities for promoting physical activity in the workplace<sup>6</sup> which found that the greatest potential for influencing the overall workforce appears to be programmes that include less 'organised' approaches and promote incidental physical activity within and around the workplace. Advice released in 2015<sup>7</sup> recommends office based staff begin standing for 2 hours per 8 hour working day and build up to 4 hours. A meta-analysis of workplace health promotion effectiveness published in 2011<sup>8</sup> found that successful programmes offered organisational leadership, health risk screening, individually tailored programmes, and a supportive workplace culture. Buckley et al<sup>7</sup> recommend staff be encouraged to take regular breaks that may include walking, filing, photocopying, getting a drink, stair climbing, standing or a combination of all. Other suggestions include isometric balls and standing desks.

#### **Exercise Hour**

Since 2011, Trinity has offered Exercise Hour during Health and Sports week. It is an hour that Trinity staff can use to exercise during work time. One of the most common reason people don't exercise is lack of time<sup>9</sup>. But physically active people are more productive and have lower rates of absenteeism<sup>10</sup>. It makes sense therefore, to make it easier for staff to participate in physical activity. More information on Exercise Hour in Trinity is available on the Healthy Trinity website<sup>11</sup>.

# Physical Activity Champions

Health champions are people from within a workplace who are trained to provide support to their peers to engage in healthy behaviours and have been suggested as an important part of any multi-level

http://circ.ahajournals.org/content/circulationaha/early/2016/08/12/CIR.00000000000440.full.pdf <sup>6</sup>Marshall, AL (2004) Challenges and Opportunities for promoting physical activity in the workplace *Journal of Science and Medicine in Sport* 7(1): 60-66

<sup>&</sup>lt;sup>5</sup> American Heart Association (2016) *Sedentary Behavior and Cardiovascular Morbidity and Mortality. A Science Advisory From the American Heart Association* accessed on 20<sup>th</sup> Aug 2016 from

<sup>&</sup>lt;sup>7</sup> Buckley JP, Hedge A, Yates T, Copeland RJ, Loosemore M, Hamer M, Bradley G, Dunstan DW (2015) The sedentary office: a growing case for change towards better health and productivity. Expert statement commissioned by Public Health England and the Active Working Community Interest Company. *Br J Sports Med* doi:10.1136/bjsports-2015-094618

<sup>&</sup>lt;sup>8</sup> Cancelliere C, Cassidy DJ, Ammendolia C, Côté P (2011) Are workplace health promotion programs effective at improving presenteeism in workers? a systematic review and best evidence synthesis of the literature. *BMC Public Health* 11, 395. doi: 10.1186/1471-2458-11-395

<sup>&</sup>lt;sup>9</sup>Irish Sports Council (2004) *Sports Participation and Health Amongst Adults in Ireland*. Accessed on 25 August 2016 from <u>http://www.irishsportscouncil.ie/Research/Sports Participation Health</u> Among Adults 2004 /Sports Participation Health.pdf

<sup>&</sup>lt;sup>10</sup> National Institute for Health Care Excellence (2008) *Physical Activity in the Workplace. Public Health Guideline.* Accessed on 25 August 2016 from <u>https://www.nice.org.uk/guidance/ph13/resources/physical-activity-in-the-workplace-1996174861765</u>

<sup>&</sup>lt;sup>11</sup> <u>https://www.tcd.ie/collegehealth/promotion/wellbeing/ExerciseHour.php</u>

workplace intervention that aims to promote health for example through physical activity<sup>12</sup>. Evidence from a meta-analysis of ten health promotion programmes done in 2013<sup>13</sup> found that peer delivered interventions to increase physical activity were as effective as professionally delivered ones and more effective than control conditions. A 2016 study<sup>14</sup> of physical activity champions in the workplace found that champions promoted physical activity with peers through direct encouragement, by facilitating workplace social support and being physical activity role models.

# Recommendations from Background Review

- Trinity should develop a health and well-being programme that meets the requirements of the Department of Health's Workplace Well-Being Bill
- Increasing rates of physical activity can promote the health of staff, reduce their stress levels and improve productivity and staff retention.
- Rates of physical activity amongst those who participated in the study are very high. Further research that uses randomised sampling should be undertaken to verify the data.
- Because 15.5% were insufficiently active and 27% were highly active, it is likely that there is a wide variation in rates of physical activity amongst staff. Provision should be made for this variation in the programme. B-Well should aim to encourage physical activity with those with low levels but should also harness the enthusiasm of those with higher levels to create a culture of physical activity in the workplace. The data available suggests that rates of physical activity may be quite good amongst a majority of Trinity staff and that a more pressing issue is excessive sitting.
- B-Well should be tailored to individuals but should also go beyond the individual by influencing the
  person's workplace and working culture. Managers should facilitate participation by their team in
  the programme, health risk screening should be considered, changes to the physical environment
  such as the introduction of isometric balls and standing desks could be included as well as changes
  to the culture of the workplace that encourage standing and movement such as facilitating regular
  breaks, encouraging stair climbing or introducing standing meetings. It may be more effective for
  broader workplace based efforts to focus on reducing sedentary behaviour rather than promoting
  physical activity.
- B-Well should give participants skills to be physical activity champions in their workplace.
- B-Well should encourage participants to begin by standing for two hours in an eight hour day and work towards standing for four.
- Participants in B-Well should be afforded an hour during work time each week to attend B-Well workshops.

