Move More, Feel Better – Evaluation Report

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Executive Summary

The following report provides analysis and evaluation of the Active Campus Europe (ACE) initiative *Move More Feel Better.* The programme consisted an intervention which involved an eight-week exercise programme, and an evaluation question to be completed both before the programme and after. The evaluation questionnaire included the International Physical Activity Questionnaire Short-Form to measure self-reported activity levels, in addition to the PROMIS Questionnaire which measured general physical and mental health. The intervention was conducted twice at different time-points referred to as Common Intervention I (CI I) and Common Intervention II (CI II).

Universities across Europe who are involved in ACE took part in the programme. Meetings between the ACE partners were organised throughout the programme to assess the programme and implement improvements. Between CI I and CI II, an app was developed to allow participants of the programme record their activity minutes rather than using a manual excel spreadsheet.

The analysis presents descriptive results of the evaluation questionnaires and exercise programme. Analysis is separated by intervention.

Results showed a positive uptake of the programme, with over 200 students taking part in the programme at each CI. Consistent activity was undertaken throughout the programme although a small drop in average activity was seen from Week 6 onwards. Improvements in overall wellbeing was seen between the pre-evaluation and post-evaluation questionnaires, suggesting a positive effect on physical and mental health from participation in the programme.

Limitations of the programme were present. Uptake of the programme varied between universities. Recruitment was difficult in some areas where students would normally walk or cycle to college, meaning the majority of students did not meet the criteria to be involved in the programme. Attrition was present in the study with some participants not completing the post-evaluation questionnaire. As a result, evaluation of the impact of the programme was not possible. A follow up assessment of the group which did not complete the post-evaluation would be worthwhile and allow for some assessment of whether the programme was not suitable for certain participants. As a result of the attrition, it is not clear whether these students were those who saw no impact from the programme and withdrew as a result.

The study had a number of strengths. Despite response rates varying throughout universities, the overall sample was large enough to produce worthwhile analysis and evaluation of the programme. Communication between partners was strong and led to the implementation of an app. The app allowed for improved data entry in CI II.

The greatest strength of the study was found in the post-evaluation, with students who completed the programme showing an improvement in their overall physical and mental health in both CI I and CI II. Physical and Mental health are a growing concern worldwide. The *Move More Feel Better* programme has shown there to be a positive impact in an eight-week programme. It would be advisable to consider continuing the programme in these universities and potentially expanding further. In addition, another follow-up programme with all participants to assess the impact on their own routines further down the line may prove worthwhile in establishing what longer term effects the intervention has had on individuals.

Introduction

The World Health Organisation (WHO) recommends adults aged 18-64 do at least 150 minutes of moderate-intensity physical activity, 75 minutes of vigorous-intensity aerobic physical or a combination of both throughout the week. Physical activity has been shown to have positive health benefits such as decreasing the risk for cardiovascular disease, chronic illness, mental health and dementia.

In 2018, a Lancet study, based on data from 358 surveys including 1.9 million people from 168 countries reported that over a quarter of adults in the world do not meet the WHO guidelines (Guthold, R, Stevens, GA, Riley, LM, Bull, FC. Worldwide trends in insufficient physical activity from 2001 to 2016: a pooled analysis of 358 population-based surveys with 1.9 million participants. (2018). *Lancet: 6(10) PE1077-E1086)*.

Active Campus Europe (ACE) is designed as a sustainable collaboration with the aim to promote physical activity throughout universities in Europe. 16 partner universities across 7 countries are involved in the initiative.

Table 1. Partner universities involved in Active Campus Europe

Partner Universities	**Country**
Tampere University of Applied Sciences	Finland
University of Turku	Finland
University of Minho	Portugal
University of Vigo	Spain
Autonomous University of Barcelona	Spain
Eindhoven University of Technology	Netherlands
Maastricht University	Netherlands
Trinity College Dublin	Ireland
University College Dublin	Ireland
RWTH Aachen University	Germany
University of Wuppertal	Germany
University of Bonn	Germany
University of Muenster	Germany
University of Bochum	Germany
Middlesex University	England
Imperial College London	England

Move More, Feel Better Programme

Move More, Feel Better is a fitness programme aimed at inactive students. It aims to promote day-to-day exercise as well as increasing well-being and quality of life within university daily life. The programme focuses on students who may not have prioritised exercise before, and do not meet the recommended WHO guidelines.

The programme intends to encourage students to implement the guidelines into their daily routine even after the project end.

Two interventions were undertaken. Common Intervention I (CI I) and Common Intervention II (CI II). The first CI of interventions for Move More, Feel Better commenced in October 2017.

Methodology

Participants of the programme were recruited through their respective university. Those partaking in the programme were asked to fill out a questionnaire (pre-evaluation questionnaire), log their minutes of activity for eight weeks, and finish up by completing the questionnaire again (post-evaluation questionnaire).

Evaluation Questionnaire

The first part of the questionnaire consisted of the International Physical Activity Questionnaire Short Form (IPAQ-SF). The IPAQ-SF is used to obtain internationally comparable health-related physical activity data. Questions on the IPAQ-SF used in the evaluation questionnaire can be seen in Table 2.

Table 2. International Physical Activity Questionnaire Short Form

1. During the last 7 days, on how many days did you do vigorous physical activities like heavy lifting, digging, aerobics, or fast bicycling?
2. How much time did you usually spend doing vigorous physical activities on one of those days?
3. During the last 7 days, on how many days did you do moderate physical activities like carrying light loads, bicycling at a regular pace, or doubles tennis? Do not include walking
4. How much time did you usually spend doing moderate physical activities on one of those days?
5. During the last 7 days, on how many days did you walk for at least 10 minutes at a time?
6. How much time did you usually spend walking on one of those days?
7. During the last 7 days, how much time did you spend sitting on a week day?

The second part of the questionnaire consisted of the Patient® Reported Outcomes Measurement Information System (PROMIS) Questionnaire. The PROMIS questionnaire is a set of questions which evaluate physical, mental and social health. The questionnaire is applicable to the general population. Questions from the PROMIS questionnaire can be seen in Table 3.

Table 3. Patient® Reported Outcomes Measurement Information System Questionnaire

1. In general, would you say that your health is?										
Excellent		Very Good		Good		Fair				Poor
2. In general, would you say that your quality of life is?										
Excellent		Very Good		Good		Fair				Poor
3. In general, how would you rate your physical fitness?										
Excellent		Very Good		Good		Fair				Poor
4. In general, how would you rate your mental health, including your mood and your ability to think?										
Excellent		Very Good		Good		Fair				Poor
5. In general, how would you rate your satisfaction with your social activities and relationships?										
Excellent		Very Good		Good		Fair				Poor
6. In general, please rate how well you carry out your social activities and roles (including activities at home, work, family and community)?										
Excellent		Very Good		Good		Fair				Poor
7. To what extent are you able to carry out your everyday physical activities such as walking, climbing stairs, carrying shopping or moving a chair?										
Completely		Mostly		Moderately		A little				Not at all
8. How often have you been bothered by emotional problems such as feeling anxious, depressed or irritable?										
Never		Rarely		Sometimes		Often				Always
9. How would you rate your fatigue on average?										
None		Mild		Moderately		Severe				Very Severe
10. How would you rate your pain on average?										
0 (no pain)	1	2	3	4	5	6	7	8	9	10 (worst pain imaginable)

The questionnaire additionally collected participant demographics, including age, sex, course of study and year of study.

Activity Logging

CI I

Participants were provided with a number of structured classes through their colleges to encourage activity participation. Over the course of eight weeks, participants were asked to log the number of minutes they spent in activities including Classes, Social Sport, Seasonal Sport and Unsupervised activity.

CI II

During CI II, structured classes were again offered to participants. Activity minutes were recorded under the same headings as CI I in some cases, but extended to include Flexi-Exercise in other cases where activities such as Gym Exercise, Gym Strengthening and certain sports could be recorded.

Data Collection

Data collection was the responsibility of each individual university.

CI I

Data collection was conducted through electronic means involving manual recording of questionnaire responses and activity logging using excel spreadsheets.

CI II

Data collection was conducted through electronic means in two separate manners. Universities had the option to continue with manual recording of questionnaire responses and activity logging using excel spreadsheets. An App was additionally developed to allow for a more streamlined process of recording and outputting data. The app linked in with university classes, automatically recording activity minutes for participants who took part in structured classes. Participants could also log into their own account and record any additional activity minutes.

Following completion of each CI, administrators of the programme collated the data and submitted it to the programme evaluators.

Data Analysis

A descriptive evaluation of the CI outcomes are provided in the next section. Data cleaning and analysis were conducted using Stata 14.0 (StataCorp. 2015. *Stata Statistical Software: Release 14*. College Station, TX: StataCorp LP).

Evaluation

CI I

Programme Participation

14 of the participating universities successfully completed CI I. 9 universities collected activity logs from participants, while 13 universities collected questionnaires. 8 universities completed both questionnaires and activity logs.

231 individuals participated in the programme. 220 pre-evaluation questionnaires were completed while 123 participants additionally completed a post-evaluation questionnaire. 121 activity log books were filled out.

Participant ages ranged between 17 years and 52 years. The majority of participants were aged between 20 and 26 years (59.6%).

75.6% of CI I participants were female. A number of participants (n=25) did not specify their sex.

Activity Logging

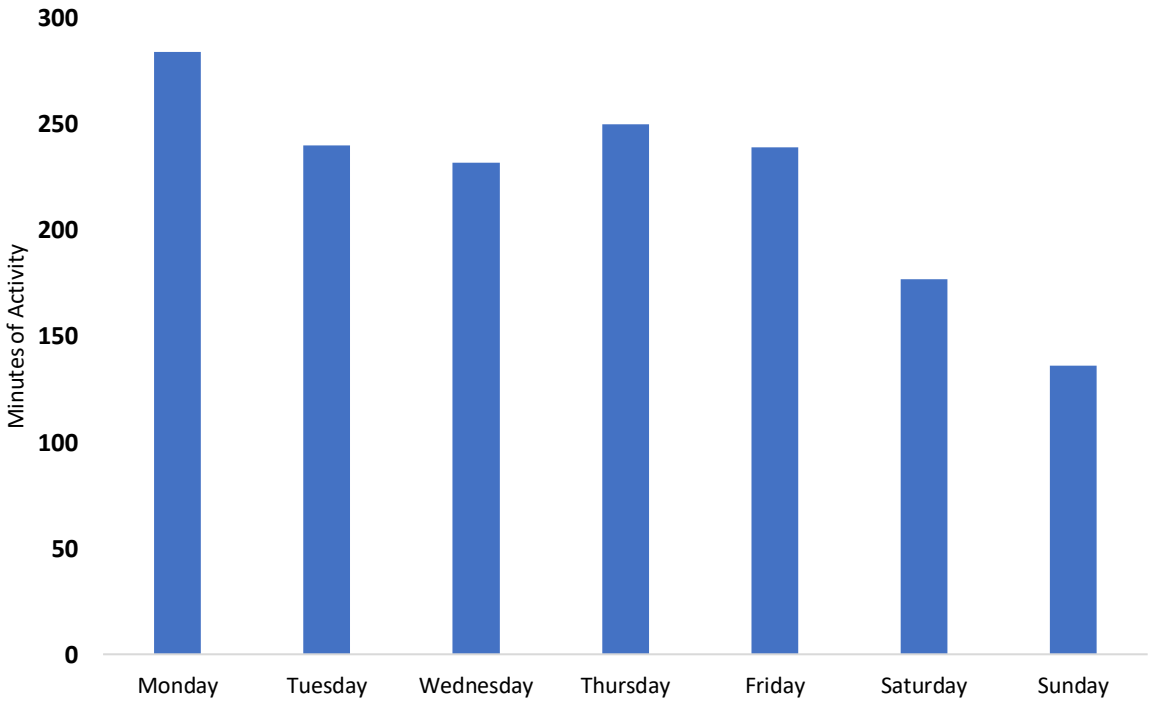
Activity was broken down by day, week and type of activity (classes, social sport, seasonal sport and unsupervised).

Across the 8 weeks, between all activities, an average of 1,645 minutes of activity was recorded amongst participants.

Logged activity by day of the week

Figure 1 shows the recorded activity minutes by day of the week. The highest amount of activity minutes were recorded on Mondays (284 minutes) while Sundays showed the lowest amount of recorded activity (136 minutes).

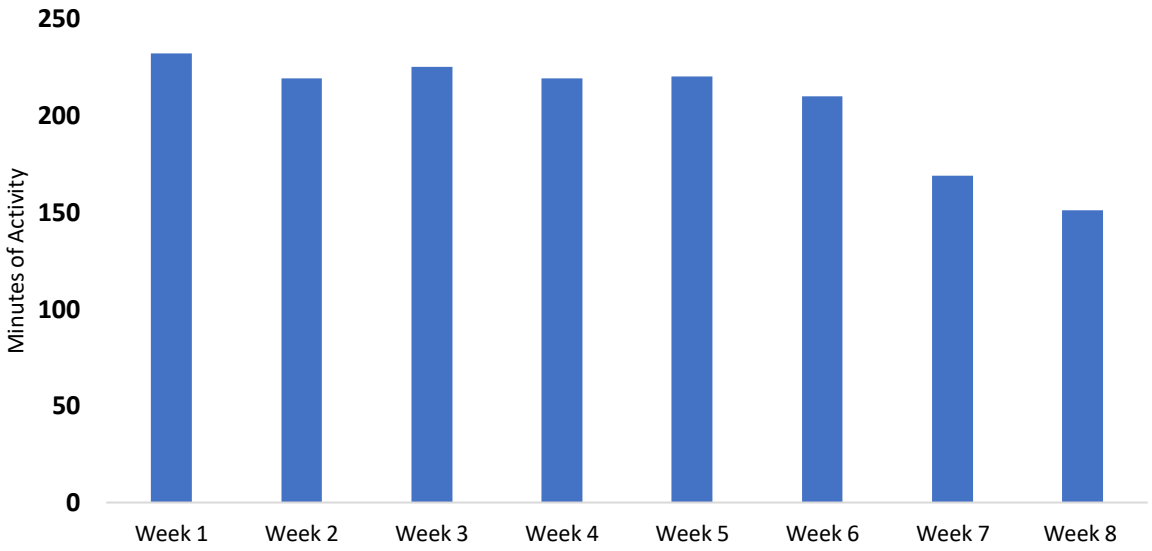
Figure 1. Recorded activity minutes by day of the week



Logged activity by week of the programme

Figure 2 shows the recorded activity minutes by the week of the programme. Recorded activity minutes remained consistent throughout the first six weeks of the programme. Activity peaked in Week 1 with 232 recorded minutes. As the programme neared its end, recorded minutes showed a noticeable drop with 169 minutes recorded in Week 7 and 151 minutes recorded in Week 8.