# Programme Design

# **Objectives and Actions**

In Oct/Nov 2015 Trinity Health Service and Trinity Sport designed and ran a six week behaviour programme for staff that aimed to promote well-being through physical activity. Based on the

<sup>&</sup>lt;sup>12</sup> Linnan L, Fisher EB, Hood S. (2013). The power and potential of peer support in workplace interventions. *American Journal of Health Promotion* 28: TAHP2-10

<sup>&</sup>lt;sup>13</sup> Ginis KAM, Nigg C, Smith AL. (2013) Peer-delivered physical activity interventions: An overlooked opportunity for physical activity promotion. *Translational Behavioral Medicine*. 2013; 3: 434–43

<sup>&</sup>lt;sup>14</sup> Edmunds S, Clow A. (2016) The role of peer physical activity champions in the workplace: a qualitative study. *Perspective in Public Health*. Vol 136 No. 3

recommendations from the background review above, a programme developed by Stanford University<sup>15</sup> and using Motivational Interviewing<sup>16</sup> the course had the three objectives and associated actions below.



# Exercise Hour

College Health and Trinity Sport agreed with Human Resources that staff could take one hour per week to participate in the B-Well Programme similar to time that would be allocated for any other type of training course.

# Recruitment

The following actions were taken to recruit participants

- 1. An all staff email was sent from the Healthy Trinity email account.
- 2. An email with a poster attached was sent to the managers of non-email based staff.
- 3. Course facilitators asked staff and managers from different departments on an ad hoc basis what they thought would be a barrier to recruitment.
- 4. A number of managers were targeted who might be likely to facilitate attendance by their team on the course. These managers were phoned about B Well and a follow up email and poster was sent. Course facilitators aimed to recruit participants from non-email based staff, admin and academic staff.

A copy of the advertising for the course is available in Appendix B.

# Course Content

Course materials included the B-Well vision and goal worksheet; worksheets on the pros and cons of becoming more active, giving advice and dealing with relapse; posters to encourage people to become more active in their office e.g. take the stairs, benefits of physical activity. For a full copy of the course material please email <u>health.promotion@tcd.ie</u>

<sup>&</sup>lt;sup>15</sup> Castro, C.M., & A.C. King (2002) Telephone-assisted counselling for physical activity. *Exerc. Sport Sci. Rev.,* Vol. 30, No. 2, pp. 64–68.

<sup>&</sup>lt;sup>16</sup> Miller, W.R.; Rollnick, S (2002) "Motivational Interviewing: Preparing People to Change". Guilford Press

# Programme Evaluation

This document contains an impact and process evaluation of the programme structured under the three objectives above.

# Impact Evaluation

The impact evaluation poses three research questions:

- 1. Did B-Well increase rates of physical activity amongst participants?
- 2. Did B-Well encourage people to become physical activity champions in their workplace?
- 3. Did B-Well encourage participants to make changes to their workplace that made it more supportive of physical activity?

#### Process Evaluation

The process evaluation asks the following research questions:

- 4. Recruitment: How were participants recruited and were there any challenges to recruitment?
- 5. Attendance: Did participants attend all sessions and complete all tasks for the programme?
- 6. Programme design: Was the programme delivered as originally designed and was the content appropriate?
- 7. Participant satisfaction: Were participants satisfied with the time, location, and duration of B-Well?

# Methodology

The following sources of information were used in the evaluation:

- 1. Before and after survey of participants. Differences were compared in Excel.
- 2. Worksheets completed each week by participants.
- 3. A checklist and comments completed by facilitators each week after the B-Well workshop. A thematic analysis of comments was conducted.
- 4. Notes from conversations with managers about recruitment were reviewed.

# Results

# Response Rate

10 participants were recruited but one person opted out of B-Well after the first week. The response rate for each of the evaluation data tools were as follows:

Completed registration survey: 8 (80%)

Submitted completed week by week worksheet: 9 (80%)

Completed evaluation survey: 8 (80%)

# Impact Evaluation

1. Did B-Well increase rates of physical activity amongst participants?

A comparison of self-report questions on rates of physical activity done in the previous seven days showed that in the seven days after the B-Well course, a majority of participants had done more physical activity than before the course.



Comparing the worksheets completed each week by participants with their baseline rates of physical activity showed that all participants who completed the worksheets increased their rates of physical activity during the programme except one person.



In the last se	ven days,	how many minutes of	f physical activit	ty have you done?	
Before	After	Difference	Nominal	% change	
90	220	130	Increase	1	144
150	80	-70	Decrease		-47
220	220	0	No change		0
120	226	106	Increase		88
60	240	180	Increase	3	300
120	200	80	Increase		67
100	450	350	Increase	3	350
150	120	-30	Decrease		-20

Increases in physical activity varied from 67-350%. Decreases were from 20-47%. One person neither increased nor decreased.

2. <u>Did B-Well encourage people to become physical activity champions in their workplace?</u> Before and after analysis of the attitudes of participants to promoting physical activity in their workplace are disappointing.







3. <u>Did B-Well encourage changes to the workplace that made it more supportive of physical activity?</u> All managers of those who attended (n=4) were aware that their staff member was participating in B-Well and allowed exercise hour for participation. Of the five participants who attended the week 4 session, two set a goal to change their work environment but neither completed the goal. People from Housekeeping didn't see any barriers to physical activity where they work and didn't feel they should change their work environment to increase physical activity. Approximately three months after the intervention, they organised a campus walk for Health Week but no colleagues turned up. Participant comments in the evaluation on changing the work environment included "Need a stronger framework to enact these changes", "I would like to but am constrained by infrastructure and ethos" and "Not at the moment. I hope to in the future"

# Process Evaluation

The process evaluation aimed to answer the questions below.

4. <u>Recruitment: Who was recruited and were there any challenges to recruitment?</u>

Response to an all staff email was poor. Facilitator comments on recruitment indicated that people were confused by the idea of Exercise Hour and being allowed to exercise during work time. Facilitators also stated that people felt they were too busy to take time off during work and that people were worried how it would be perceived by their colleagues if they did. After contacting four managers likely to be supportive of a workplace physical activity programme, the following numbers were recruited:

Title of Team	Work Classification	Number Recruited
Housekeeping	Non-email based	5
Academic Registry	Administrative staff	2
Estates and Facilities	Administrative staff	3
School of Psychology	Academic	0

**Management Comments:** During telephone conversations with managers, one person suggested marketing B-Well as a team building or stress management course. Another manager said it would be fair to give people a half an hour per week off to exercise and ask them to give a half an hour of their own time. One manager suggested marketing it as a team building/stress relief programme rather than behaviour change.

A thematic analysis of facilitator comments taken after each workshop found the following recruitment themes:

**Mixed fitness:** There were very different levels of fitness amongst those on the course. For example, two people were regularly HEPA active whereas others were obviously not fit.

**Mixed needs:** Some participants were time poor and really just needed an hour off work to exercise. Others were less confident and benefitted from learning about the process of behaviour change.

**Changing workplaces:** When encouraging participants to change workplace, some people didn't feel comfortable discussing issues of culture in the presence of other team members. Some found it useful however, to have other team members with whom they could plan changes.

5.	Attendance: Did participants attend all sessions?
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Of the 10 who registered for the course, the following attended per week:

Week	1	2	3	4	5	6
Attendees	7	7	7	5	7	6

Attendance per person varied.



One person dropped out of the course after the first week. One person only came to two workshops. 50% of those registered attended five or six workshops.

# 6. <u>Programme design: Was the programme delivered as originally designed and was the content</u> <u>appropriate?</u>

# Weekly Facilitator Checklist:

A review of the facilitator checklist that recorded what elements of the programme as originally designed showed were actually delivered found that the following parts were omitted: Teaching participants Motivational Interviewing skills (OARS); Encouraging participants to test their goals using confidence and motivation rulers. The time for setting a vision in the first week was also shorter than ideal.

# Weekly Facilitator Comments:

The thematic analysis of facilitator comments found the following themes.

<u>Time</u>: Workshops were initially intended to be 60 minutes in duration but this was shorted to 45 minutes to allow people to change and go back to work. Including all elements of the planned programme was very difficult and items were removed from the content.

<u>Social Aspect:</u> Participants didn't have enough time each week to revisit each other's' names. <u>Behaviour Change:</u> Some of the visions were poorly teased out and it wasn't always clear how weekly goals were related to the vision. Some of the goals were unrelated to physical activity. Many of the goals weren't specific enough. Focus on relapse in the last week of the course was useful. <u>Broader benefits:</u> One participant who was already very active didn't increase her physical activity but said that her confidence did increase.

<u>Changing the Workplace:</u> Housekeeping staff didn't think there was any point in changing their workplace because their job is physically active. When discussing barriers to physical activity in the workplace, no one spoke of the cultural barriers that were discussed with facilitator in a less formal setting because they didn't feel comfortable doing so in a group setting. Participants felt changing the workplace was difficult due to the culture where they worked and time pressures.

<u>Physical activity</u>: facilitating different levels of fitness is important. Some people didn't need as long on behaviour change and would have benefitted from longer exercise. Others needed the social aspect and group work of the behaviour change part of the programme. Trampolining was very social but because of turn taking, it involved very little exercise.

#### **Review of Participant Worksheets:**

A review of the worksheets found that three people didn't use it during the course. Two were already highly active. It's not clear why the third didn't. Each week participants were to set goals and document their physical activity. Six of the nine people completed some information every week on the sheets.

#### **Evaluation Comments:**

A thematic analysis of three open ended questions (1. What was good about B-Well, 2. What could be improved and 3. Any other comments) in the evaluation survey identified the following positive themes: Participants enjoyed the social aspect of meeting staff from other departments e.g. one participant said *"It was good to meet other staff members in other areas"*, they found the programme motivating e.g. one participants commented *"Didn't realise how unfit I was and lacking in motivation."* and they referred to learning about physical activity with one participant stating *"I found it important to begin 'relearning' how to fit in exercise and still cope with my diary"*. One person enjoyed the opportunity to exercise during the workshops.

Themes that arose as suggestions for improving B-Well included more programmes like B-Well, more options for physical activity, more physical activity during the workshop, the programme running for longer and each workshop being longer. It was also suggested that more work be done with managers to encourage change in the workplace. Other comments included changing the time to 8am or around lunchtime and offering the worksheet online.

7. <u>Participant satisfaction: Were participants satisfied with time, location, and duration of B-Well</u> workshops?

The evaluation survey completed by participants found that most participants thought the overall session was too short.



Participants thought the physical activity part of each workshop was also too short but the behaviour change session length was OK.

The timing of the course (8.30-9.15am) suited a majority of people.