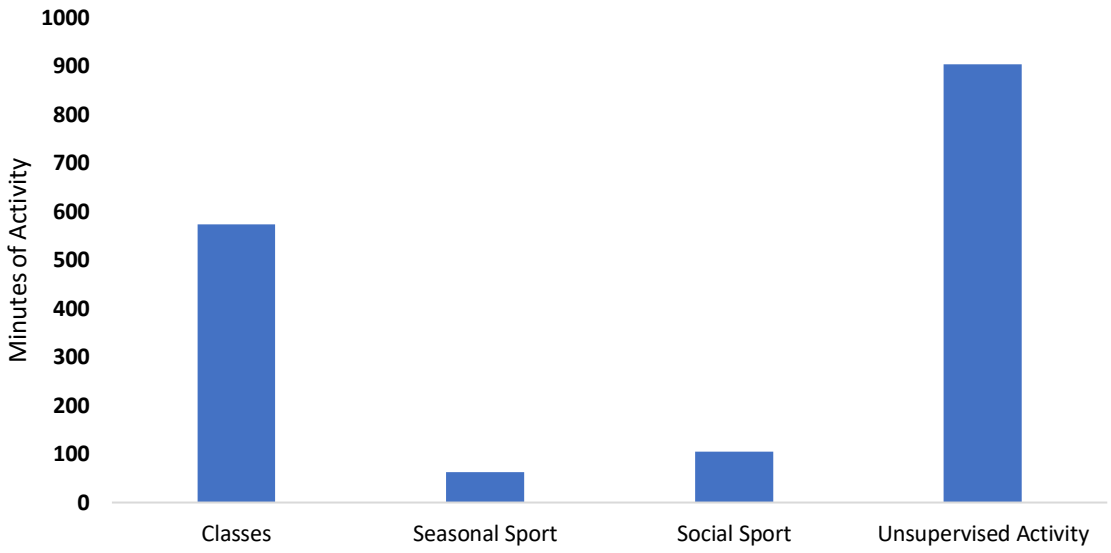
Figure 2. Recorded activity minutes by week of programme



Logged activity by type of activity

Figure 3 shows the average of activity minutes by the type of activity for the full eight weeks of the programme. The highest amount of recorded activity was done during unsupervised activity (904 minutes). 574 minutes of activity were recorded during the structured classes offered by respective universities, while just 105 minutes of social sport were recorded and 62 minutes of seasonal sport.

Figure 3. Recorded activity minutes by type of activity



Logged activity by structured classes, unsupervised activity over weekdays and weekends

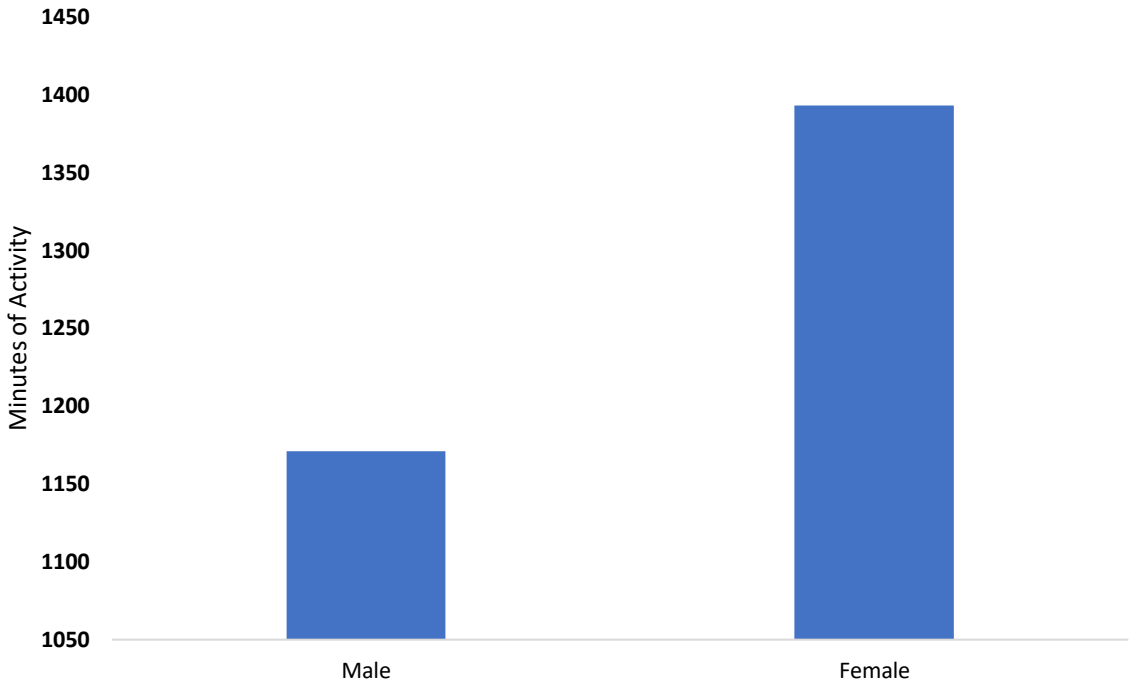
Figure 4 shows uptake of class activity and unsupervised activity between weekdays and weekends for the full eight weeks of the programme. Activity was primarily recorded on weekdays, with 554 minutes of class activity recorded during the week compared to just 19 minutes over the weekend. The differences were not as large in unsupervised activity, where 619 minutes of activity was recorded during the week while reasonable uptake of unsupervised activity was seen during the two days over the weekend with 285 minutes recorded. Differences in unsupervised activity were likely as a result of fewer days in the weekend.

Figure 4. Activity minutes for structured classes and unsupervised activity by weekday and weekend

Logged activity by sex

Figure 5 shows the breakdown of recorded activity by sex over the eight weeks of the programme. Female participants recorded 1393 minutes while male participants recorded 1171 minutes.

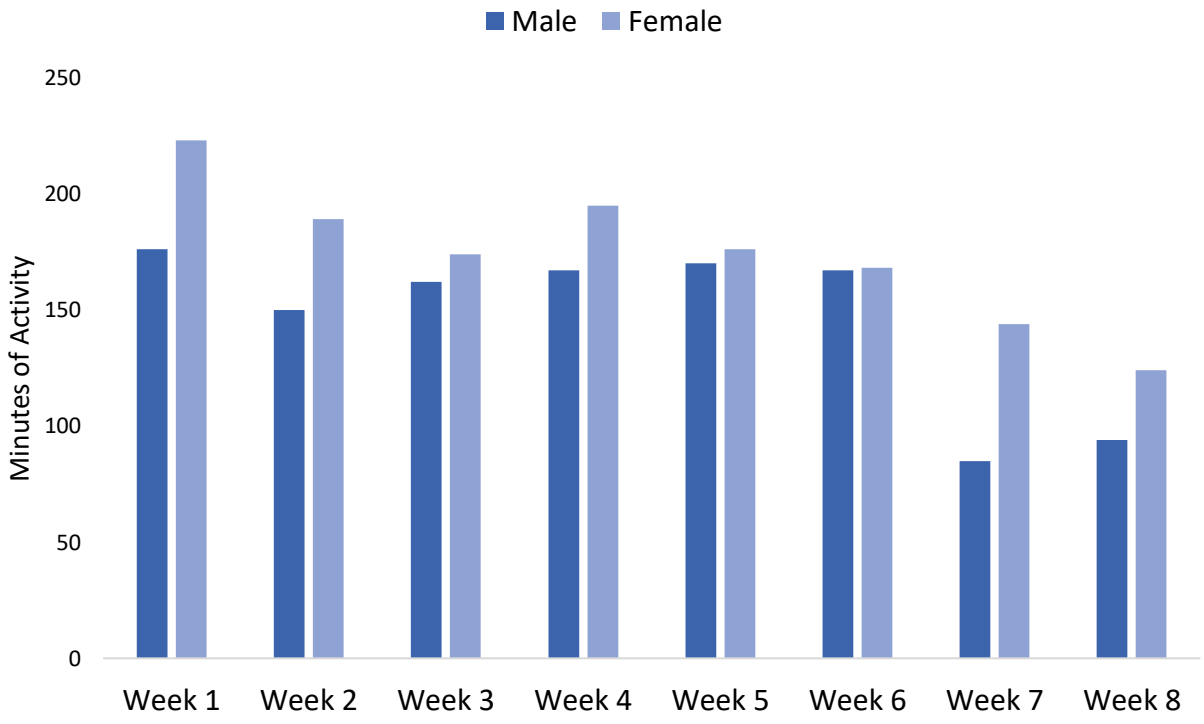
Figure 5. Recorded activity minutes by sex



Logged activity type by week of programme

Figure 6 shows the breakdown of recorded activity by week of the programme. Trends were similar between male and female participants. Male participants recorded consistent activity throughout the first six week of the programme, recording 176 minutes in Week 1 and 166 minutes in Week 6. A sharp decline was seen between Week 7 and Week 8, dropping to 85 minutes and 94 minutes respectively. Female participants remained more consistent throughout the programme. A small decline was seen from Week 1 to Week 2 and Week 3, dropping from 222 minutes to 174 minutes, however this levelled out until Week 6 where 167 minutes were recorded. Week 7 and Week 8 saw another drop in activity minutes, although not as sharp as Male participants. 143 minutes were recorded in Week 7 and 124 minutes in Week 8.

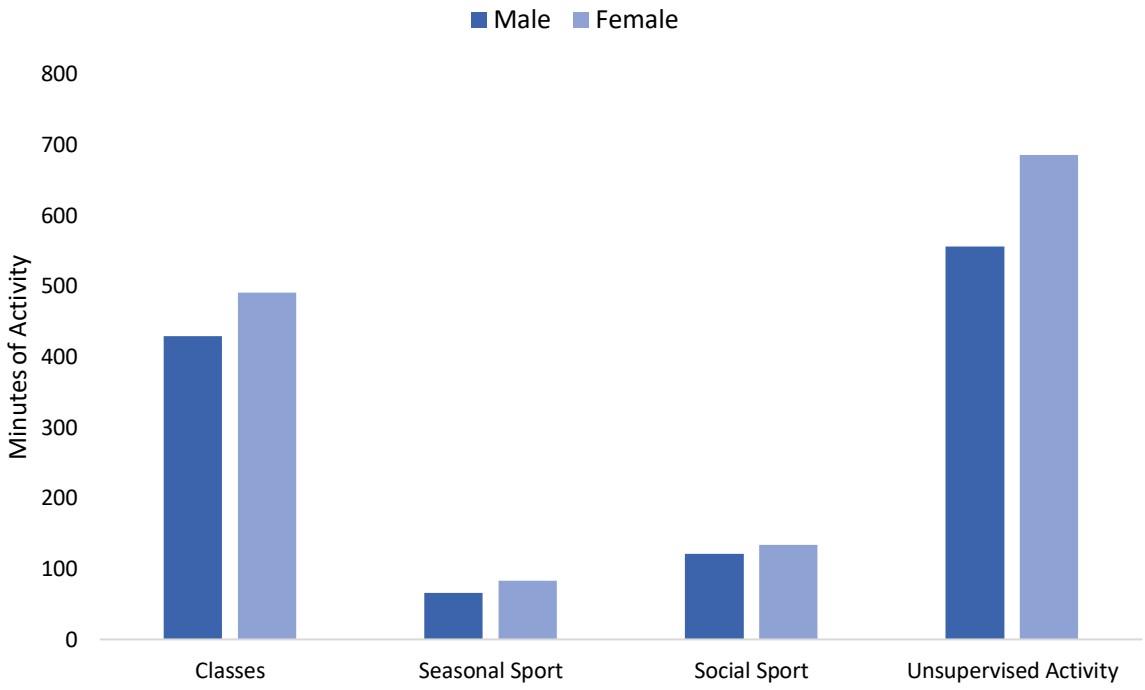
Figure 6. Recorded activity type by sex



Logged activity type by sex

Figure 7 shows the breakdown of recorded activity type by sex over the eight weeks of the programme. Trends were similar between male and female participants. The largest difference between the two sexes was in that of unsupervised activity, with female participants recorded 685 minutes while male participants recorded 556 minutes.