Comments from one participants suggested an earlier start would be better though other participants felt the time was too early because of traffic and another person thought around lunchtime would be good time.

# Discussion

# Rates of physical activity

Participants in B-Well increased their physical activity during the course and a majority were more active after the course than they were before it. These staff members are likely to enjoy decreased stress and better mental health and they are less likely to suffer chronic health problems. Furthermore, they are less likely to be absent from work due to illness and are likely to be more productive<sup>17</sup>. One person whose physical activity increased during the course but decreased after it had only attended two workshops. The second person whose physical activity decreased slowly reduced her physical activity throughout the course and it is not clear why. Increases were not only more common but were of far greater magnitude than decreases.

# Recruitment

The idea of allowing staff the opportunity to be physically active during worktime appeared to be new to many people in Trinity. An evaluation of Exercise Hour done in 2011 suggests that people misunderstand that Exercise Hour allows staff to exercise during worktime without affecting flexi-time. Findings from that evaluation suggest that greater promotion of the Exercise Hour element of B-Well could help people to become familiar with the concept.

Literature on promoting physical activity in the workplace<sup>18</sup> cites the critical role of management in supporting people to be physically active in the workplace. Future recruitment therefore should focus on attaining management support for B-Well programmes before recruitment of participants begins. It may be useful to market B-Well as a team-building or stress management course to management. It's not clear why there was no one interested amongst academic staff approached.

The mixed fitness and mixed needs of those recruited combined with participants' comments on the length of physical activity sessions during the programme suggest that future B-Well programmes be pitched at different levels.

Positive comments about the course such as meeting other staff, learning how to be active and getting help to be motivated should be emphasised.

When recruiting champions, potential participants should understand that they will be asked to encourage physical activity in their workplace. Greater than one potential champion per workplace is ideal because they can offer each other ongoing support although it may be difficult for colleagues to speak frankly about problems in a workplace where problems of culture for example are not openly discussed.

<sup>&</sup>lt;sup>17</sup> Get Ireland Active (2016) *National Physical Activity Plan for Ireland*. Accessed from <u>http://www.getirelandactive.ie/Professionals/National-PA-Plan.pdf</u> on 29/7/2016

<sup>&</sup>lt;sup>18</sup> Edmunds S, Clow A. (2016) The role of peer physical activity champions in the workplace: a qualitative study. *Perspective in Public Health*. Vol 136 No. 3

# Changing Workplaces

The pressure of time that led to the strategic omission of much of the behaviour change content of the B-Well course will not diminish in future. Changing the workplace however, is likely to be the most effective means of promoting physical activity amongst staff. Indeed, since B-Well was piloted in October 2015, support for focusing on reducing sedentarism through changes to the workplace has strengthened. Evidence in support of peer to peer health champion programmes<sup>13</sup> is sufficient to recommend the establishment of a champions programme in Trinity. Such a programme could incorporate the Motivational Interviewing and behaviour change elements of the original B-Well programme. The B-Well programmes would be a good means of recruiting people to the champions course or as a place to which champions can refer peers and should therefore be marketed as complimentary to the other B-Well programmes.

When asked to change their workplaces, staff were asked to come up with ideas. It may be helpful for B-Well facilitators to offer support in the form of posters, examples of how other organisations have changed problems like "the tutting culture" mentioned in one workplace (where other staff members tut when people stand up from their desk), as well as a list of the physical activity available on campus for exercisers. Evidence on the importance of combatting sedentarism has strengthened since B-Well was piloted in 2015 and means by which movement in workplaces can be encouraged should be incorporated into resources for champions. Evidence in literature<sup>19</sup> suggests that champions will require on-going support on contact from a course facilitator. This evidence is corroborated by the failure of colleagues to attend the campus walk organised by three members of the course and by the comments on the difficulties of changing culture and ethos cited by one participant. Edmunds et al suggest ongoing social events and emails to encourage champions.

Promoting physical activity in active workplaces isn't practical but staff from active workplaces were the only people who organised an event to promote physical activity for their workplace.

Having management consent to participate in B-Well during worktime is an important first step in encouraging change in the workplace. Management should be aware that their staff are attending B-Well as well as understanding they may make changes to the workplace.

# The B-Well Worksheet

The worksheet was useful for capturing the progress of participants but should be adapted as per recommendations in the Conclusions & Recommendations section.

# Broader Benefits

Although the first objective of the programme was to increase physical activity, there were other benefits namely one participant referring to an improvement in her confidence to do new projects, others referring to their learning how to be active again and a number of participants referring to the social benefits of participating.

# Attendance

There was no clear profile of people who were more likely to attend workshops consistently than those who weren't. It may be that those who were more physically active didn't complete the worksheets as

<sup>&</sup>lt;sup>19</sup> Edmunds S, Clow A. (2016) The role of peer physical activity champions in the workplace: a qualitative study. *Perspective in Public Health*. Vol 136 No. 3

well as those who were struggling to make change. The people who organised an event after B-Well as physical activity champions were a socially cohesive group from one department with varying levels of physical activity, fitness and attendance.

# Programme content & participant satisfaction

Some very specific recommendations for changing the format of B-Well are made in the Conclusion & Recommendations. As outlined in the Recruitment section of this document, the format of the programmes require some adjustment. The feedback on the course was very positive.

# Conclusions & Recommendations:

The B-Well programme was effective at promoting physical activity amongst Trinity staff but a stronger framework is required to encourage people to make changes to their workplace to increase physical activity. Each of the research questions asked by this impact and process evaluation of B-Well are answered below. Beneath the questions, there are conclusions and recommendations on further study required as B-Well develops.

# 1. Did B-Well increase rates of physical activity amongst participants?

B-Well increased physical activity amongst the majority of participants both during the course and in a before and after comparison of rates of physical activity in the previous seven days. Increases ranged in size from 67-350%. Where there were decreases in physical activity, one person attended very little of the course but one attended most workshops but declined in rates of physical activity slowly over the course.

**Recommendations:** 

- B-Well should continue to be offered and she be available to all Trinity staff
- B-Well should be offered to all staff
- Participants should be advised of the time commitment required to participate and recommended to attend a minimum number of workshops.
- Further evaluation is required to improve the quality of the intervention.
- 2. <u>Did B-Well encourage people to become physical activity champions in their workplace?</u>

No. Changes in the confidence of participants to encourage others to be physically active were disappointing but unsurprising given that much of the behaviour change content of the course was omitted due to time constraints. Workplace champion programmes have however, enough proof of effectiveness to warrant further exploration and coupled with emerging recommendations on reducing sedentarism have potential to improve rates of physical activity amongst staff. Recommendation:

- A separate B-Well Champions Programme should be developed. It should incorporate the omitted elements of this programme, ideas generated by participants and concrete ideas for ways that participants can make changes to their workplace e.g. posters to encourage movement; lists of physical activity events open to staff like pedometer and cycle challenges, operation transformation, social walking and jogging clubs, club staff sessions; burseries for staff to buy medicine balls, standing desks or exercise classes; support to introduce culture change such as changing to standing meetings or encouraging regular active breaks.
- Future B-Well programmes should refer to the importance of changes in the workplace in particular to reduce sedentarism and should be used to recruit staff to the Champions course.
- As part of recruitment to all B-Well programmes, managers and staff should be made aware that B-Well encourages participants to change the workplace and wants participants to be or to support physical activity champions.

3. <u>Did B-Well encourage participants to make changes to their workplace that made it more supportive of physical activity?</u>

Somewhat. One group of participants organised a campus walk for their department but no one attended it. No other changes were made by participants who cited culture and ethos as a barrier. Obtaining the support of management for participants to exercise during worktime was difficult, a new idea to managers but in the opinion of the facilitators a worthwhile precedent.

Encouraging changes to the workplaces of people in active jobs is not feasible but champions can still be recruited from people in active jobs whose role would be oriented towards encouraging staff to exercise outside work.

Recommendations:

- Champions require ongoing support through regular contact with course facilitators and other champions. The support should ensures that events planned by champions are feasible and that staff are given help to overcome barriers, in particular cultural ones.
- B-Well should continue to be offered as a programme done during worktime to emphasise the role of managers and Trinity in encouraging staff to be physically active.
- The B-Well Champions Programme should focus on encouraging physical activity in active and sedentary jobs.
- A means of managing B-Well Champion contact details should be created to ensure ease of contact e.g. a Customer Relationship Manager system.

4. <u>Recruitment: How were participants recruited and were there any challenges to recruitment?</u> It was difficult for people to understand that staff were being allowed to exercise on work time but given the benefits of being physically active to Trinity and staff as well as the precedent set by universities abroad, it is reasonable for Trinity to continue to facilitate this feature of the B-Well Programme.

The mixed needs and fitness levels of participants coupled with feedback on the course content suggest that the B-Well format be altered for future implementation.

Recommendations:

- Continue to allow staff to attend B-Well during work time.
- Promote B-Well with managers as a means of increasing productivity, as team building and as a way
  of decreasing stress amongst staff. B-Well should be framed as a course like any other that staff do
  during worktime. Promotion should be done via presentations to managers and through emails and
  phone calls with an emphasis on why it's important until B-Well is an established programme.
- Promote Exercise Hour as part of B-Well with explanations of how it affects work arrangments.
- Introduce two B-Well courses. B-Well, possibly marketed as B-Well Social should continue with the same mix of physical activity and behaviour change and with an emphasis on fun and social exercise. A more active version should do standard gym classes but with weekly session-side vision and goal setting.
- Future advertising should focus on the social benefits of participating in B-Well as well as the help it gives people to become motivated to be active.
- Future B-Well courses should ask participants to commit to be open to changing their workplace to promote physical activity. e.g. ask them to hold a standing meeting, put up posters etc after each session.
- More than one person per workplace should be recruited so that participants can support each other in championing change to the workplace. It is important to remain cognisant however, that

people from the same workplace must be able to speak frankly about the structures and culture of the workplace.

5. <u>Attendance: Did participants attend all sessions and complete all tasks for the programme?</u> Attendance by participants was mixed. There was no clear profile of who was most likely to attend or complete their worksheets. For most, time was an issue but it affected the attendance of some more than others.