Figure 7. Recorded activity type by sex



Exercise type by number of days

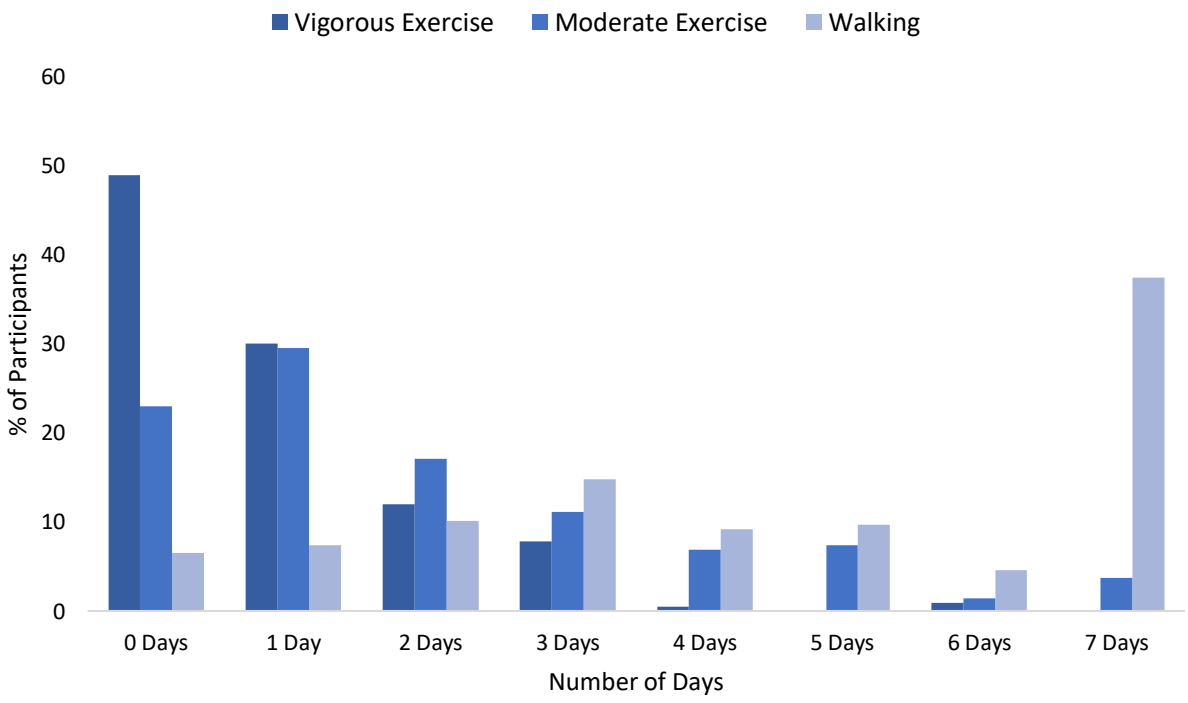
Participants were asked if they had spent any time in the past 7 days in vigorous or moderate exercise, or walking for at least 10 minutes at a time. Just two participants reporting having done no vigorous or moderate or walking exercise in the past 7 days.

Figure 8 shows the breakdown of exercise type by number of days exercise was completed in the past week. Almost 50% of participants reported no vigorous exercise in the past 7 days. 30% had reported at least 1 day. Very few participants reported vigorous exercise for 4 days or more (1.4%).

Just over three quarters of participants reported at least one day of moderate exercise in the past 7 days. Similar to vigorous activity, 30% reported 1 day. Participants were more likely to report having completed moderate exercise consistently throughout the week than vigorous exercise. 19% had partaken in moderate exercise for at least 4 days or more.

Walking for at least 10 minutes in a day was the most commonly reported exercise. 37% of participants had walked for at least 10 minutes in a day for each day of the previous week. The numbers are potentially inflated here as a result of a high proportion of students walking to university. However, 7% reported 0 days of walking for at least 10 minutes.

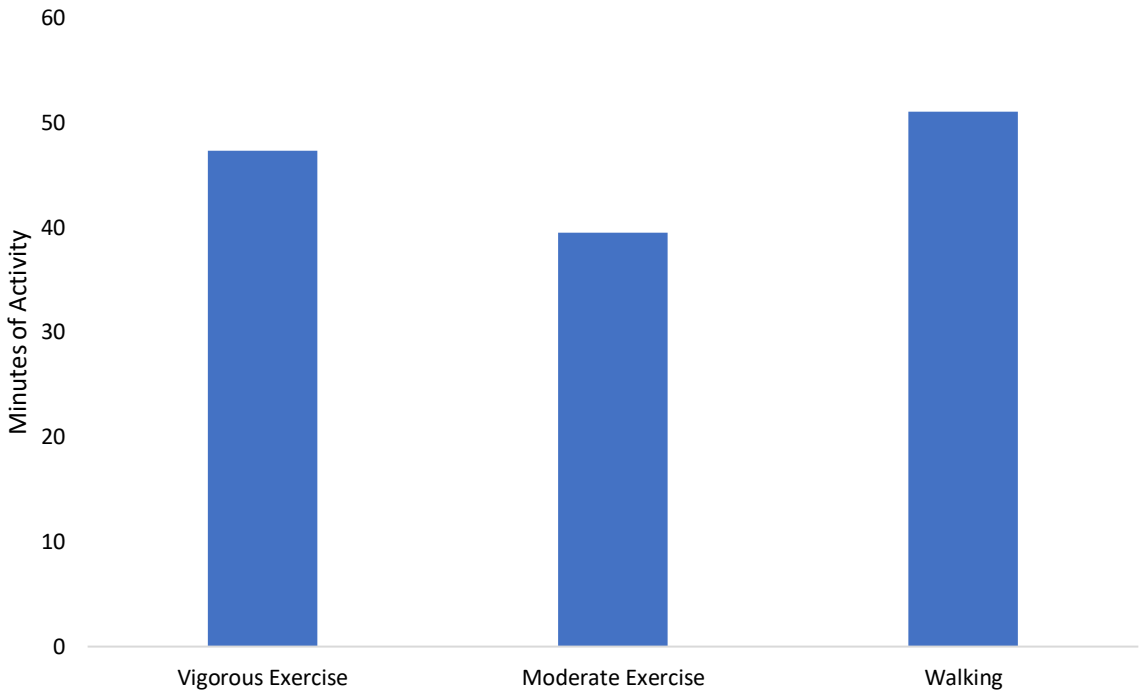
Figure 8. Exercise type by number of days completed in the past week



Exercise type by average minutes completed in a day

Of participants who reported spending any time in each respective exercise, a follow-up question on the amount minutes spent in that exercise in a day was asked. Participants reported 51 minutes of walking on average on the days they partook in this exercise. 47 minutes of vigorous exercise and 40 minutes of moderate activity were reported on average (Figure 9).

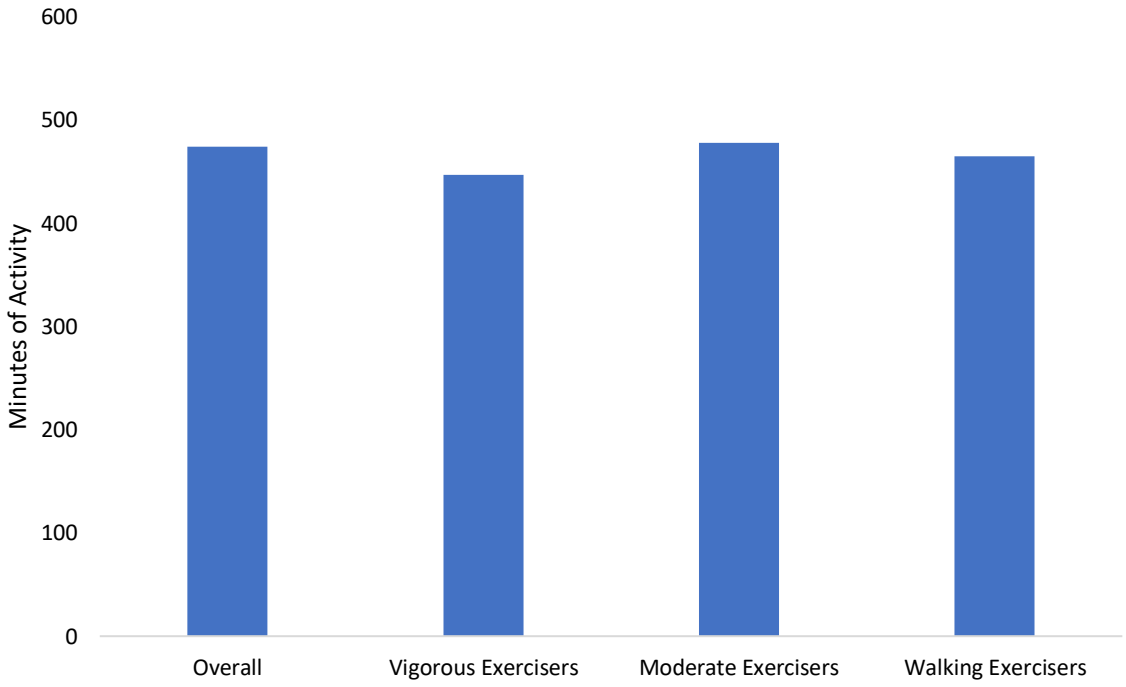
Figure 9. Exercise type by mean minutes completed in a day



Sitting time overall and by type of exercise

Participants were asked how much time on they would spend sitting on a weekday. Figure 10 shows the mean minutes of sitting time overall and for those who reported completing at least one day of each respective type of exercise. 474 minutes on average were spent sitting during the day. Those who reported at least one day of vigorous exercise reported the least amount of time spent sitting (447 minutes). 465 minutes were spent sitting for those who reported walking exercise, while 478 minutes were reported by those who spent time in moderate exercise.

Figure 10. Sitting time overall and by type of exercise



PROMIS Scale

The first six questions on the PROMIS scale asked participants to rather their health, quality of life and on a scale of 1 (Poor) to 5 (Excellent) (Figure 11).

50% rated their general health as good, while 18% rated it as very good. Similar results were seen in quality of life, with 31% reporting that their quality of life was good and 32% reported it as very good. Just 1.4% reported that their quality of life was poor.

Across almost all domains, over half of participants reported that each aspect was good, very good or excellent. The only exception was seen in that of physical fitness. 18% of participants reported that their physical function was poor, and a further 37% reported that it was fair.

Figure 12 shows the breakdown of responses to everyday activities. The responses were positive, with 40% of the sample reporting that they were completely able to carry out every day activities. 17% responded “not at all” and a further 10% responded “a little”.

Figure 13 asked participants if they were bothered by emotional problems. Just 6% reported they had they were “never” bothered by emotional problems. 77% reported that they were “rarely” or “sometimes” bothered. Just over 20% reported that they were bothered “often” or “always” by emotional problems.

Figure 14 depicts how fatigue was rated on average. 5% of participants rated their fatigue as “none”. A quarter of participants rated their fatigue as severe or very severe on average.

Finally, participants were asked how they would rate their pain on a scale of 0 (no pain) to 10 (worst pain imaginable). The highest proportion of responses were for 0 (28%). No participant reported their pain as 10, however 12% of participants rated their pain as between 5 and 8.