Recommendation:

- Offer B-Well to all staff but specify that participants must attend a minimum number of workshops.
- 6. <u>Programme design: Was the programme delivered as originally designed and was the content</u> <u>appropriate?</u>

Elements of the programme were omitted due to time constraints. Feedback from participants on the course was very positive. Participants liked the social connections they made, they found the programme motivating and it helped them to learn about being physically active again. Suggested amendments based on facilitator and participant comments are below. Recommendations:

- Promote B-Well to participants as social, motivational and educational in future recruitment.
- Remove elements of the programme that were omitted on delivery of the pilot from the programme design i.e. teaching participants motivational interviewing skills and encouraging participants to use decisional balance tools when goal setting.
- Allow more time for setting a course vision at the beginning of all B-Well programmes.
- Extend the workshops to one hour in duration.
- Ensure each week allows participants the opportunities to learn each other's names.
- Continue to encourage SMART goal setting and emphasise the opportunity in relapse
- Future evaluations should try to capture broader benefits e.g. increased confidence, decreased stress, increased social networks
- Include suggestions about cultural barriers that may exist to changing workplace physical activity
   e.g. the tutting culture, the work area is too busy, participants feel silly suggesting change. Solutions for overcoming these barriers should also be explored.
- Continue to offer a menu of changes champions can make to the workplace to make it more supportive of physical activity
- If offering trampolining again, explain that actual time exercising is low due to turn taking.
- Continue to use the worksheets but review the completed ones and remove elements not used by a majority of participants. Investigate offering them as an online resource.

7. <u>Participant satisfaction: Were participants satisfied with time, location, and duration of B-Well?</u> The majority of participants were satisfied with the time, location and duration of B-Well. Some suggestions were made.

Recommendations:

- Make workshops longer and consider incorporating longer physical activity sessions for some.
- The timing of the workshops suited most but it would be useful to offer B-Well at other times too.

# Further Study

Because this evaluation was exploratory it was necessarily broad in scope which made it time consuming to evaluation. Future evaluations will require less breadth.

The rates of physical activity in Trinity are likely quite high compared to national data. Further research to supplement the findings of Trinity Sport using representative sampling would be useful.

Recommendations:

- Evaluate all B-Well programmes but reduce the evaluation sources to as much quantitative data as possible and make the evaluations as short as possible while still giving meaningful information
- Verify the findings of the Trinity Sport study by assessing lifestyle behaviours of Trinity staff on a representative sample of staff.

# Appendix A - How Active Are Trinity Staff?

# Comparing Physical Activity Definitions

The Masters Project on which B Well is based, used HEPA categorisation of physical activity which is different to the categorisation used by national studies. Before comparing rates of physical activity, it is necessary to compare the definitions used by HEPA<sup>20</sup>, the Irish Sports Monitor<sup>21</sup> and the SLAN survey<sup>22</sup>. See table below.

1. HEPA	HEPA description	2. ISM category	ISM description	3. SLAN	SLAN description
category				category	
Insufficiently	Those who do not meet	Sedentary	Did not participate (20 minutes) in	Physically	Did not participate in
Active	the categories below		recreational activity during the	inactive	physical activity
			previous 7 days and does not cycle or		
			walk for transport		
		Just Active	Participated in sporting activity or	Insufficientl	Participated in some
			recreational walking for 20 minutes at	y active	activity but not at a level
			least once during the previous 7 days		great enough to be
			OR		considered 'physically
			Regularly walks or cycles for transport		active'.
		Fairly active	Participated in 30 minutes physical		
			activity at least twice during the		
			previous seven days		
Minimally Active	a) 3 or more days of	Highly active	Participated in 30 minutes moderate	Physically	Taking part in exercise or
	vigorous activity of at		intensity physical activity at least five	active	sport 2-3 times per week
	least 20 minutes per day		times in the last week		for 20 or more minutes
	b) 5 or more days of				at a time or engaging in
	moderate-intensity				more general activities,

Table 1: A comparison of definitions of physical activity under HEPA, Irish Sports Monitor and SLAN categorisation

<sup>&</sup>lt;sup>20</sup> IPAQ Research Committee (2004). *Guidelines for Data Processing and Analysis of the International Physical Activity Questionnaire. Version 2.* Accessed 8 Aug 2016 from <a href="http://www.institutferran.org/documentos/scoring\_short\_ipaq\_april04.pdf">http://www.institutferran.org/documentos/scoring\_short\_ipaq\_april04.pdf</a>

<sup>&</sup>lt;sup>21</sup> Irish Sports Council (2014) Irish Sports Monitor Annual Report 2013Accessed 8 August 20116 from

http://www.irishsportscouncil.ie/Research/The Irish Sports Monitor/The-Irish-Sports-Monitor-2013/

<sup>&</sup>lt;sup>22</sup> Morgan K, Watson D, Perry I, Barry M, Shelley E, Harrington J, Molcho, M LR, Tully N, Van Lente E, Ward M, Lutomski J, Conroy R, Brugha R. *SLÁN 2007: Survey of Lifestyle, Attitudes & Nutrition in Ireland.* Dublin: Department of Health and Children. Main Report. 2008.

	activity or walking of at		such as walking, cycling
	least 30 minutes per day		or dancing, 4-5 times per
HEPA Active	1.5-2 hours of physical		week accumulating to at
	activity per day		least 30 minutes per day.

# Comparing Rates of Physical Activity

For the purpose of comparison, the tables below use HEPA categorisation as the baseline and fit the SLAN and ISM definitions into them. Table 2: HEPA versus Irish Sports Monitor rates of physical activity

HEPA Category	Description		ISM '13 National
		Staff	Levels
1. Insufficiently	Those who do not meet the categories below	15.5%	68.6%
Active		n = 149	
2. Minimally	a) 3 or more days of vigorous activity of at least 20 minutes per day OR	57.5%	Not available
active	b) 5 or more days of moderate-intensity activity or walking of at least 30 minutes per day	n = 349	
3. HEPA Active	1.5-2 hours of physical activity per day	27%	Not available
		n = 164	
Combined HEPA	Because ISM definition of highly active incorporates HEPA definition of Minimally Active and	84.5%	31.3%
category 2 & 3	HEPA Active	n = 513	

#### Table 3: HEPA versus SLAN rates of physical activity amongst staff

HEPA Category	EPA Category HEPA Description		SLAN '08 National Levels
1. Insufficiently	Those who do not meet the categories below	<b>Staff</b> 15.5%	46%
Active		n = 149	
2. Minimally	a) 3 or more days of vigorous activity of at least 20 minutes per day OR	57.5%	Not available
Active	b) 5 or more days of moderate-intensity activity or walking of at least 30 minutes per day	n = 349	
3. HEPA Active	1.5-2 hours of physical activity per day	27%	Not available
		n = 164	
Combined HEPA	Because SLAN definition of physical activity incorporates HEPA definition of Minimally Active	84.5%	55%
category 2 & 3	and HEPA Active	n = 513	

# Appendix B – Course Advertising



# Sign up before the 7th of October

#### For More Information:

Email: deirdre.mullen@tcd.le Phone: Deirdre 01 896 4681 Call to reception in the Health or Sports Centres and ask for Martina/Deirdre.

http://www.tcd.ie/collegehealth/promotion/wellbeing/



Trinity College Dublin Coláiste na Trionóide, Baile Átha Cliath The University of Dublin An initiative by: Trinity Sport College Health Service Human Resources

# All-Staff Email

Healthy Trinity B-Well Pilot Staff Programme A Behaviour Change Course that Promotes Well-Being through Physical Activity

Are you stressed? Do you wish you had more energy? Would you like to enjoy work more? Healthy Trinity B-Well pilot staff behaviour change programme can help.

#### What is B-Well?

It is a PILOT behaviour change programme that:

- Motivates people to be more physically active
- Helps people find time for the exercise that suits them
- Supports people to create a physical activity friendly work environment

#### When is B-Well On?

**Date:** Tuesdays, 13th October – 17th November (inclusive) **Location:** Start in the Sports Centre. We can move during the course if participants want to. **Time:** 8.30am-9.15am

Sign up before the 7<sup>th</sup> of October.

To learn more:

Go to: <u>http://www.tcd.ie/collegehealth/promotion/wellbeing/</u> Email: Deirdre in the Sports Centre at <u>Deirdre.mullen@tcd.ie</u> Phone: Deirdre on 01 896 4681 Speak to: Reception in the Health or Sports Centres

B-Well is an initiative of College Health, the Department of Sport and Human Resources

# Manager Email Healthy Trinity B Well Pilot Staff Programme

Are your team stressed? Would you like to help them enjoy work more? Are you looking for a team building opportunity?

Healthy Trinity B-Well pilot staff behaviour change programme can help.

#### What is B-Well?

B-Well staff programme is a PILOT behaviour change programme that:

- Motivates people to be more physically active
- Helps people find time for the right exercise for them
- Supports people to make their workplace more physical activity friendly

It's based on a programme developed by Stanford University and uses Motivational Interviewing to encourage participants to set goals and become more physically active.

# Why should my team participate in B-Well?

Physically active staff are more productive and less likely to be absent due to illness. Physical activity is proven to help manage stress, improve morale and reduce tiredness. It's also associated with great productivity and reduced absenteeism.

#### How do I get my team involved?

We're asking line manager to allow their team to take an hour a week during work time, to attend B-Well workshops, as an <u>Exercise Hour</u> like the one they take during Health and Sports Week. This will be one hour per week for six weeks. Your role is to:

- 1. Forward details of the programme to your team. There is a poster and a formatted staff email attached.
- 2. Work with any interested team members to ensure they can take Exercise Hour to participate in the programme.
- 3. Encourage them to sign up **before the 7<sup>th</sup> of October.**

# Why don't they exercise on their own time?

They do. B-Well participants must agree to attend B-Well workshops during Exercise Hour plus a minimum of a further hour of their own time per week to being physically active. Furthermore, one of the most common reason people don't exercise is <u>lack of time</u>. But physically active people are more productive and have lower rates of absenteeism. So it makes sense to make it easier for staff to participate in physical activity.

#### How do my team sign up?

For more information and details of how to sign up see <a href="http://www.tcd.ie/collegehealth/promotion/wellbeing/">http://www.tcd.ie/collegehealth/promotion/wellbeing/</a>

# Appendix C – Course Content

# Group Session 1: Introduction and Setting Your Vision

# Objectives

By the end of this session participants will be given the opportunity to:

- Learn about the course and meet others doing it
- Complete a short, fun physical activity session
- Explore why setting a vision is important and have their personal vision recorded by the course facilitators
- Learn about how goal setting relates to their vision
- Set an achievable goal for the coming week and have it recorded by the course facilitators

Format	Description	Time
Ice breaker	Learn each other's name and get to know each other. Name game	15 mins
and physical	followed by fun game like dodgeball, hungry hippos, double handed	
activity	chasing.	
	15 minutes of rip 60. All participated. Gave options for easier and harder versions.	
Presentation	Outline the structure and aims of the course	5 mins
	Go through the B-Well check sheet	
Workshop	In groups ask participants to brainstorm good visions for the end of the	10 mins
	six week programme e.g. To be able to run for 30 minutes, To be able to	
	fit into a skirt, To feel good about yourself, To take less anti-depressants,	
	To be able to dance at an upcoming wedding, To be off cigarettes, To be	
	able to cope with the stress of work	
Individual	Each participant to write on their worksheet their own vision for the end	5 mins
activity	of the course	
Presentation	How goals relate to the vision	5 mins
Work in	In pairs, ask participants to set their physical activity goal for the coming	5 mins
pairs	week	
	Total	45 mins