Figure 11. PROMIS Scale Questions 1-6

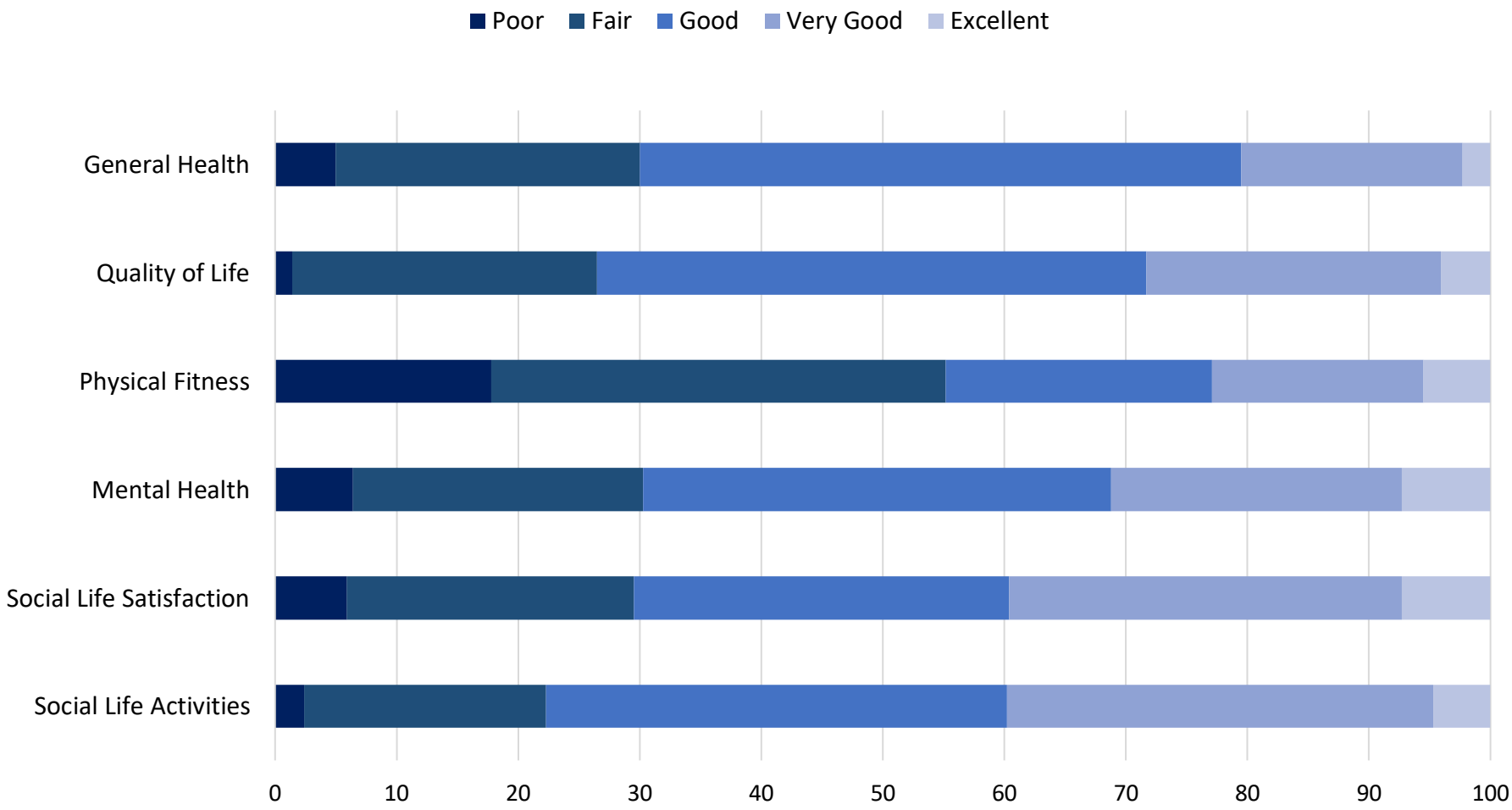


Figure 12. PROMIS Scale Question 7

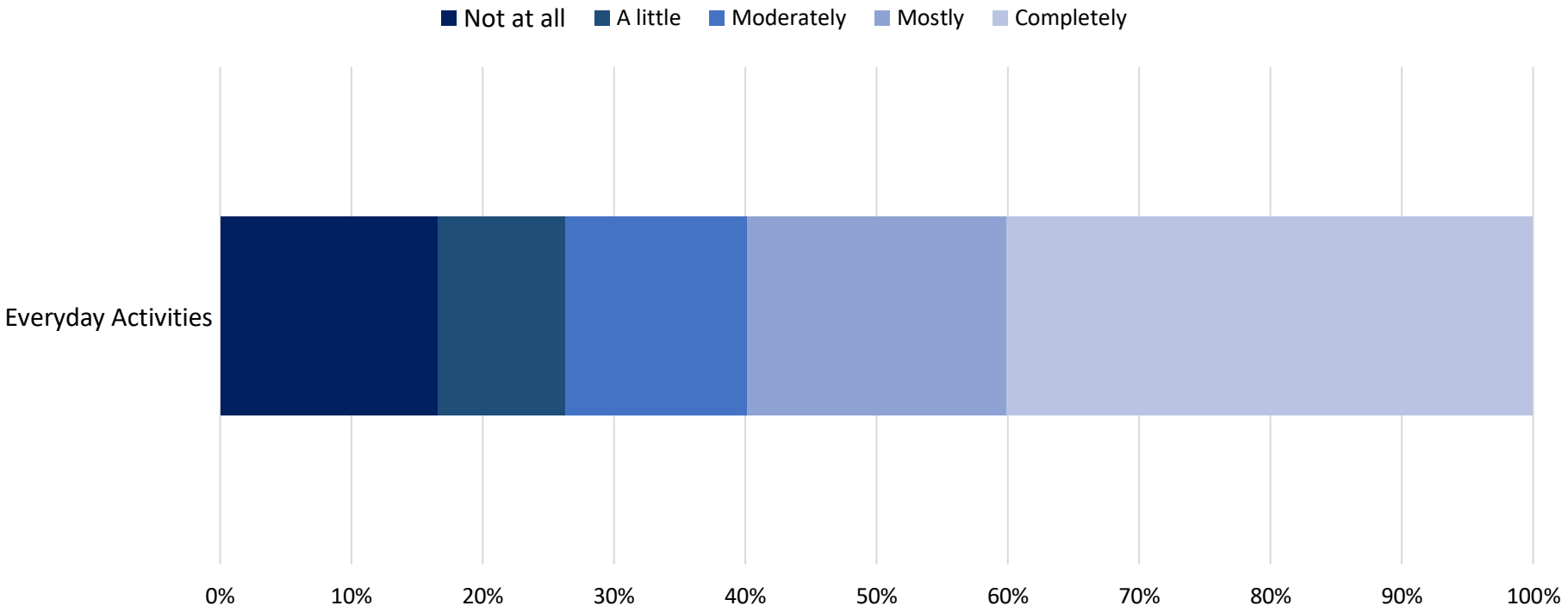


Figure 13. PROMIS Scale Question 8

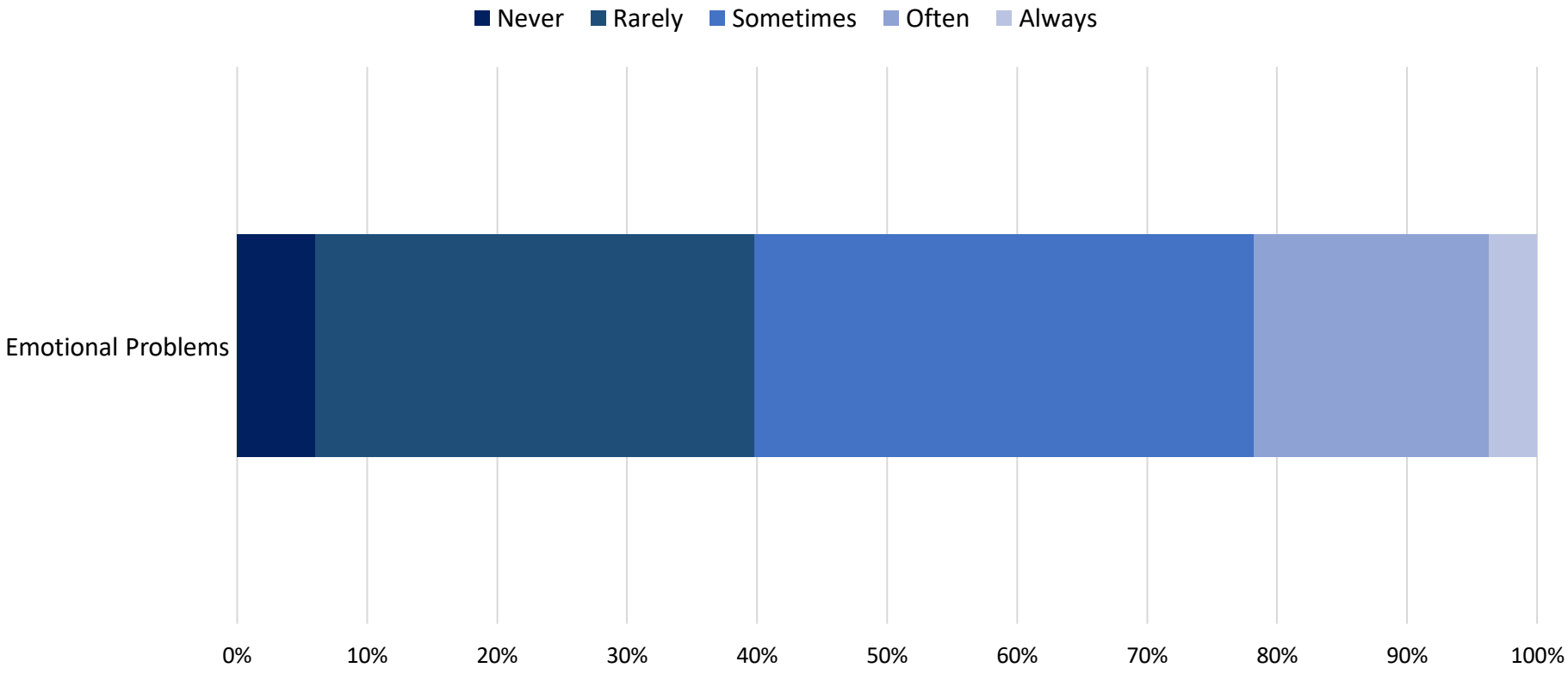


Figure 14. PROMIS Scale Question 9

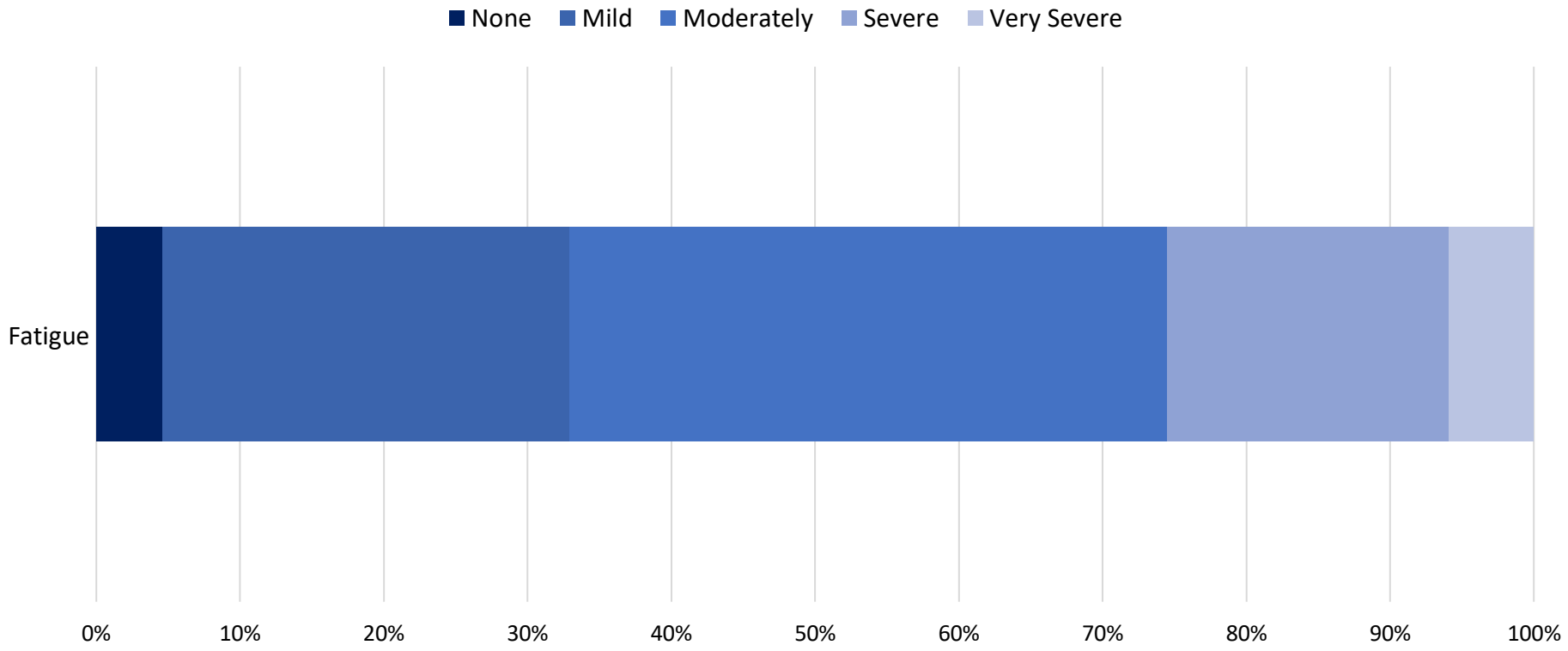
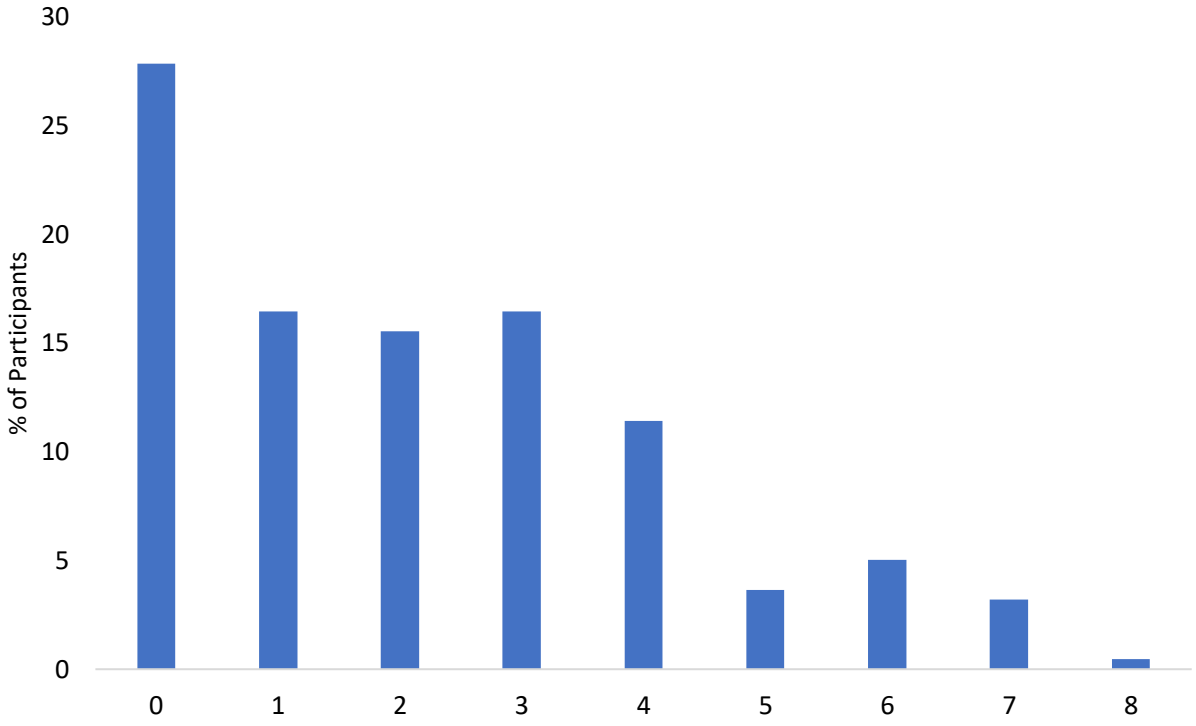


Figure 15. PROMIS Scale Question 10



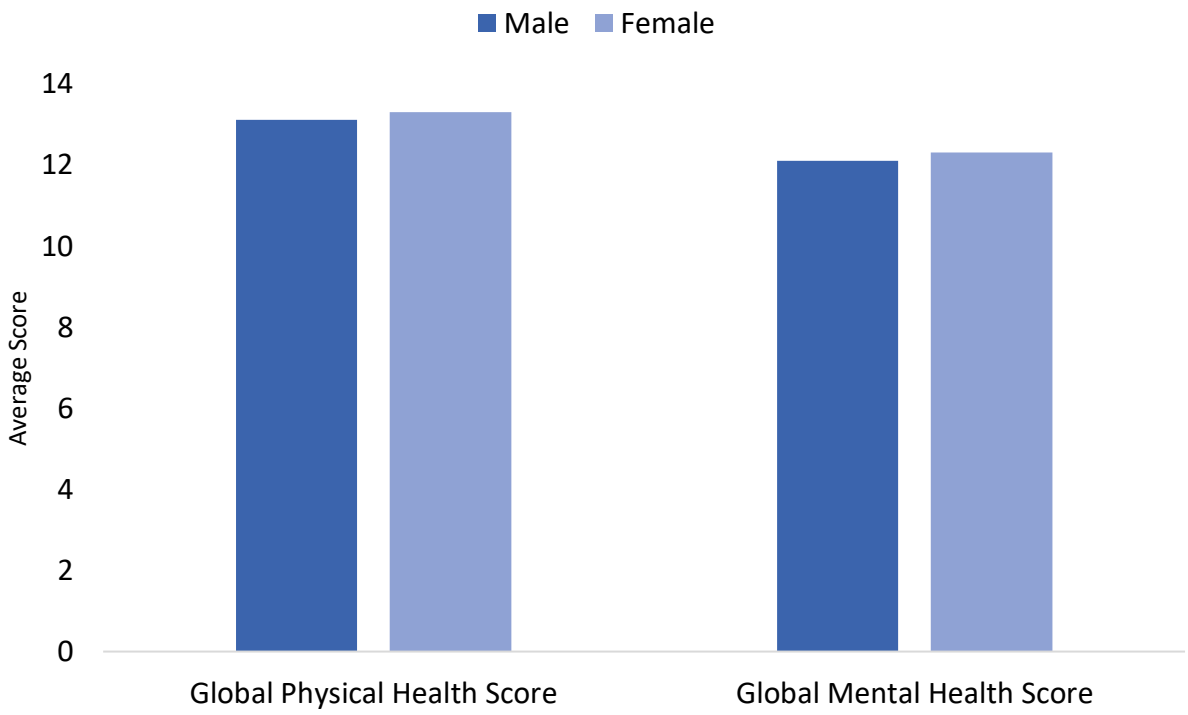
Global Physical Health and Mental Health

The sum of scores from the questions on physical health, everyday activities, fatigue and pain allow for a composite score on global physical health. The scores range from 4 to 20.

The sum of scores from the questions on quality of life, mental health, social life satisfaction and social activities. The scores range from 4 to 20.

Average scores for male and female participants showed little difference. Male participants scored 13.1 on the physical health scale, while females scored 13.3 on the scale. On the mental health scale, male participants scored 12.1 and female participants scored 12.3.

Figure 16. Global Physical Health and Mental Health by sex



Pre/Post Questionnaire Evaluation

Participants were asked to fill out the questionnaire evaluation following their eight week programme. The questionnaire remained the same. The following sections assesses the changes in responses to the evaluation between the pre-questionnaire and post-questionnaire. Only those who completed the questionnaire at both times are included (n=123).

Table 3 and 4 show the average number of days, and average time spent in each type of exercise. Number of days in each type of exercise, and time spent in each exercise increased by the end of the programme. Vigorous exercise increased from 17 minutes to 42 minutes, while moderate exercise almost doubled from 25 minutes to 47 minutes. Sedentary behaviour showed a noticeable decrease, with reported sitting time decreasing from 524 minutes to 431 minutes between the pre and post questionnaire evaluation.

Table 3. Exercise type by number of days by pre and post questionnaire

Type of exercise	**Pre-Questionnaire** No. of Days	**Post-Questionnaire** No of Days
Vigorous Exercise	0.7	2.2
Moderate Exercise	2.0	3.0
Walking	3.6	5.0

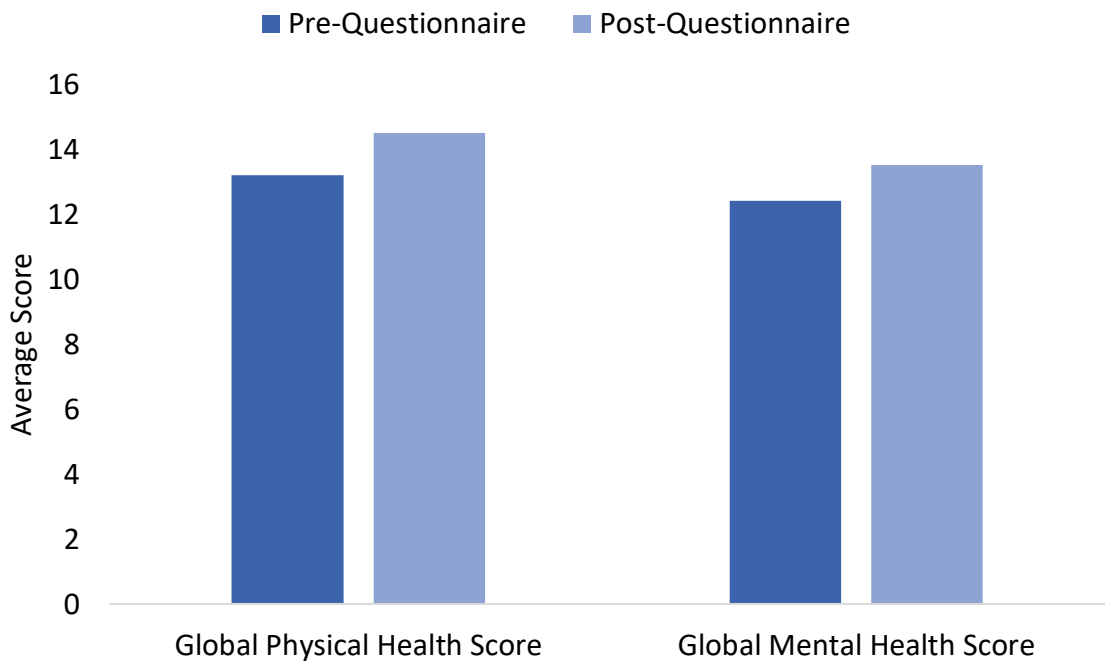
Table 4. Exercise type by number of days by pre and post questionnaire

Type of exercise	**Pre-Questionnaire** Average Time (Mins)	**Post-Questionnaire** Average Time (Mins)
Vigorous Exercise	17	42
Moderate Exercise	25	47
Walking	37	60
Sitting	524	431

Pre/Post PROMIS Questionnaire Evaluation

Global Physical Health scores and Global Mental Health scores were calculated for those who completed both the pre and post questionnaire evaluation. By the end of the programme, participants rated their physical and mental health on average one point higher on both scales (Figure 15). This suggests an overall improvement across all domains of the PROMIS questionnaire, signifying the positive impact of the eight week fitness programme.

Figure 15. Global Physical Health and Mental Health Scores by pre and post questionnaire



CI II

Programme Participation

13 of the participating universities successfully completed CI II. 13 universities collected activity logs from participants, while 7 universities collected questionnaires. 8 universities completed both questionnaires and activity logs.

247 pre-evaluation questionnaires were completed while 104 participants additionally completed a post-evaluation questionnaire. 200 activity log books were filled out.

Participant ages ranged between 18 years and 66 years. The majority of participants were aged between 18 and 25 years (75.0%).

73.1% of CI II participants were female.

Activity Logging

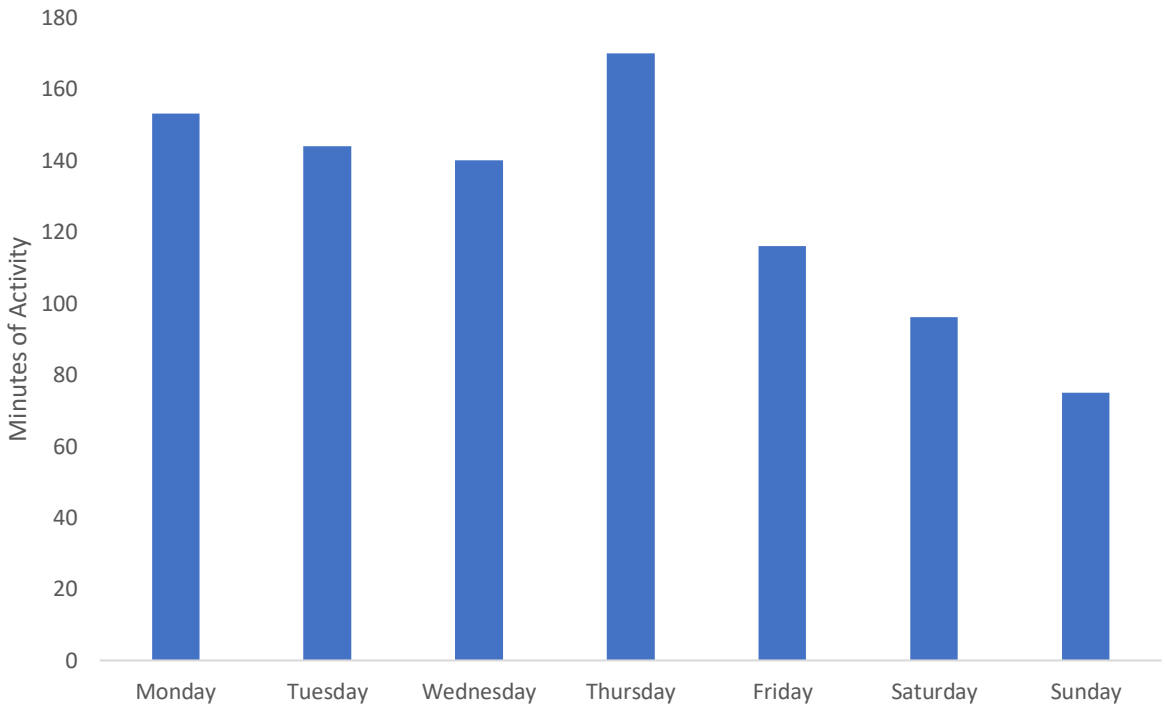
Activity was broken down by day, week and type of activity. CI II allowed participants to record a wider categorisation of activity known as Flexi Exercise. For the purposes of this report, activity is classified as either classes, in reference to the structured classes run for the *Move More, Feel Better* programme, or as unsupervised activity referring to any unstructured type of activity.

Across the 8 weeks, between all activities, an average of 894 minutes of activity was recorded amongst participants.

Logged activity by day of the week

Figure 15 shows the recorded activity minutes by day of the week. The highest amount of activity minutes were recorded on Thursdays (170 minutes) while Sundays showed the lowest amount of recorded activity (75 minutes).

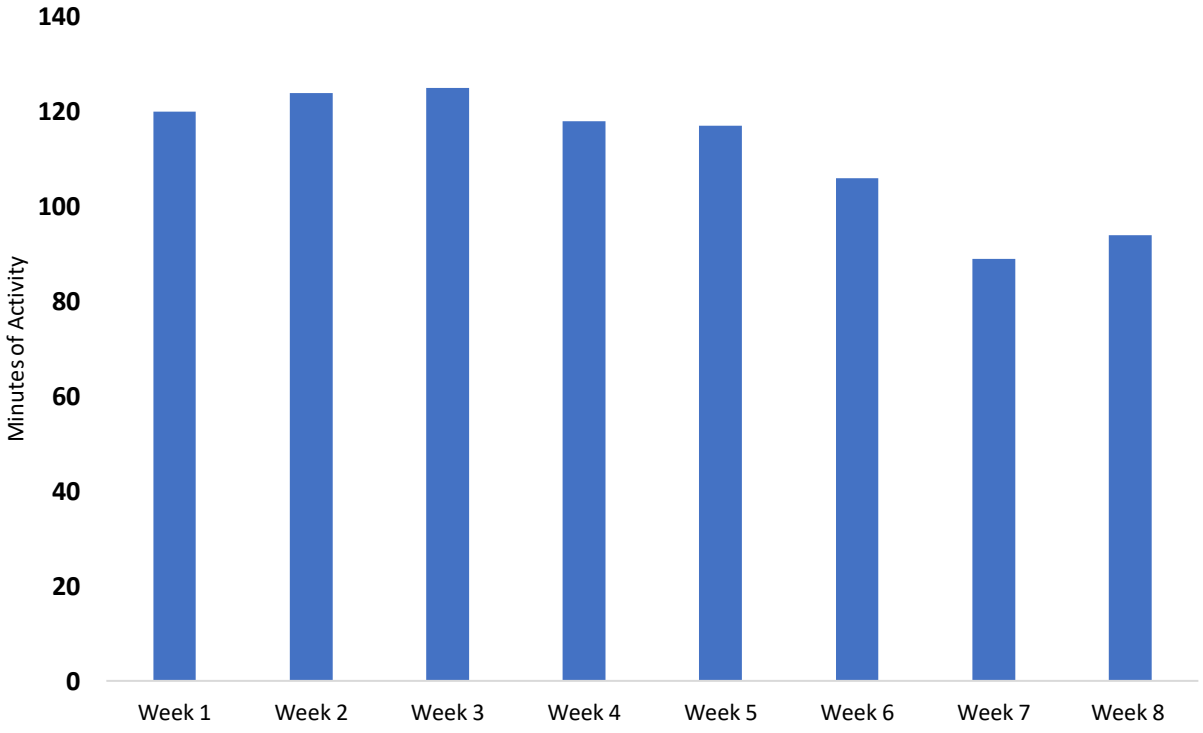
Figure 15. Recorded activity minutes by day of the week



Logged activity by week of the programme

Figure 16 shows the recorded activity minutes by the week of the programme. Recorded activity minutes remained consistent throughout the first five weeks of the programme. Activity peaked in Week 3 with 125 recorded minutes. Activity dropped following Week 3, dipping to a low of 89 minutes by Week 7 and 94 minutes in Week 8.

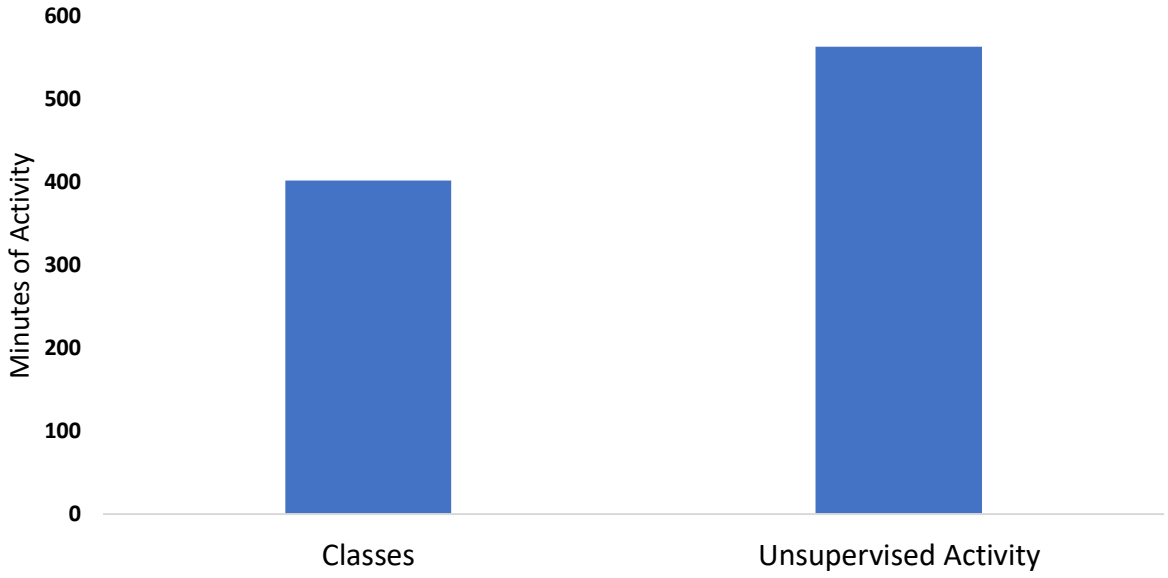
Figure 16. Recorded activity minutes by week of programme



Logged activity by type of activity

Figure 17 shows the average amount of activity minutes by the type of activity for the full eight weeks of the programme. Activity was only broken into two categories, classes and unsupervised activity, for CI II. 402 minutes of activity were recorded during the structured classes. 563 minutes were recorded of unsupervised activity.

Figure 17. Recorded activity minutes by type of activity



Logged activity by structured classes, unsupervised activity over weekdays and weekends

Figure 18 shows uptake of class activity and unsupervised activity between weekdays and weekends for the full eight weeks of the programme. Activity was primarily recorded on weekdays, with 392 minutes of class activity recorded during the week. In unsupervised activity, 378 minutes of unsupervised activity was recorded during the week and 175 minutes were recorded over the weekend.

Figure 18. Activity minutes for structured classes and unsupervised activity by weekday and weekend

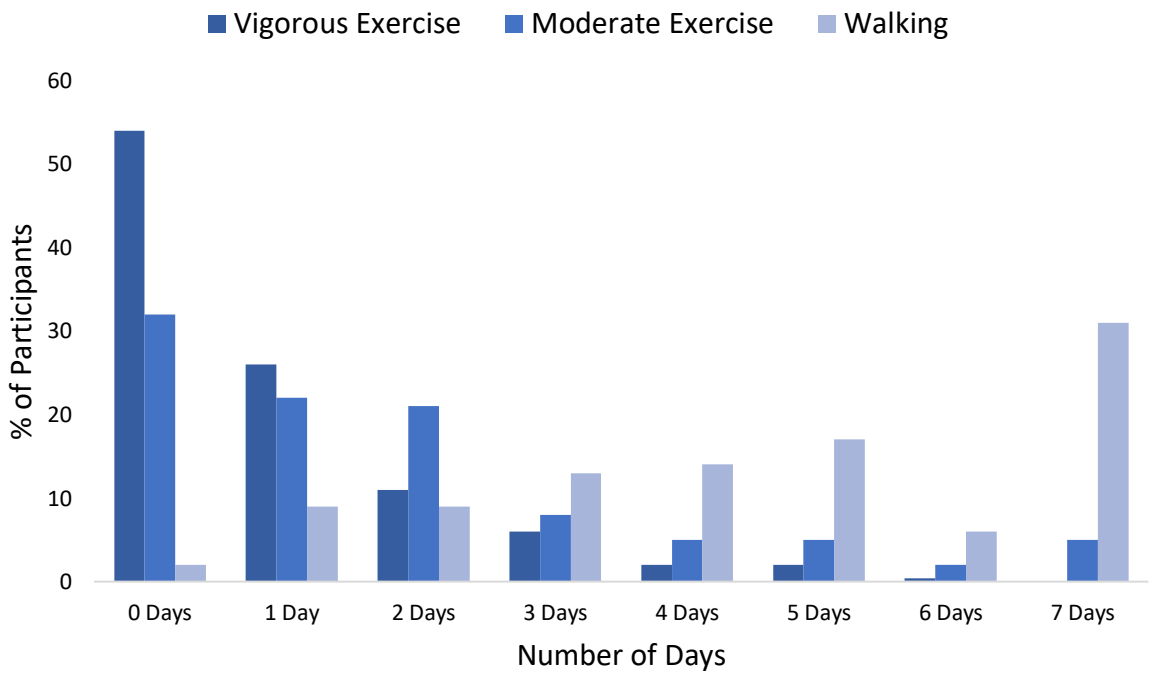
Exercise type by number of days

Figure 19 shows the breakdown of exercise type by number of days exercise was completed in the past week. 54% of participants reported no vigorous exercise in the past 7 days. 23% had reported at least 1 day.

22% of participants reported 1 day of moderate activity. Similar to CI I, 17% had partaken in moderate exercise for at least 4 days or more.

Walking for at least 10 minutes in a day was again the most commonly reported exercise. 31% of participants had walked for at least 10 minutes in a day for each day of the previous week. 2% reported 0 days of walking for at least 10 minutes, a decrease in the numbers seen in CI I.

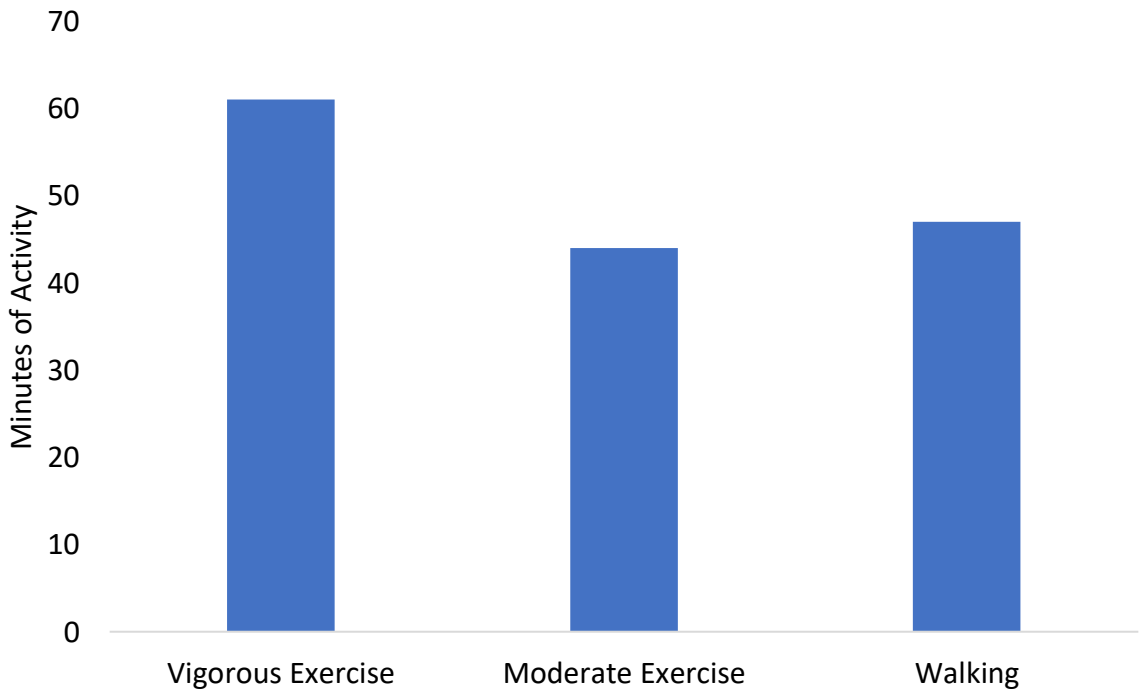
Figure 19. Exercise type by number of days completed in the past week



Exercise type by average minutes completed in a day

Of participants who reported spending any time in each respective exercise, a follow-up question on the amount minutes spent in that exercise in a day was asked. The average time spent in each exercise was similar between types. Participants reported 46 minutes of walking on average on the days they partook in this exercise. 61 minutes of vigorous exercise and 44 minutes of moderate activity were reported on average (Figure 20).

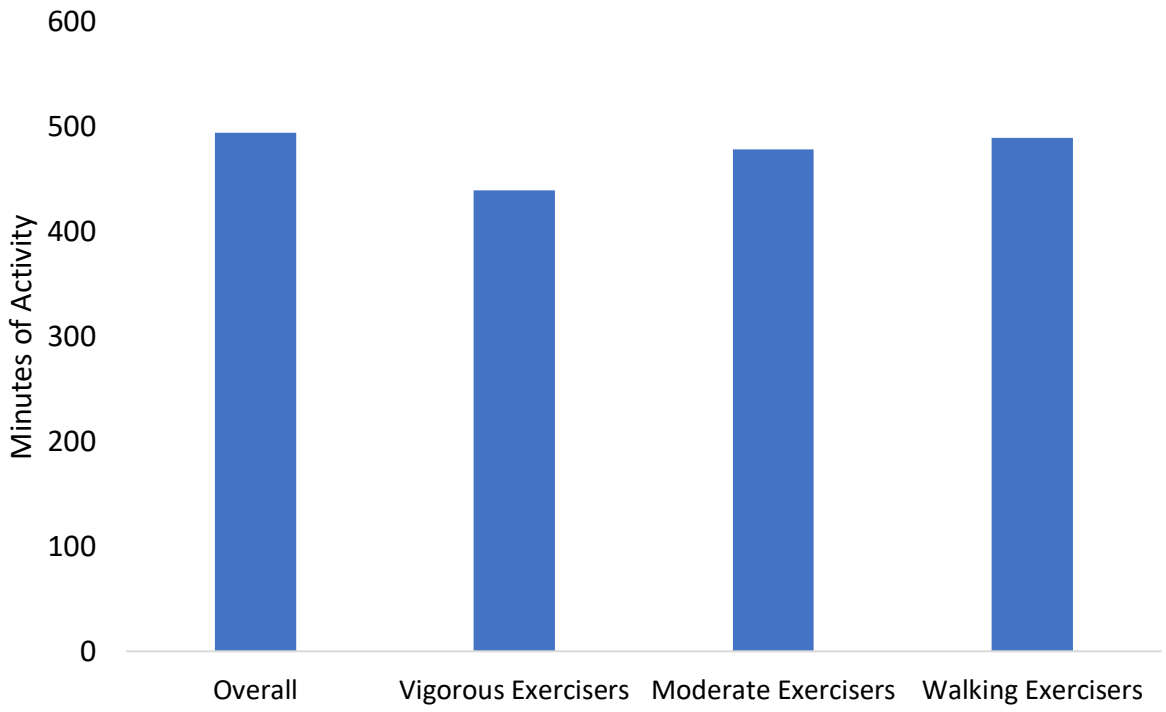
Figure 20. Exercise type by mean minutes completed in a day



Sitting time overall and by type of exercise

Figure 21 shows the mean minutes of sitting time overall and for those who reported completing at least one day of each respective type of exercise. 494 minutes on average were spent sitting during the day. Those who reported at least one day of vigorous exercise reported the least amount of time spent sitting (439 minutes). 489 minutes were spent sitting for those who reported walking exercise, while 478 minutes were reported by those who spent time in moderate exercise.

Figure 21. Sitting time overall and by type of exercise



PROMIS Scale

The first six questions on the PROMIS scale asked participants to rather their health, quality of life and on a scale of 1 (Poor) to 5 (Excellent) (Figure 22).

45% rated their general health as good, while 25% rated it as very good. Similar results were seen in quality of life, with 42% reporting that their quality of life was good and 32% reported it as very good. Just 3% reported that their quality of life was poor.

As seen in CI I, across almost all domains, over half of participants reported that each aspect was good, very good or excellent. 18% of participants reported that their physical function was poor, a noticeable decrease in the proportion who reported the same in CI I. A further 32% reported their physical function as fair.

Figure 23 shows the breakdown of responses to everyday activities. The responses were again positive, with 45% of the sample reporting that they were completely able to carry out every day activities. However, 11% responded “not at all” and a further 10% responded “a little”.

Figure 24 asked participants if they were bothered by emotional problems. 7% reported they had they were “never” bothered by emotional problems. 67% reported that they were “rarely” or “sometimes” bothered. 29% reported that they were bothered “often” or “always” by emotional problems.

5% of participants rated their fatigue as “none”. 25% of participants rated their fatigue as severe or very severe on average (Figure 25).

The highest proportion of responses for how participants rated their pain was for 0 (23%). Again, no participant reported their pain as 10. 12% of participants rated their pain as between 5 and 7.

Figure 22. PROMIS Scale Questions 1-6

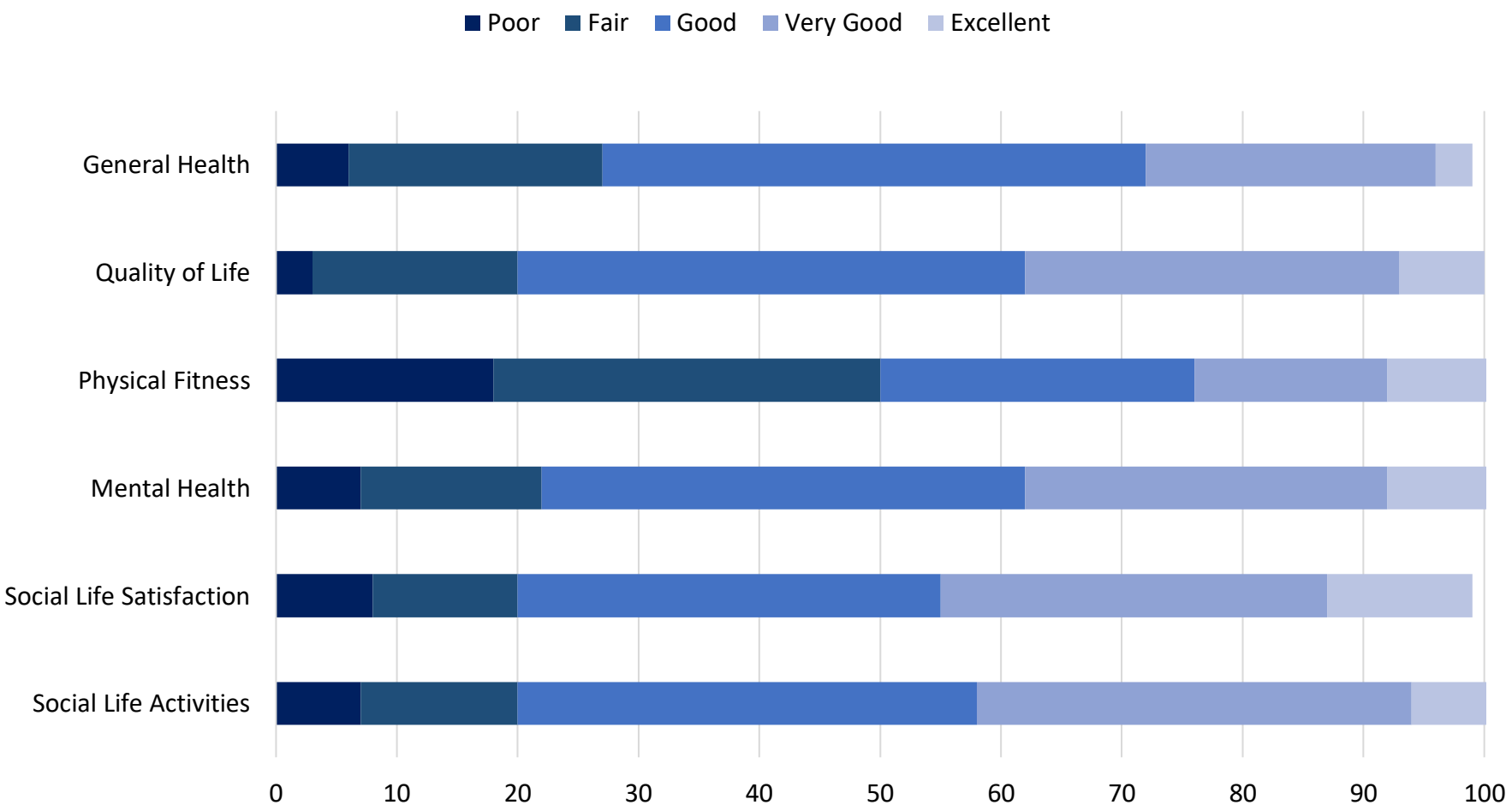


Figure 23. PROMIS Scale Question 7

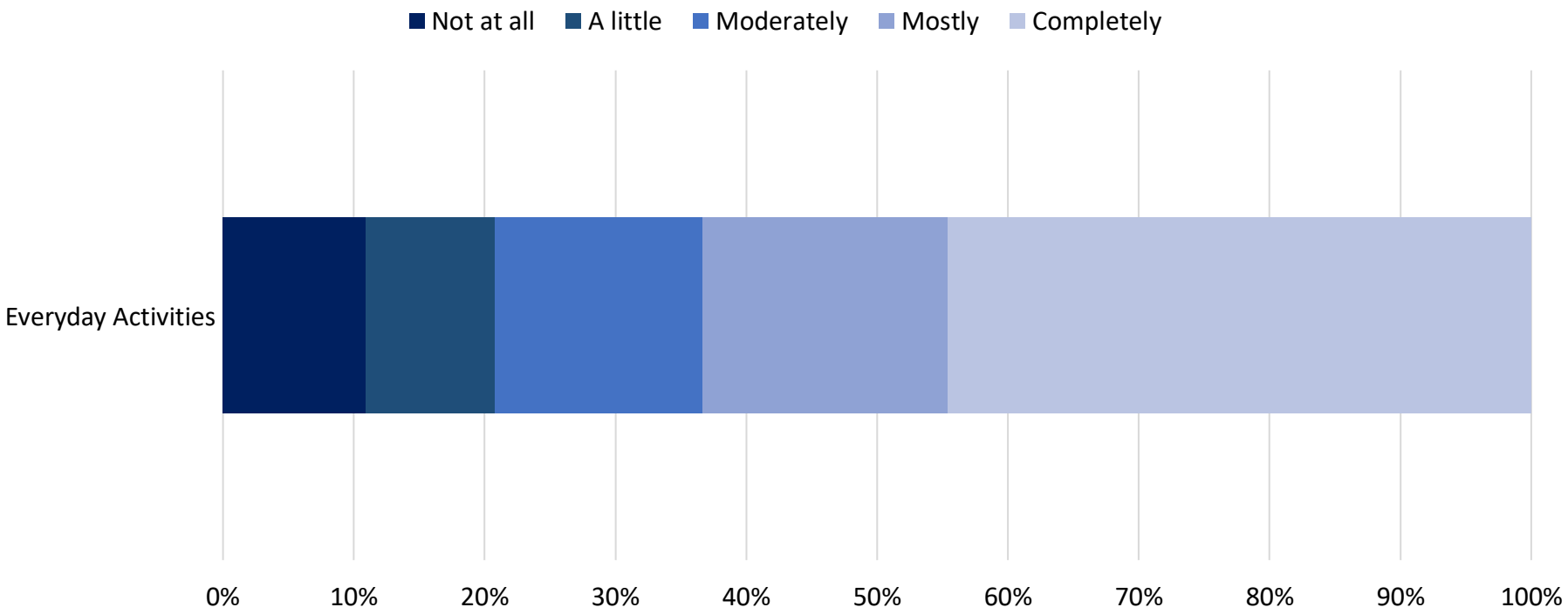


Figure 24. PROMIS Scale Question 8

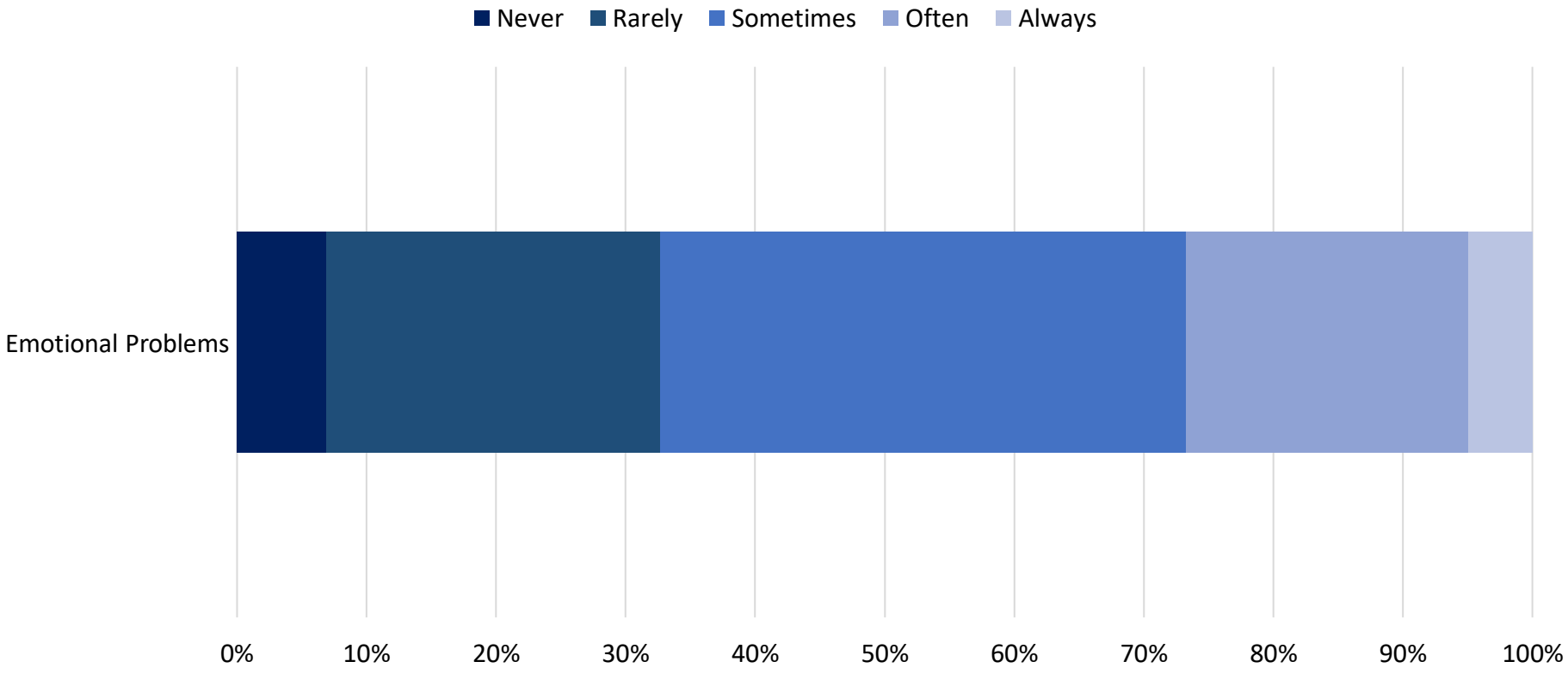


Figure 25. PROMIS Scale Question 9

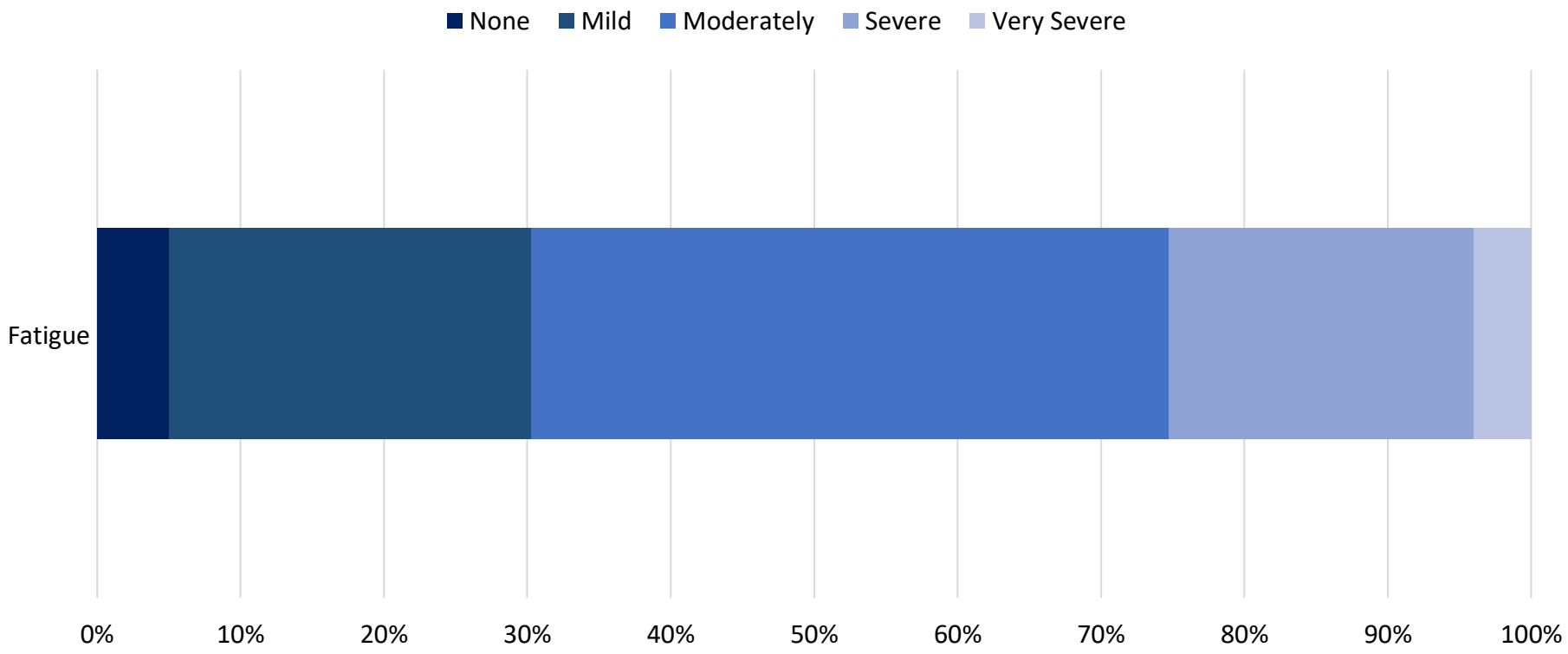
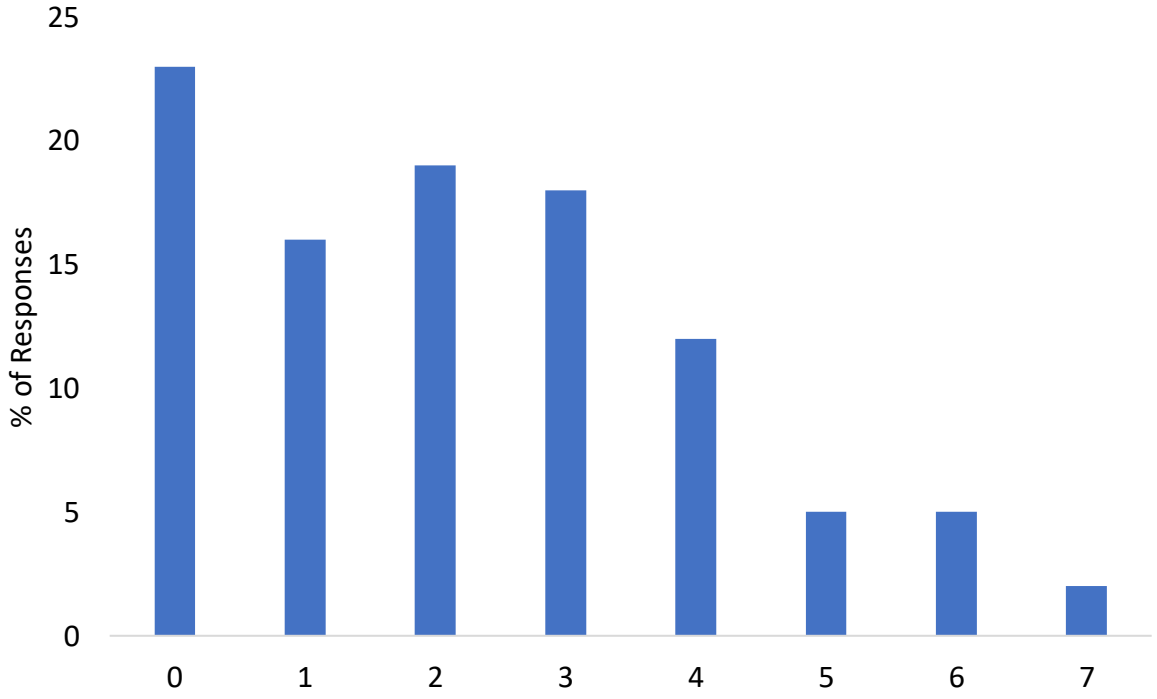


Figure 26. PROMIS Scale Question 10

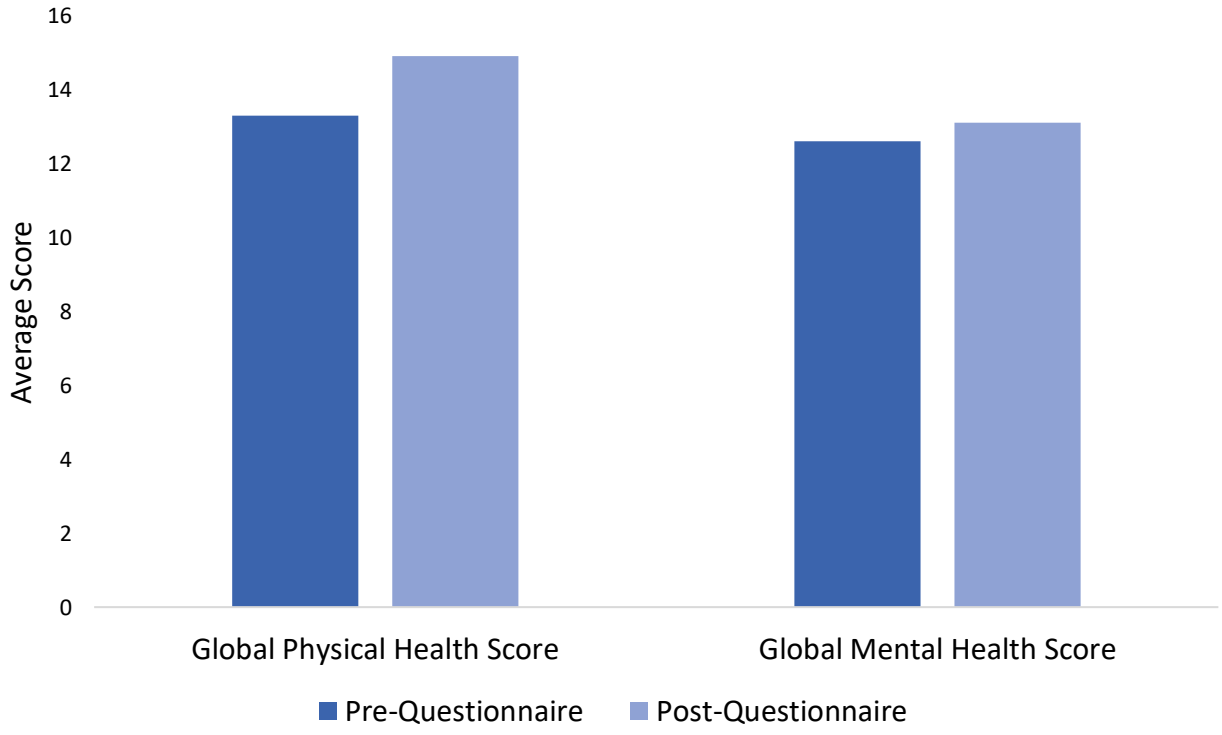


Only those who completed the questionnaire at both times are included in the following section (n=87).

Global Physical Health and Mental Health

Average scores for participants who completed both the pre-evaluation and post-evaluation showed little difference in the Global Physical Health and Mental Health scales. Participants scored 13.3 on average on the physical health scale. On the mental health scale, participants scored 12.6 on average. Scores increased slightly by the pre-evaluation with participants increasing to 14.9 on the Global Physical Health scale, and 13.1 on the Global Mental Health Scale (Figure 27).

Figure 27. Global Physical Health and Mental Health by sex



Pre/Post Questionnaire Evaluation

Table 5 and 6 show the average number of days, and average time spent in each type of exercise. Sedentary behaviour decreased substantially, with reported sitting time decreasing from 582 minutes to 472 minutes between the pre and post questionnaire evaluation. The number of days spent in each type of exercise increased, with days spent in vigorous and moderate exercise doubling. Time spent in each also increase. Vigorous exercise saw the largest increase, from 14 minutes to 53 minutes on average. Moderate activity doubled from 20 minutes to 43 minutes and time spent walking increased from 30 minutes to 48 minutes.

Table 5. Exercise type by number of days by pre and post questionnaire

Type of exercise	**Pre-Questionnaire** No. of Days	**Post-Questionnaire** No of Days
Vigorous Exercise	0.6	2.4
Moderate Exercise	1.7	3.0
Walking	4.1	5.5

Table 6. Exercise type by number of days by pre and post questionnaire

Type of exercise	**Pre-Questionnaire** Average Time (Mins)	**Post-Questionnaire** Average Time (Mins)
Vigorous Exercise	15	53
Moderate Exercise	20	43
Walking	31	49
Sitting	559	464

Working Package Group Evaluation

Strengths, Limitations, Changes and Risks

The *Move More, Feel Better* programme had a number of strengths. The programme involved a mixture of experts throughout partner universities across Europe, allowing for a more specialised and centralised approach to each aspect of the programme.

The programme evaluation was one such aspect which was assigned to an individual partner university. The programme was implemented by individual universities, with the results submitted to the evaluation partner for a full overview, as opposed to individual evaluations being completed at each partner university and collated at the programme end. This allows for a common methodology to the evaluation and decreases the potential for analysis differences to be as a result of methodological differences rather than real-life differences between institutions and countries.

Responses to the programme varied across countries. However, the combined response number was sufficient for analysis to be conducted and an assessment of how the programme has impacted the lives of the university students who were involved.

Prior to implementation of the Common Interventions, comparable and reliable assessment methods were agreed on by partner universities which has allowed for a powerful cross-country analysis of exercise and activity habits of university students across Europe.

Communication and internal programme evaluation was undertaken throughout the project. This allowed for improvements to data collection and programme implementation between CI I and CI II, in addition to ensuring that partner universities maintained the same approach to the programme.

A concern of large cross-country projects such as this can be for data collection to be mixed, and results may be difficult to interpret. The data seen in this evaluation report was consistent and reliable throughout the partner universities, allowing for an interesting and beneficial analysis of the impact of the programme on university students.

A major strength of the study was the implementation of the App in CI II. Assessment of the data input and collation from CI I suggested that an electronic means of inputting data would allow for more consistent results and potentially greater adherence to recording activity minutes in the programme. The App was developed well and provided a functional service for partner universities which will hopefully carry over into any future endeavours with similar programmes or interventions. Data collection was more streamlined where the app was integrated with the programme which additionally allowed for a more speedy analysis process following the CI.

The greatest strength of this study was the results outcome. The programme was built as an exercise in partner university communication and collaboration, however from the results it is clear it has had a positive impact on the students who involved themselves in the programme. Concerns are increasing worldwide with regards to physical inactivity and mental health. This programme targeted an at-risk student population and encouraged them to get involved in physical activity through structured classes. Those who completed a post-evaluation are seen to have increased their average activity time within eight weeks, and report higher scores on average for Global Physical Health and Global Mental Health. The success of this programme in its first venture speaks to the potential for programmes such as this to be rolled out even further across universities and work to improve the mental and physical well-being of our student populations.

Response rates throughout the different areas of the programme were mixed (activity log, pre/post evaluation). Initial responses were strong but a significant number of involved persons failed to complete a post-evaluation, leaving it difficult to declare with certainty that the programme structure was fully functional.

A follow-up assessment of the group which failed to complete the post-evaluation may allow for improvements in any future programmes. There is a risk that those who did not complete this evaluation dropped out because they felt the programme was not suited to them. This is more likely for the most inactive participants of the study. The participants who completed the programme were seen to have had a positive impact from it. However, it is unclear without the full range of post-evaluations whether there are students who were not impacted by the programme and dropped out as a result. Assessment of reasons why attrition has occurred will be valuable going forward to ensure that adherence to the programme can be maximised where possible.

Uptake of the programme was found to be difficult in a number of universities. In certain areas, it is common practice for students to engage in long walks to university, or to cycle, thus rendering them outside of the criteria for the study. As a result, low uptake of the programme was found in certain countries despite the programme being promoted and implemented correctly.

The implementation of the app was a positive step. However, it created some difficulty in comparisons between CI I and CI II. Additionally, partner universities while encouraged to make use of the app, had the option of continuing with the original process and logging data manually. Going forward, it would be worthwhile to ensure that there is common practice across universities.

Problems arose in CI I with some data entry. Following completion of the questionnaires and logs, the data was forwarded to the evaluator. In some cases, problematic data entry was found where responses could not be interpreted. The arising issues were relayed to the partner universities and a request that data is checked as it is received was made. CI II as a result saw fewer problematic data entries. Similar methods should be employed in any future programme.

Final Comments

The programme has been shown to be worthwhile. Where possible, University sports departments should be encouraged to undertake the programme and introduce such practice as a normal part of student life.

It is the opinion of the evaluator that this programme was a success which had a noticeably positive impact on the students who engaged with the programme. The many partner universities who implemented the programme, contributed to the programme and worked to ensure the programme was a success should be lauded for their efforts in making universities across Europe a better place for their students.

Appendix

Evaluation Questionnaires:

Development of activity minutes in CI I

Institution	Pre – Vigorous Minutes	Post – Vigorous Minutes
University of Bochum	2	43
Eindhoven University of Technology	18	48
Maastricht University	3	0
University of Muenster	21	51
RWTH Aachen University	39	75
Trinity College Dublin	23	25
University of Turku	48	51
University College Dublin	39	48
University de Vigo	10	60
University of Wuppertal	11	56

Institution	Pre – Moderate Minutes	Post – Moderate Minutes
University of Bochum	14	48
Eindhoven University of Technology	27	40
Maastricht University	28	32
University of Muenster	45	31
RWTH Aachen University	53	108
Trinity College Dublin	20	26
University of Turku	33	33
University College Dublin	32	43
University de Vigo	5	100
University of Wuppertal	14	52

Institution	Pre – Walking Minutes	Post – Walking Minutes
University of Bochum	23	57
Eindhoven University of Technology	25	96
Maastricht University	35	21
University of Muenster	50	39
RWTH Aachen University	46	96
Trinity College Dublin	88	32
University of Turku	32	33
University College Dublin	65	99
University de Vigo	26	77
University of Wuppertal	34	65

Institution	Pre – Sitting Minutes	Post – Sitting Minutes
University of Bochum	670	409
Eindhoven University of Technology	795	658
Maastricht University	544	431
University of Muenster	386	323
RWTH Aachen University	473	371
Trinity College Dublin	518	366
University of Turku	873	638
University College Dublin	267	299
University de Vigo	469	480
University of Wuppertal	534	373

Development of activity minutes in CI II

Institution	Pre – Vigorous Minutes	Post – Vigorous Minutes
University of Bochum	1.5	47
University of Bonn	60	-
Eindhoven University of Technology	15	64
Maastricht University	16	66
Middlesex University	30	1
University College Dublin	20	37
University de Vigo	23	53
University of Wuppertal	14	74

Institution	Pre – Moderate Minutes	Post – Moderate Minutes
University of Bochum	12	34
University of Bonn	70	-
Eindhoven University of Technology	31	43
Maastricht University	28	34
Middlesex University	10	94
University College Dublin	22	30
University de Vigo	19	41
University of Wuppertal	16	47

Institution	Pre – Walking Minutes	Post – Walking Minutes
University of Bochum	25	54
University of Bonn	51	-
Eindhoven University of Technology	28	34
Maastricht University	29	78
Middlesex University	30	69
University College Dublin	44	47
University de Vigo	42	54
University of Wuppertal	28	37

Institution	Pre – Sitting Minutes	Post – Sitting Minutes
University of Bochum	560	465
University of Bonn	390	-
Eindhoven University of Technology	865	676
Maastricht University	600	548
Middlesex University	450	276
University College Dublin	375	358
University de Vigo	424	405
University of Wuppertal	413	325