# Group Session 2: Physical activity, costs and benefits, measuring progress

# Objectives

By the end of this session participants will be given the opportunity to:

- Participate in physical activity
- Record the pros and cons of physical activity for themselves
- Explore the idea of achievable goals
- Set a goal for the following week using confidence and motivation rulers

Format	Description	Time
Physical	Fun physical activity session.	20 mins
activity	3 games:	
	- Tag (as in chasing) when caught do jumping jacks etc until released	
	- Chase in a circle holding hands getting bib off someone	
	- 10 minutes of circuit exercises	
	- Ball game: under over	

Workshop	General pros and cons of being physically active	5 mins
In pairs	Participants to complete pros and cons page for partner. Highlight the	5 mins
	biggest barrier.	
Presentation	Importance of pros for motivation and cons for overcoming barriers and	5 mins
	role of problem solving.	
In pairs	Review and record progress the previous week and set physical activity	5 mins
	goal for coming week	
Presentation	Testing goals using motivation and confidence rulers	2 mins
Work in	Use motivation and confidence rulers to adjust the goal	3 mins
pairs		
	Total	45 mins

# Group Session 3: Physical activity, problem solving, measuring progress

#### Objectives

By the end of this session participants will be given the opportunity to:

- Participate in physical activity
- Learn about advice
- Explore barriers to being physically active and how to encourage others to overcome them
- Set a goal for the following week
- Review vision

Format	Description	Time
Physical activity	Physical activity session. Circuits session in studio.	20 mins
Presentation	How to give advice	5 mins
As a group	Review the barriers discussed in previous week and highlight solutions to the biggest barrier identified by people.	5 mins
In pairs	Use the barriers identified and find solutions, remembering not to give advice.	5 mins
As a group	Review vision from the beginning of the course	2 mins
In pairs	Review and record progress the previous week and set goals for next week	8 mins
	Total	45 mins

# Group Session 4: Physical activity, relapse, measuring progress

#### Objectives

By the end of this session participants will be given the opportunity to:

- Participate in physical activity
- Learn about barriers to physical activity in participants' workplace
- Set a goal to make their work environment more supportive of physical activity
- Review their vision from the beginning of the course and rewrite if necessary
- Review last week's progress and set goals for next week

Format	Description	Time
Physical	Physical activity session. Trampoline and encourage name use.	20 mins
activity		
Presentation	Discuss environments that support physical activity and health.	5 mins
and flipchart		

Group	Ask participants to get into group with those from their department and discuss what supports/inhibits physical activity and health in their work environment Set a goal to make their own workplace more supportive of physical activity and health	10 mins
In pairs	Review visions as a group and rewrite if necessary	2 mins
In pairs	Review and record progress the previous week. Set physical activity goal for coming week	8 mins
	Total	45 mins

Group Session 5: Physical activity, creating a supportive environment, measuring progress

#### Objectives

By the end of this session participants will be given the opportunity to:

- Participate in physical activity
- Learn about the stages of change model and how to view relapse as a learning opportunity.
- Review pros and cons and vision and complete review and regroup sheet
- Review changes made to the workplace
- Review progress the previous week and goals for the coming week

Format	Description	Time
Physical activity	Physical activity session. Yoga	20 mins
Presentation	Stages of change model and relapse. Focus on affirmation	5 mins
As a group	Flipchart: Go through Relapse and Regroup sheet 5	
Each person	Complete the worksheet, my progress to date.	5 mins
As a group	Review actions to create supportive environment for physical activity 5 mins	
In pairs	Review progress and set goals for next time	5 mins
	Total	45 mins

# Group Session 6: Physical activity, review of vision, evaluation

# Objectives

By the end of this session participants will be given the opportunity to:

- Participate in physical activity
- Commit to booking an Exercise Hour in their workplace during Health Week
- Review progress the previous week
- Determine if and how they would like to stay in touch. Would they like to set a vision for that?
- Complete an evaluation of the course

<ul> <li>Paper, focus group</li> </ul>			
Format	Description	Time	
Physical activity	Physical activity session. Keiser room	20 mins	
Workshop	Share how changes to the work environment were received. In departmental groups, commit to booking Exercise Hour for department during Health Week	5 mins	
As a group	Review and record progress the previous week	5 mins	
As a group	Determine if and how they would like to stay in touch. Set a vision for the next time we meet?	5 mins	
On paper	Evaluation	10 mins	
	Total	45 mins	

Elements planned at the beginning of programme that were removed due to lack of time.			
Element	Comment		
Begin to use OARS motivational interviewing techniques to check each	Removed from week 2		
other's progress in the previous week			
Use OARS to review each other's progress in the previous week	Removed from week 3		
Use OARS to review each other's progress in the previous week	Removed from week 4		
Set a goal for the following week using confidence and motivation rulers	Removed from week 4		
Use OARS to review each other's progress in the previous week	Removed from week 5		

Elements planned at the beginning of programme that were removed due to lack of time: