DECLARATION

I declare that the work described in this dissertation has been carried out in full compliance with the ethical research requirements of the School of Computer Science and Statistics.

Signed: ___________________

Jennifer Murphy
April 3\textsuperscript{rd} 2013
ABSTRACT

The aim of this project was to investigate participation levels in sport and physical activity by students at third level and to gather quantifiable information which can be used to identify why students don’t get involved in sport and exercise. This information was gathered through an online survey designed and administered to find out how much physical activity students at third level currently partake in and to identify reasons why some students are not physically active. The study focused on undergraduate students in Trinity College. The research and report were conducted on behalf of Dublin University Central Athletic Club (DUCAC)/Department of Sport/College Health Service (CHS).

Over 1500 undergraduate students from Trinity College Dublin responded to the online questionnaire enabling large amounts of data to be gathered. There are a number of significant and interesting findings. The study showed that this sample group of Trinity College undergraduates is a good sample of the undergraduate population of the college to represent their physical activity habits. This was proven with the application of statistical significance tests to certain portions of the data.
PREFACE

The client for this project was DUCAC/Department of Sport/College Health Service. The client contacts were Drinda Jones, the DUCAC and Department of Sport Administrator, and Martina Mullin, the Health Promotions Officer.

DUCAC and the Department of Sport are based in the Sports Centre in Trinity College. Both areas work together for the development of Sport in College and encourage both recreational and competitive sport. The primary function of DUCAC is to further the interests of students in Sport Clubs at Trinity College and the Department of Sport is responsible for facilities and services.

This project aimed to identify reasons for participation and non participation in sport and other physical activity and concluded by making recommendations on how DUCAC and the Department of Sport could encourage more students to participate in sport and physical activity during their student years at Trinity College.

The project was a success, with the online questionnaire receiving a high response rate providing an adequate amount of data for the detailed analysis. Initially, the intention was to survey other third level colleges in the country. However, even though the survey was sent to contacts in the other institutions, they did not circulate it to their students. Had they done this, a comparative study would have been carried out.

I would like to thank both my clients, Drinda Jones and Martina Mullin for their tremendous help throughout the course of this project. Drinda made so much time for meetings and Martina was particularly helpful when it came to sending out my survey and organizing the prize to be won as an incentive to do it, without which the response rate would not have been nearly as high as it was so I am very grateful for that too.

I would also like to thank my project supervisor, Mary Sharp, for her consistent support and guidance throughout the project.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>NO.</th>
<th>SECTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>INTRODUCTION AND SUMMARY</td>
<td>1</td>
</tr>
<tr>
<td>1.1</td>
<td>The Client Company</td>
<td>1</td>
</tr>
<tr>
<td>1.2</td>
<td>The Project Background</td>
<td>1</td>
</tr>
<tr>
<td>1.3</td>
<td>Terms of Reference</td>
<td>1</td>
</tr>
<tr>
<td>1.4</td>
<td>Summary</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>CONCLUSIONS AND RECOMMENDATIONS</td>
<td>3</td>
</tr>
<tr>
<td>2.1</td>
<td>Conclusions</td>
<td>3</td>
</tr>
<tr>
<td>2.2</td>
<td>Recommendations</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>LITERATURE REVIEW</td>
<td>6</td>
</tr>
<tr>
<td>3.1</td>
<td>Introduction</td>
<td>6</td>
</tr>
<tr>
<td>3.2</td>
<td>Physical Activity Recommendations</td>
<td>6</td>
</tr>
<tr>
<td>3.3</td>
<td>Motivations for Physical Activity</td>
<td>7</td>
</tr>
<tr>
<td>3.4</td>
<td>Main Barriers to Physical Activity</td>
<td>8</td>
</tr>
<tr>
<td>4.</td>
<td>METHODOLOGY</td>
<td>10</td>
</tr>
<tr>
<td>4.1</td>
<td>Survey</td>
<td>10</td>
</tr>
<tr>
<td>5.</td>
<td>ANALYSIS</td>
<td>13</td>
</tr>
<tr>
<td>5.1</td>
<td>Respondents</td>
<td>13</td>
</tr>
<tr>
<td>5.2</td>
<td>School Sports Team versus Local Sports Team</td>
<td>14</td>
</tr>
<tr>
<td>5.3</td>
<td>Type of Physical Activity: Sport versus Exercise</td>
<td>16</td>
</tr>
<tr>
<td>5.4</td>
<td>Frequency of Physical Activity</td>
<td>17</td>
</tr>
<tr>
<td>5.5</td>
<td>Motivations for Physical Activity</td>
<td>21</td>
</tr>
<tr>
<td>5.6</td>
<td>Deterrents to Physical Activity</td>
<td>23</td>
</tr>
<tr>
<td>5.7</td>
<td>Interest in Suggested Events</td>
<td>26</td>
</tr>
</tbody>
</table>
## APPENDICES

<table>
<thead>
<tr>
<th>NO.</th>
<th>CONTENT</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Original Project Outline</td>
<td>A.2</td>
</tr>
<tr>
<td>B</td>
<td>Interim Project Report</td>
<td>B.1</td>
</tr>
<tr>
<td>C</td>
<td>Online Questionnaire</td>
<td>C.1</td>
</tr>
<tr>
<td>D</td>
<td>Analysis of Online Questionnaire</td>
<td>D.1</td>
</tr>
<tr>
<td>E</td>
<td>Open Ended Responses</td>
<td>E.1</td>
</tr>
</tbody>
</table>

REFERENCES
1. INTRODUCTION AND SUMMARY

This chapter gives a brief description of the client and the background to the project. This chapter also states the terms of reference for the project and gives a summary of the remaining chapters in the report.

1.1 The Client

The clients for this project are Drinda Jones, the DUCAC/Department of Sport Administrator and Martina Mullin, the Health promotions officer.

1.2 Project Background

It is generally accepted that physical activity confers benefits to psychosocial health, functional ability and general quality of life. Research has indeed been done on these benefits but there is little material relating specifically to third level participation. The Irish Sports Council have identified that physical activity has increased by 3% between 2007 and 2010. However, it is not known how much of this increase relates to 3rd level.

DUCAC, the Department of Sport at Trinity and the College Health Service want to identify student involvement in sport to highlight the demographics involved and their participation levels in the hope that this information can be used to target students in creating greater involvement in sport and a healthy lifestyle.

1.3 Terms of Reference

- Conduct a brief literature review on Recreational/Sport Activity; Involvement at third level.

- Carry out primary and secondary research to identify national trends.

- Carry out research in Trinity and/or other 3rd level institutions.

- Identify reasons for participation and non participation in sport at 3rd level.

- Identify recommendations to increase student participation in physical activity.

1.4 Report Summary

- Chapter 2 summarises conclusions drawn from the project research and any recommendations made

- Chapter 3 contains a literature review based on literature on the project title available to date
• Chapter 4 sets out the methodology used in creating and administering the online questionnaire

• Chapter 5 provides an in depth analysis of findings drawn from the research
2. CONCLUSIONS AND RECOMMENDATIONS

This chapter will briefly describe the main findings of the research analysis and identify recommendations for DUCAC on increasing student involvement in recreational/sport activity.

2.1 Conclusions

- Only 29% of students are on a college or local sports team now and over half the students that played on a sports team in school do not play on a college or local sports team now. The students on a college/local team now are largely made up of students who were on a school team before (78%). First years have the largest proportion of their students on a college or local sports team (33%). Only 23% of women are on a college/local sports team whereas 38% of men are. (See Section 5.2, pg.14 )

- Exercise is a more popular form of physical activity than sport among the respondents. Over four fifths (86%) of the students participate in exercise as a form of physical activity whereas only just over one third (36%) of the students play sport. (See Section 5.3, pg. 15)

- Overall, 14% of respondents do no physical activity at all. Of these inactive students 39% are female and 61% are male. Slightly more females (83%) take part in exercise as a form of physical activity than males (81%) whereas more males play sport than females (49% and 28% respectively). (See Section 5.3, pg. 16)

- Students in their 5th year ie final year have the highest rate of inactivity with 23% of these students doing no form of physical activity. This is also probably due to the large workload these students encounter. (See Section 5.4, pg. 18)

- Less than one third (31%) of females meet the recommended weekly requirements for physical activity whereas 49% of males do. Overall, 38% of the respondents meet the recommended requirements. (See Section 5.4, pg.17 )

- The Engineering, Maths and Science and Medicine, Nursing and Health Science departments are the faculties with highest percentage of inactive students, each having 15% of their students doing no physical activity. However, the Engineering, Maths and Science department also have the highest percentage (44%) of students who meet the recommended physical activity requirements. The Medicine, Nursing and Health Sciences department have 66% of their students not meeting physical activity requirements. (See Section 5.4, pg.18 )
• Over 60% of students in courses with both 0-10 timetabled hours per week and 31 plus hours per week do not meet physical activity requirements (63% and 64% respectively). (See Section 5.4, pg. 19)

• Respondents were asked how tired they were on a daily basis. Results of the analysis showed that the more frequently students exercised or played sport, the less tired they were. (See Section 5.4, pg. 19)

• Gender differences for competition, physical appearance and social reasons as motivators for sport are statistically significant with men being more motivated by competition in sport and women being more motivated with physical appearance and social reasons for sport. Men are also more motivated to exercise by competition. (See Section 5.5, pg. 21)

• Lack of time acts as a larger barrier for sport rather than exercise for respondents, 92% of respondents who don’t do enough physical activity said time is a deterring factor for sport whereas only 48% said time is a deterring factor for exercise. Laziness acts as the other main barrier to sport and exercise with 79% of respondents saying it deters them from sport and 85% of respondents saying it deters them from exercise. (See Section 5.6, pg.22)

• Respondents were asked if they would use free exercise programs were they made available on the college sports website and 69% of them said yes. Over half (56%) of students who do no physical activity were among these students saying yes to the exercise programs. (See Section 5.7, pg. 25)

2.2 Recommendations

• Encourage more students to join a sports team in first year. Also encourage more women to join. In order to do this the social benefits and the aspect of levels for everyone to play at being available must be promoted more effectively to incoming students. Possibly make students aware of college sports clubs before freshers week via the internet or sending brochures to incoming students, for example. (See Section 5.2, pg. 15)

• Promote more involvement in sport than exercise in general. While exercise is beneficial too, because respondents rate the enjoyment factor higher in sport, they are more likely to keep up a sport than exercise. A student could work closely with DUCAC each year with their job being to promote sport and exercise to fellow students. This is recommended as it is easier for students to get students involved rather than DUCAC trying to target students. These ‘Sports Activity Officers’ could be assigned, one to each faculty, and give short talks at the start of lectures for example letting students know when to come along to try out new sports or activities in the gym. They would also be available to contact if students had any queries relating to getting more active in college. (See Section 5.5, pg. 21)
• Females need to be targeted slightly more than males as only 31% of females are physically active at least five times a week (ie meet the National requirements for physical activity) whereas 49% of males are physically active at least five times a week. This could also be done through the use of ‘Sports Activity Officers’ with some of them being female specifically targeting female students. (See Section 5.4, pg. 17)

• Since the main barriers to physical activity are lack of time and laziness, educate students in time management. Although these classes are available freely to students throughout the year by the Student Counselling Service, DUCAC and the Department of Sport could specifically make talks on time management available to students at the beginning of and throughout the year. These talks would solely focus on making more time for physical activity in one’s daily routine. When respondents were asked would they attend such talks, 27% of them said yes. (See Section 5.7, pg. 25)

• Possibly look into making free exercise programs available on the college sports website throughout the year. At the moment students have the opportunity to avail of these in the sports centre during freshers week but a recommendation would be to make them available throughout the year as they would be utilised regularly according to the research. Almost 70% of respondents expressed that they would use this service throughout the year if it was available. (See Section 5.7, pg. 25)

• Promote the academic benefits of physical activity ie stress relief etc. An idea would be to put facts about physical activity health benefits in the college journals and around the gym, not only during freshers week and sports week, but throughout the entire year. (See Section 5.5, pg. 21)

• Need to keep students active the whole way through college so they continue to do so later in life. ‘Sports Activity Officers’ could also be assigned to each year encouraging them to keep up their physical activity levels and bringing the students into sports clubs with them regularly. (See Section 5.6, pg. 24)
3. LITERATURE REVIEW

This chapter will discuss and review the literature on student involvement in physical activity to help gain a better understanding of the topic.

3.1 Introduction

Irish literature surrounding student involvement in physical activity is scarce. Most of the research gathered for this review was conducted in America, Canada and Turkey. One unpublished paper from Ireland is also discussed. The main themes discovered after an examination of the literature are; gender differences for motivation of sport and exercise, barriers to physical activity during the transition to university, and the relationship between physical activity and fatigue levels.

For the purpose of the project research, and for this review, it is important to distinguish sport and exercise as two different forms of physical activity. The reason for this is that the motivations to do each of these can be very different, as will be shown in this review. Exercise has been defined in the online questionnaire and for the purpose of this project as ‘activity requiring physical effort, carried out especially to sustain or improve health and fitness’. Sport has been defined in the online questionnaire and for the purpose of this project as ‘an activity involving physical exertion and skill in which an individual or team competes against another or others’ (Both definitions are Google definitions). Physical activity as a whole is defined as ‘a broad category of bodily movement produced by skeletal muscle that results in energy expenditure, including elective forms of activity such as sport and exercise, and required forms of activity, such as labour’ (Kilpatrick, Hebert, & Bartholomew, 2005). Other definitions of sport and exercise are similar to the one above; Sport: ‘Physical activity governed by formal or informal rules that involve competition against an opponent or oneself’. Exercise: ‘form of physical activity involving exertion of sufficient intensity, duration and frequency to achieve or maintain fitness or other athletic objectives’ (Kilpatrick, Hebert, & Bartholomew, 2005).

3.2 Physical Activity Recommendations

According to the Health Service Executive (HSE), the national guidelines for physical activity for Ireland are as follows: adults aged 18 to 64 should do at least 30 minutes a day of moderate activity on five days a week or 150 minutes a week. Examples of moderate intensity activities given by the HSE are a brisk walk (ie a mile in 15-20 minutes) or medium paced swimming. The Irish Sports Council states moderate physical activity as any physical activity sufficient to raise one’s breathing rate. One minute of vigorous intensity activity is equal to two minutes of moderate intensity activity. Examples of vigorous intensity activity, given by the HSE, are doing active sports such as football, squash or jogging or running a mile in ten minutes or less. The requirements can be met by doing moderate activity, vigorous activity or a combination of both but the general requirement on which the survey has been based is for adults to do at least 30 minutes of moderate intensity activity five days a week.
The National Health Interview Survey presents statistics representing the percentage of the US population who meet both aerobic physical activity requirements and both aerobic and muscle strengthening activity requirements. The report by the National Center for Health Statistics (NCHS) of the United States Center for Disease and Control (CDC) contains statistics from the years 1997 to 2012. For January to September 2012 the results indicated that 50.4% of adults over the age of 18 of the US population met the aerobic physical activity requirements as described above. This represented a 1.4% increase on the 2011 figure (49%). The ratio of males meeting these requirements to females in the age group 18-24 which is similar to the age group in this research project is roughly 1.2:1. When looking at the results for the percentage of US citizens meeting aerobic physical activity requirements and muscle strengthening activities, the results show that for January to September 2012 only 20.5% of the population over 18 years of age met these requirements compared with 20.9% in the previous year. Here the ratio of males to females meeting these requirements in the 18-24 year old age group was 1.85:1. The Irish Sports Council produced a report on the Irish Sports Monitor (ISM) Survey which is designed to be representative of the Irish population aged 16 and over. The survey was conducted through telephone interviews during 2011. The results of this survey showed that the proportion of ‘highly active’ citizens (ie meet National Physical Activity guidelines of aerobic activity ie 5 days a week for at least 30 minutes) over the age of 16 has increased from 26% in 2009 to 30% in 2011. The results also showed that the proportion of the population over 16 years of age that did no physical activity decreased from 16% in 2009 to 13% in 2011.

3.3 Motivations for Physical Activity

The literature reviewed shows that many motivations for sport and exercise are significantly different as are the factors that motivate men and women to participate in sport and exercise. Research that directly compares the motivations to participate in sport and exercise is sparse (Kilpatrick, Hebert, & Bartholomew, 2005). This comparison formed part of the basis for the online questionnaire for the project research in which men and women were asked questions about motivations for sport and exercise separately.

A study was carried out by Kilpatrick, Hebert, & Bartholomew (2005) in which students, enrolled in undergraduate health and kinesiology courses at a university in the southeastern United States, were asked to fill out a questionnaire intended to measure physical activity demographics and motivation. The aim of this research was to extend the comparison of sport participation and exercise motivation through the use of a highly differentiated scale of physical activity motivation within a college sample. Results of this research showed that extrinsic factors, such as physical appearance, are the primary motivators for exercise, whereas, people are more motivated by intrinsic factors such as enjoyment when it comes to sport participation. Sports participants rated competence and enjoyment as main motivators whereas body motives were more prevalent for exercise. The main results of the study showed that the highest rated motives for sport participation were competition, affiliation, enjoyment and challenge, whereas the highest related motives for exercise were related to health and appearance. Weight management was a motive strongly linked to exercise and particularly true for women. This result is supported in the article by Kilpatrick et al (2005) as
respondents were asked to rate factors in terms of how important they are in motivating them to participate in sport and exercise. The scale ranged from one (most important) to 14 (least important) and women gave weight management a rating of two for exercise whereas men gave it a rating of 10 (Kilpatrick et al 2005, p. 92). Kilpatrick et al (2005) carried out hypothesis tests on the data collected revealing significant gender differences for motivations in sport and exercise; men are more motivated than women by challenge, competition, social recognition and strength and endurance for sport and exercise whereas women are more motivated than men to do sport and exercise by weight management. These results agreed with some of the work by (1). In response to the question by Martina Mullin, “Do men like sport and physical activity that is competitive more than women?”, an examination was carried out primarily from data derived from the ISC. Results of this analysis showed that 52% of males and 34% of females played sport. Results relating to work by Kilpatrick et al (2005) were such that 46% of men who played sport played it competitively, whereas, only 27% of women did. This shows that men do like competitive sport more than women and that they are more motivated by competition in sport than women.

Other works cited by (1) which agreed with Kilpatrick et al (2005) were; Gill, D.L and Dzewaltowski, D.A (1988) whose research claimed that gender difference was most evident for scores of competitiveness with males scoring higher than females on competitiveness and win orientation; Muriel Niederle and Lise Vesterlund (2011) whose research on gender differences relating to competition in all aspects of life including education, the labour market and sport stated that women respond less favourably to competition than men; Gill, Diane L. (1988) investigated gender differences in competitive achievement orientation and sport participation in 300 females and 270 males and results showed males consistently scoring higher on competitiveness and win orientation than females but females, however, scored equally high on non-competitive achievement orientation.

3.4 Main Barriers to Physical Activity

The transition from second level to third level education is a huge change in students’ lives. They become more independent and have to do everything for themselves. In school, students are told what to do and when to do it. This is very different in college where students have the freedom to choose to do what they like in terms of how much work to put into academics and what extracurricular activities to join. Matthew Y. W. Kwan and Guy E. J. Faulkner (2011) carried out a study conducting eight focus groups consisting of first year university students whose physical activity had declined at university. Kwan et al, (2009, pp. 87) states that “students are entering university with positive attitudes towards physical activity, strong perceptions of behavioural control, and intentions to be regularly active”. According to Gyurcsick et al, (2006) cited by Kwan et al, (2011), students come across more barriers to physical activity during their first year at university compared to their final year in secondary school. The focus groups carried out in the research by Kwan et al, (2011) explored students perceptions of physical activity during their first year at university and the second part focussed on the barriers students encountered to physical activity during their first year at university. Results of the analysis showed that students’ positive intentions to be
physically active in college became mitigated when the reality and shift towards academics came in. However, when students were asked if they’d be interested in a physical activity intervention program helping them to be more active during their transition to university, they were overwhelmingly in favour of the idea. The article fails to support this claim however with a percentage of students who were in favour of this intervention. A questionnaire which participants were asked to fill out showed that an average of 24% (plus or minus 2% standard deviation) of students were moderately-vigorously physically active each week in high school but only 6% (plus or minus 5% standard deviation) had this activity level in first year college (Kwan et all, 2011, pp. 89).

Barriers stated by the students in work by Kwan et al, (2011) were broken down into intrapersonal barriers (ie. barriers internal to the individual) including lack of time and intimidation, and interpersonal barriers (ie. external factors hindering physical activity) including changes in social groups and parental encouragement, and environmental/community barriers including distance from college and absence of information available. Although the study failed to produce numerical results due to the nature of the research (a focus group), interesting results were discovered. When discussing lack of time as a barrier, students said they lacked the confidence in time management. When discussing the interpersonal barriers students said they found it difficult to form social relationships for the purpose of being physically active. They also stated that it is easier to socialise via eating ie. going for lunch rather than exercising together. Some students said their parents put pressure on them to focus solely on academics, whereas others said their parents were very encouraging of physical activity. Again, there are no percentages to support this information in the article. Whilst discussing environmental barriers students felt there was not enough information or marketing regarding physical activity on campus. Commuting students also mentioned feeling fatigued following their daily commute to and from college. Contrary to these statements, and because many students do not exercise due to laziness and being tired, the study by Soyeur, Unalan and Elmali (2010) which investigated the relationship between physical activity level and fatigue in college students in a university at Turkey, found that physical activity significantly correlated with the prevalence of fatigue. There was a negative correlation with exercise and sport. This correlation was proved to be significant and therefore probably true with the results of a two tailed hypothesis test giving a p value of less than 0.005 (Soyeur et al, 2010, pp352). This meant that students who engaged in more physical activity were less likely to be as affected by fatigue as students who did not engage in as much physical activity.
4. METHODOLOGY

This chapter outlines the method that was used when gathering and analysing the data.

An online questionnaire was the chosen research method for the project as it could easily be sent to all undergraduate students in Trinity College in the hope of returning a high response rate.

4.1 Survey

Design of Questionnaire

The survey was drafted in a way that respondents would answer different questions depending on the type and amount of physical activity they did. Depending on the type of physical activity respondents did, they were sent to different pages in the questionnaire. Respondents who did more than enough physical activity were not asked for reasons why they didn’t do sport or exercise, but respondents who did little or no physical activity were asked for reasons. Only respondents who played sport were asked for their motivations to play sport and the same applied to respondents doing exercise, who were only asked about their motivations to exercise.

‘Other’ options were also provided at the end of certain questions where respondents could insert their own opinions when their views in the original question were not available. It was important to get more feedback from the respondents in this way to aid the research process and also get as much information on what motivates respondents to do physical activity and what deters them.

After the introduction and consent pages, basic short questions were asked to ease respondents into the survey. This was so respondents would not be tempted to exit the survey early upon seeing the long questions at the beginning. Dillman (2000) suggests this layout as the subjects will be more willing to answer the long questions having been eased into the survey at the beginning with the short questions. These long questions were introduced later on when respondents were split into groups depending on the type of physical activity they did. The four groups were: No physical activity; plays sport only; exercises only; does both sport and exercise. Before answering, respondents were given a definition of sport as ‘an activity involving physical exertion and skill in which an individual or team competes against another or others eg. Hockey, Rugby (matches or training) etc.’. The definition given for exercise was ‘activity requiring physical effort, carried out especially to sustain or improve health and fitness eg. a moderate intensity gym session, going for a run etc.’.

The demographics section was left until the end of the questionnaire so that if respondents became lazy they would hopefully have already completely filled out the questions specifically related to the research. The online questionnaire included single response, rating and open ended questions. The online questionnaire can be seen in Appendix E.1.
Questionnaire Topics

Since the aim of the project was to investigate reasons for student participation and non participation in physical activity, topics in the questionnaire were focussed around respondents' motivations to do sport and exercise, and what discouraged them from these activities. The literature review (See Section 3, pg. 6) helped in forming the questions on motivation and deterrents to physical activity and was the main basis for the online questionnaire. The survey was shown to both the clients and supervisor for approval before it was sent out.

Introductory Questions

These questions were simple and created to see if students had played on a sports team in school and whether or not they play on a sports team in college now. Exercise and sport were then defined for the respondents. They were then prompted to select whether they engaged in exercise and sport, neither or one of these types of physical activity. This was so that only certain respondents were asked certain questions. For example, only respondents who indicated that they played sport were asked about their motivations to play sport.

Motivations

These questions prompted students to rate certain variables according to how important they were in motivating them to engage in sport or exercise. An ‘other’ option was also added to make sure all students opinions were taken into account.

Deterrents

Respondents were asked if certain variables discouraged them from doing sport or exercise. They had the option to record the factors which affected the amount of physical activity they did as “a lot”, “a bit” or “not at all”. An ‘other’ option was also provided at the end of these questions to get as many reasons as possible as to why students at third level do not engage in regular physical activity.

Opinion questions

These questions were included in the online questionnaire to see if respondents would be interested in attending any events or using certain services intended to promote more physical activity among college students. The events included; a talk on the benefits of physical activity during college and a talk specifically aimed at making more time for physical activity in respondents’ daily schedules. The service was whether people would use free exercise programs were they made available on the college sports centre website. Responses to these questions aided the generation of conclusions and recommendations for the project.
Questions on demographics

In this section, demographics of the respondents were collected such as gender and what year the respondents were in. Respondents were asked which faculty they studied in so that DUCAC, the client, could identify which faculties need to be targeted in terms of doing more physical activity.

Implementing the Questionnaire

The original plan was to send the questionnaire out to several colleges in Ireland. Unfortunately, due to officials in other colleges who received the survey opting not to forward it on to their students, the survey only made it out to students of Trinity College. Survey monkey, free online questionnaire software, was used to design and administer the questionnaire. As an incentive to complete the survey and to increase the response rate, students had the option to be entered into a draw to win one of two Vodafone smart tab IIs kindly donated by Vodafone itself.

Distributing the Questionnaire

Before distributing the online questionnaire to the undergraduate student body, ethical approval from the ethics committee at Trinity College had to be obtained. Forms were filled out and the application along with the survey was submitted in January and was approved within two weeks.

With the assistance of Martina Mullin, the health promotions officer, and Susan McCormack, the secretary for the college secretary, the survey was successfully sent out via email to the undergraduate body of Trinity College. A cover letter was attached to the email explaining the details of the project and a link to the survey was attached to the email. Respondents also had the option to contact the author if they wanted any additional information on the project. The survey was sent out on a Friday morning and given a two week response time. A reminder email was sent out to all students shortly before closing the survey in order to get the best possible response rate.
5. ANALYSIS

This section will provide a detailed analysis on the results obtained from examining the data in the online questionnaire.

5.1 Respondents

The questionnaire was sent out over email to the 12,000 undergraduate students of Trinity College Dublin and received a 13% response rate. The demographics of the respondents were analysed by gender and what year they were in. More women responded to the survey than men. The ratio was 1.5:1 with 896 female respondents (60%) and 593 male respondents (40%) (See Appendix D.1, Figure D.1.3).

The data was also analysed by the faculty in which respondents studied. The faculty with the most respondents was Arts, Humanities and Social Science accounting for 38% of respondents. Engineering, Maths and Science, and Medicine, Nursing and Health Science accounted for 34% and 27% respectively (See Appendix D.1, Figure D.1.1). Below, in Figure 5.1.1, is a graph of which faculty the respondents are in and their current year of study.

![Respondents by faculty and year](image)

**FIGURE 5.1.1 – Graph of Respondents by Faculty and Year of Study**

Figure 5.1.1 above shows that the respondents were largely made up of first year students. These students accounted for 27% of the overall sample size (See Appendix D.1, Figure D.1.2). The majority of respondents in Arts, Humanities and Social Science and Medicine, Nursing and Health Science were first year students accounting for 11% and 7% of respondents respectively. The group with the most respondents were the first year Arts, Humanities and Social Science students accounting for 11% of the respondents. The group
with the least respondents were students in their 5th year in the Engineering, Maths and Science Department accounting for less than 1% of the respondents.

The rest of the data was analysed by studying the responses under the following main headings:

- School sports team versus college/local sports team
- Type of physical activity: sport and exercise
- Frequency of physical activity
- Motivations for physical activity
- Deterrents to physical activity
- Interest in suggested events

5.2 School Sports Team versus College/Local Sports Team

The introductory section of the survey began by asking respondents whether they had been on a sports team in 6th year in school and whether they were on a college or local sports team now. Figure 5.2.2 below is the comparison of the percentage of students on a college or local team now and the percentage of students that were on a school team in 6th year. Only 28% of respondents are on a college or local sports team now whereas 46% of the respondents were on a sports team in 6th year in school. The breakdown by gender can be seen in Appendix D.2, Figure D.2.1 showing that only 23% of females are on a college/local team whereas 38% of men are on a college/local team. There is a high percentage, 52%, of the 721 people who were on a school team that are not on a college/local team now. This figure reflects the large number of people who stop playing sport during the transition from 6th year to first year college (See Section 3, pg. 6). The table in Appendix D.2, Table D.2.1 shows that 78% of the students that are currently on a college or local sports team were on a school team and that 34% of students not playing on a college or local sports team were on a school sports team before.
In Figure 5.2.3 below 1st years have the highest percentage (33%) of their students playing on a college/local team currently. It is therefore important to get more students involved in first year so that the percentages of students in 2nd to 4th year (final year) will be increased each year.

FIGURE 5.2.3 – Graph of Respondents on a College/Local Team now by Year of Study
5.3 Type of Physical Activity: Sport versus exercise

Respondents were given a definition of sport and exercise and then asked whether they participated in sport, exercise, neither or both. Only 36% of respondents indicated that they played sport whereas 83% of respondents exercised (See Appendix D.3, Figure D.3.1). The breakdown of types of physical activity done by students in each faculty is shown in the Table 5.3.1 below;

<table>
<thead>
<tr>
<th>Does Sport or Exercise?</th>
<th>Arts, Humanities and Social Science</th>
<th>Engineering, Maths and Science</th>
<th>Medicine, Nursing and Health Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neither</td>
<td>13%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>Exercise only</td>
<td>54%</td>
<td>41%</td>
<td>53%</td>
</tr>
<tr>
<td>Both</td>
<td>31%</td>
<td>39%</td>
<td>28%</td>
</tr>
<tr>
<td>Sport only</td>
<td>3%</td>
<td>4%</td>
<td>3%</td>
</tr>
</tbody>
</table>

The most popular form of physical activity across all faculties is exercise. The number of students in Arts, Humanities and Social Science, Engineering, Maths and Science and Medicine, Nursing and Health Science are all high respectively having 85%, 80% and 81% of their students exercising. It is clear from Table 5.3.1 above that between 13% and 15% of students in each faculty do not do any physical activity. These students account for 14% of all respondents (See Appendix D.3, Figure D.3.1). If gender vs type of exercise is examined, it is evident from Appendix D.3, Figure D.3.2 that slightly more females (15%) than males (14%) do not participate in any physical activity. Overall, 14% of respondents do no physical activity (See Appendix D.3, Figure D.3.3). Looking at Appendix D.3, Figure D.3.2 it is clear a lot more females (57%) than males (37%) solely do exercise as a form of physical activity. In the case of playing sport it is the opposite where more males (49%) than females (28%) play sport as a form of physical activity (See Section 3, pg. 6). It can be seen in Appendix D.3, Figure D.3.3 that the majority of respondents are Arts, Humanities and Social Science students who solely do exercise as a form of physical activity (20%). This same graph also shows the small minority of students who solely play sport as a form of physical activity (3%). The most common type of physical activity is solely exercising with 50% of students choosing this option. This is closely followed by engaging in both sport and exercise, 33% of respondents. The number of students who do no physical activity at all is high considering how unhealthy this is at 14% of respondents. Only 3% of respondents solely play sport as a form of physical activity (See Appendix D.3, Figure D.3.1). Upon examining which years in college may need attention in terms of not doing any physical activity (See Appendix D.2, Figure D.2.2), students in 5th year ie. their final year have the highest percentage of students doing no physical activity (23%). This of course could be largely due to the huge workload in this year of study. In contrast to this previous statistic, these students in their final year have
the highest percentage (42%) of students who meet physical activity (See Appendix D.4, Figure D.4.2). The reason for them having the lowest percentage of students playing sport out of all the other years (16%) may be largely due to the fact that they cannot give up the time to commit to a sports team.

5.4 Frequency of Physical Activity

The recommended weekly amount of physical activity as stated by the HSE in the literature review (See Section 3, pg. 6) is 5 sets of 30 minutes or more at a moderate intensity. After respondents were split into their groups according to what type of physical activity they did, they were asked how many times per week they participated in these types of physical activity so that an analysis on how many students met these standard requirements could be carried out.

Frequency of Physical Activity by Gender

When the data detailing how many times a week students exercise or play sport is examined and compared by gender, results show that more females than males do not do enough physical activity. Only 31% of females do enough physical activity per week whereas 49% of males do enough. Overall, only 38% of respondents do enough physical activity every week. Upon continuing to examine this data in Figure 5.4.1 below where a graph of frequency of activity in units as times one is physically active for at least 30 minutes is shown, it is evident that the cumulative proportion of females who exercise four times per week or less for 30 minutes ie. not meeting national requirements is 69% whereas this figure is lower, at 51%, for males. This shows that females in general need to be targeted slightly more than males in terms of doing more physical activity.

![Frequency of PA by gender](image)

FIGURE 5.4.1 – Graph of Frequency of Physical Activity per week by Gender
What Faculties Need Attention

Figure 5.4.2 below shows a breakdown of the amount of physical activity done by respondents in each faculty. The inactivity rate i.e. ‘No Physical Activity’ is highest for the Engineering, Maths and Science and the Medicine, Nursing and Health Sciences department, both having 15% of their students doing no physical activity at all. Although the workloads of courses such as these are heavy, it is ironic that this many students in Medicine, Nursing and Health Sciences are inactive as they should certainly know how important it is to have physical activity as part of one’s weekly routine. The Engineering, Maths and Science department also has the highest percentage of its students who meet physical activity requirements (44%) i.e. who are physically active more than five times per week. The faculty with the most students who do not meet physical activity requirements is the Medicine, Nursing and Health Sciences faculty having 66% of its students not meeting these requirements, closely followed by the Arts, Humanities and Social Science department with 65% of its students not meeting requirements. These faculties therefore may need to be targeted slightly more than the Engineering, Maths and Science department in terms of encouraging more physical activity.

![Frequency by faculty](image)

FIGURE 5.4.2 – Graph of Frequency of Physical Activity per week by Faculty

A breakdown of frequency of physical activity by year is also provided in Appendix D.4, Figure D.4.2. These results show that first years and students in their 4\textsuperscript{th} year of five years have the highest percentage of their students meeting physical activity requirements (41% and 42% respectively). Only 19% of the students in 5\textsuperscript{th} year (final year) are physically active more than five times per week. This is probably due to the large workload these students have but they should be educated in how physical activity can help them manage this workload in terms of dealing with stress etc.
Frequency of Physical Activity versus Timetabled College Hours

In Figure 5.4.3 below the amount of timetabled hours students had in their current year of study was compared with whether they do enough physical activity. It is shown that only 37% of students who have between zero and ten hours of college per week meet the weekly physical activity requirements. The students in this hourly category who do not meet the requirements (63%) need to be targeted as they certainly have time for more physical activity in their schedules. Laziness is more than likely a factor playing a part in the students neglecting physical activity. Only 36% of students in courses with over 31 hours of classes per week do enough physical activity. Although time constraints is probably a factor here, these students should be educated in the benefits of physical activity as a stress reliever and a refresher as students in these long hour courses need to remain calm and keep regularly active so that they are not tired and groggy when it comes to their studies. It is clear from the Figure 5.4.3 below that there was very little difference between the percentages of students in each hourly category who did enough physical activity weekly. Each category therefore needs to be targeted to improve these levels.

**FIGURE 5.4.3 – Graph of Students meeting Physical Activity Requirements and their Timetabled College Hours**
Frequency of Physical Activity versus Level of Tiredness

TABLE 5.4.1 – Physical Activity Levels versus Fatigue Levels

<table>
<thead>
<tr>
<th></th>
<th>No PA</th>
<th>Once</th>
<th>Twice</th>
<th>3 times</th>
<th>4 times</th>
<th>5+ times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very tired most of the time</td>
<td>31%</td>
<td>25%</td>
<td>17%</td>
<td>15%</td>
<td>10%</td>
<td>11%</td>
</tr>
<tr>
<td>Tired a good bit of the time</td>
<td>45%</td>
<td>51%</td>
<td>51%</td>
<td>52%</td>
<td>47%</td>
<td>40%</td>
</tr>
<tr>
<td>Tired sometimes</td>
<td>24%</td>
<td>24%</td>
<td>32%</td>
<td>32%</td>
<td>42%</td>
<td>47%</td>
</tr>
<tr>
<td>Never tired</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
</tr>
</tbody>
</table>

In the Table 5.4.1 above, tiredness is rated down as the top value being the most tired and the bottom value being the least tired. Table 4.4.1 above indicates that 76% of respondents who do no physical activity are either very tired all the time or tired a good bit of the time. A smaller percentage (51%) of respondents who exercise at least five times per week ie the recommended amount are very tired most of the time or tired a good bit of the time. Only 11% of respondents who do enough physical activity are very tired most of the time and 2% of these students claim to never be tired. Table 5.4.1 above shows that the more exercise students do the less tired they are. This is shown for example as the percentage of students that are ‘very tired most of the time’ decreases as the amount of times per week they do physical activity increases (31%->25%->17%->15%->10%: see highlighted values on Table 5.4.1 above). The number of students who exercise over five times per week who are ‘very tired most of the time’ is only 11%.

Correlation was carried out in excel to investigate the relationship between fatigue (level of tiredness) and amount of physical activity practiced. The results showed that increases in physical activity were positively correlated with decreases in levels of tiredness with a correlation coefficient of 0.3. The scatter plot in See Appendix D.4, Figure D.4.3 also illustrates this correlation.

Frequency of Physical Activity versus Distance from College

Below in Figure 5.5.4 it is shown that students who live 20-50 minutes and 50+ minutes away from college have lower percentages meeting physical activity requirements, 38% and 31% respectively. Students living on campus and living less than a 0 minute journey from college have higher percentages (41% each) meeting physical activity guidelines. Figure 5.5.4 also depicts that 19% of students living the furthest away from college ie a 50+ minute journey do no physical activity, making this the group with the highest inactivity rate.
Motivations for Physical Activity

Table 5.5.1 below shows men and women’s motivations to do sport and exercise. Respondents were asked to rate each of the factors in terms of importance. The options were ‘Most important’, ‘Very important’, ‘Quite important’ and ‘Least important’. These ratings were each given a value from one to four, one being the most important and 4 being the least important. An average value was then calculated from the responses across each category. Therefore, in Table 5.5.1 below, the importance of each factor as a motivator for sport or exercise decreases as the number increases from one to four. The graphed versions of the full breakdown of motivations for sport and exercise for both men and women can be seen in the Appendix D.5, Figures D.5.1-D.5.4.

It is clear from Table 5.5.1 that men (2.1) see competition as a more important factor in motivating them to do both sport and exercise than women (2.3). Overall, competition is seen as a more important motivator for sport than exercise across both genders (2.1-2.3 for sport vs 2.9-3.1 for exercise). Chi squared tests were carried out on the gender differences between competition, physical appearance and social reasons as motivators for sport and all of the tests had a p value of less than 0.05 indicating the differences in the gender motivations to be significant (See Appendix D.5, Table D.5.1). Upon examining Table 5.5.1 as well it is important to note that both men and women tend to enjoy playing sport more than doing exercise as enjoyment is ranked as a higher motivator for sport (1.4-1.3 for sport vs 2-1.9 for exercise).
TABLE 5.5.1 – Motivations for Sport by Gender

<table>
<thead>
<tr>
<th></th>
<th>Sport</th>
<th>Exercise</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Competition</td>
<td>2.1</td>
<td>2.3</td>
</tr>
<tr>
<td>Affiliation/Sense of Belonging</td>
<td>2.2</td>
<td>2.0</td>
</tr>
<tr>
<td>Enjoyment</td>
<td>1.4</td>
<td>1.3</td>
</tr>
<tr>
<td>Positive Health</td>
<td>1.8</td>
<td>1.6</td>
</tr>
<tr>
<td>Physical Appearance</td>
<td>2.5</td>
<td>2.1</td>
</tr>
<tr>
<td>Social Reasons</td>
<td>2.2</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Some of the responses to the open ended questions on motivation for sport and exercise were interesting such as the ones below:

“Brings you away from stresses of work and clears mind”

“Improves academic performance”

“Positive mental health and wellbeing; release of positive endorphins to improve my mood!”

The above three responses are interesting as they show some students are aware of the academic and general health related benefits of sport and exercise. DUCAC, the Department of Sport and the College Health Service should ensure all students are aware of these benefits.

“The prestige of certain sports... how it looks on your cv”

Many companies look for sports players nowadays as team orientation is very important in today’s business world. Students should be aware of the job prospect improvements of playing sport in college.

“Transportation-cycling to college. It’s a good way to clear my head and makes me feel good.”

Students should be encouraged to walk or cycle to college not only due to the academic and psychosocial benefits of physical activity but also due to the reduction in travel expenses for the students.

“Basically, I just want to lose weight.”

The above response, quoted by a female student, was one of many similar comments. These comments tie in with the analysis results in Table 5.5.1 above which shows that females are motivated to exercise and play sport by physical appearance.
5.6 Deterrents to Physical Activity

Respondents were asked what discourages them from participating in sport and exercise. They were given three options to the below factors including ‘Yes a lot’, ‘Yes a bit’ and ‘Not at all’. These factors were rated as follows: 1 for ‘Yes a lot’, 2 for ‘Yes a bit’ and 3 for ‘Not at all’ and the average rating for each factor voted by each gender was calculated. The results are in Table 5.6.1 below. The higher the rating for each factor, the less of a deterrent that factor is for men and women participating in sport and exercise. The full breakdown of responses by gender for both sport and exercise and for all respondents together can be seen in Appendix D.6, Figures D.6.1-D.6.6

In Table 5.6.1 men and women on average gave a rating of 1.6 and 1.5 respectively to lack of time as a factor for deterring sport and 2.5 and 2.4 for deterring exercise. This shows that lack of time is definitely a greater factor in discouraging both men and women from playing sport than exercising. Obviously playing a sport can involve a lot more commitment as there may be set training times and game times whereas with exercise it is a lot more flexible as one can choose when to do this in their own schedule.

Laziness as a factor for deterring sport and exercise was more or less equal across both categories of physical activity, having an average value of 1.9 for both men and women in sport and 1.8 for both genders in exercise. Referring to the Appendix D.6, Figure D.6.1, it can be seen that 29% of respondents said laziness discourages them from sport a lot and 50% said it discourages them a bit. This means 79% of respondents admit to laziness somewhat discouraging them from participating in sport. When looking at exercise in Appendix D.6, Figure D.6.2, 35% of respondents said laziness discourages them from this form of physical activity a lot and 50% said it discourages them a bit. This in total suggests that 85% of respondents are at least somewhat discouraged from doing exercise due to laziness.
TABLE 5.6.1 – Factors that Discourage Respondents from Physical Activity by Gender

<table>
<thead>
<tr>
<th>Factors</th>
<th>Sport Men</th>
<th>Sport Women</th>
<th>Exercise Men</th>
<th>Exercise Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of time</td>
<td>1.6</td>
<td>1.5</td>
<td>2.5</td>
<td>2.4</td>
</tr>
<tr>
<td>Intimidation of activity</td>
<td>2.3</td>
<td>2.0</td>
<td>1.7</td>
<td>1.5</td>
</tr>
<tr>
<td>Intimidated by group atmosphere</td>
<td>2.3</td>
<td>2.1</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Laziness</td>
<td>1.9</td>
<td>1.9</td>
<td>1.8</td>
<td>1.8</td>
</tr>
<tr>
<td>Lack of interest</td>
<td>2.1</td>
<td>2.1</td>
<td>2.3</td>
<td>2.4</td>
</tr>
<tr>
<td>Parents do not encourage me to</td>
<td>2.8</td>
<td>2.7</td>
<td>2.8</td>
<td>2.8</td>
</tr>
<tr>
<td>Distance from home</td>
<td>2.4</td>
<td>2.2</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Lack of information available</td>
<td>2.6</td>
<td>2.5</td>
<td>2.7</td>
<td>2.7</td>
</tr>
<tr>
<td>Hassle of clothes and equipment</td>
<td>2.3</td>
<td>2.3</td>
<td>2.5</td>
<td>2.4</td>
</tr>
<tr>
<td>Cost</td>
<td>2.4</td>
<td>2.2</td>
<td>2.6</td>
<td>2.5</td>
</tr>
<tr>
<td>Lack of ability</td>
<td>2.3</td>
<td>2.1</td>
<td>2.7</td>
<td>2.5</td>
</tr>
<tr>
<td>Not confident in own ability</td>
<td>2.3</td>
<td>2.0</td>
<td>2.6</td>
<td>2.4</td>
</tr>
</tbody>
</table>

According to the data in Table 5.6.1 above, the main reasons why students do not participate in sport are lack of time and laziness as these have the lowest values in the Table 5.6.1 indicating that they discourage students from the activities a lot. Chi squared tests were also carried out on this data and they revealed that gender differences between the factors ‘intimidation of the activity’ and ‘not confident in own ability’ as deterrents for sport were significant having p values less than 0.005. This means that the difference between intimidation of the activity as a factor for discouraging sport for men (2.3) and women (2.0) is probably true and not due to chance, instigating that women in general are more intimidated by sports activities than men. The same goes for men and women stating that lack of confidence in their own ability is a deterrent for sport, the test showing that women are not as confident in their own ability to do sport as men are in their ability.

When answering the open ended question on deterrents to physical activity the students said the following:

“Not having other friends/teammates to play with, not wanting to sign up as an individual.”

The answer above is representing the factor ‘intimidation by group atmosphere’ that deters some students from sport. Students should be made aware of the social aspects around joining a sports team in college. They should also be made aware that people who join on their own will be made feel extremely welcome from day one of joining.
“Commitment issues: I do not like having to attend practice at a specific day/time every week”

This student’s comment above shows that joining a team is a bigger commitment for students than exercising. This is due to the schedules for team training and match times being fixed whereas students can exercise whenever they want to. These students, who are on tight time schedules and who feel they cannot commit to a team should be encouraged to exercise regularly as an alternative and possibly play on a social team as these have less commitment involved with them.

“Finding something to be able to crack into. Having not got involved in first year it can feel very difficult to begin something a few years into college.”

The above comment supports the recommendation that students should be encouraged to join sports teams in first year so they continue to play throughout their college years.

What would encourage more physical activity?

Students were also asked an open ended question on what would encourage them to participate in more physical activity. Some responses are below;

“Having a newcomers’ week or event at gyms to encourage people who have never used the gym before and don’t want to stand out amongst the regulars.”

This student’s comment above suggests that beginners do not feel comfortable going to the gym without an induction class perhaps. Many other students stated answers similar to the one above indicating that beginner classes in the gym on a monthly basis, for example, could be good idea to get these students exercising more.

“A more disciplined approach to time management on my behalf”

The comment above emphasises that students need to be more educated in how to manage their time. This point is also backed up by evidence in the literature review (See Section 3, pg 6).

“Team members recruiting people in general to just try the sport, not necessarily join the team but just play a friendly match”

This student’s comment supports the recommendation (See Section 2, pg. 4) that a student could work with DUCAC in helping them to promote sport and exercise to other students.
5.7 Interest in Suggested Events

Respondents were asked if they would attend the following events or use the following service if the option was made available to them: a talk aimed specifically at making time for physical activity in students’ schedules; an information evening on the benefits of being physically active in college; free exercise programs being made available on the college sports centre website. The students who said they would use the exercise programs accounted for 69% of the respondents indicating that this could be a good idea for the sports centre to implement. This is broken down further in Table 5.7.1 below where it shows that 56% of students who do not do any physical activity would use free exercise programs were they made available to them. This again shows that this would be an excellent investment as it would more than halve the number of people who do no physical activity in the college. Furthermore, as can be seen in Table 5.7.1, at least 70% of respondents in all the other frequency of physical activity categories would use these programs not only increasing the percentage of students who don’t meet the physical activity requirements, but also sustaining the ones that do.

<table>
<thead>
<tr>
<th>No PA</th>
<th>Once</th>
<th>Twice</th>
<th>3 times</th>
<th>4 times</th>
<th>5+ times</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n=216</td>
<td>n=104</td>
<td>n=183</td>
<td>n=243</td>
<td>n=176</td>
<td>n=565</td>
</tr>
</tbody>
</table>
A Original Project Outline

Department: DUCAC/Department of Sport/College Health Service, TCD
Contact: Drinda Jones, DUCAC/DOS & Martina Mullan, Health Promotions Officer
Email: drinda.jones@tcd.ie
Project title: Recreational/Sport Activity involvement at third level

Client Background
DUCAC and the Department of Sport are based in the Sports Centre in Trinity College. Both areas work together for the development of Sport in College and encourage both recreational and competitive sport.

DUCAC is the governing body for approximately 50 sports clubs at the University (www.ducac.tcdlife.ie). The function of DUCAC is to further the interests of all sport in College, while particularly supporting and developing our sport clubs. DUCAC receives a proportion of Capitation money and supplements its income with bar profits from the Pavilion Bar. Clubs are funded by DUCAC on an annual basis for items such as sports equipment, coaching, affiliation fees and travel to competitions. An Executive Committee and other sub-committees manage the business affairs of DUCAC.

The purpose of the Department of Sport and Recreation (www.tcd.ie/sport) is to recognise the role played by sports in providing a rounded, well-balanced university education. The sports department personnel are committed to developing and enhancing the vibrant sporting tradition through the provision of quality facilities, services and programmes for all customers.

The Department of Sport hosts both indoor and outdoor facilities. Indoor in the Sports Centre has the following:

- 25m Swimming Pool
- Sauna and Steam Room
- Fitness Theatre
- Climbing Wall
- Aerobics Studio and Studio Cycling Balcony
- Stretch and Tone Room
- Indoor Sports Hall
- Keiser Resistance Training Room
- Squash Courts
- Treatment Rooms

In College Park, there is a grass Hockey, Cricket, Soccer and Rugby Pitch and in the summer a running track. There are Rugby, Soccer, GAA and a synthetic Hockey Pitches at Santry and Rowing Facilities at Islandbridge.
College Health Promotion Officer works between the College Health Centre and Sports Centre and aims to promote physical, mental and social well being amongst College staff and students. Critical to the promotion of all three facets of health, is participation in physical activity and/or sport. Health Promotion is particularly interested in focusing on those who are sedentary or are not meeting recommended national physical activity guidelines.

**Project Background**
It is generally accepted that physical activity confers benefits to psychosocial health, functional ability and general quality of life. There is much research about these benefits but not specifically about the involvement and buy in at third level. The Irish Sports Council have identified that physical activity has increased by 3% between 2007-2010 but how much of this increase is directed at 3rd level is not known.

There is a need both from the Department of Sport at Trinity and the College Health Service to identify student involvement in sport to highlight the demographics involved and their participation levels. This information may be used to target students in creating greater involvement in sport and a healthy lifestyle.

**Client Requirement**
To receive quantifiable information which can be used to identify why students do not get involved in sport while also giving the department to identify opportunity to target students. There is a requirement to establish the percentage of students participating and the level of that participation, identify pattern of sports participation, competitive levels and membership of clubs. Identify the reasons for participation or non participation and compare these with national trends.

**What is involved for the student?**
The students should carry out primary and secondary research about participation levels in sport and physical activity at 3rd level

- Research to identify national trends
- Carry out research in Trinity and/or other 3rd level institutions
- Identify reasons for participation and non participation in sport at 3rd level
- Identify recommendations to increase participation
Project Background and Work to Date
DUCAC and the Department of Sport are based in the Sports Centre in Trinity College. Both areas work together for the development of Sport in College and encourage both recreational and competitive sport. The primary function of DUCAC is to further the interests of students in all sports in the college. Physical activity and or sport are critical in the promotion of physical, mental and social health in college students. Research has indeed been done on these benefits but there is little material relating specifically to third level participation. The Department of Sport at Trinity and the College Health Service want to identify student involvement in sport to highlight the demographics involved and their participation levels in the hope that this information can be used to target students in creating greater involvement in sport and a healthy lifestyle.

My work to date on this project includes meeting with my clients, Drinda Jones of DUCAC and Martina Mullin, the College Health Promotions Officer, and my supervisor, Mary Sharp. These meetings were held in order to clarify the terms of reference for my project and to keep regular communication going between myself and my clients. I have also collected and studied a number of articles on which I will be conducting a brief literature review. This will help me to form my survey which, following ethical approval, is due to be sent out to various colleges in Ireland come January.

Terms of Reference
- Conduct a brief literature review on the project title
- Carry out primary and secondary research to identify national trends
- Carry out research in Trinity and/or other 3rd level institutions
- Identify reasons for participation and non participation in sport at 3rd level
- Identify recommendations to increase student participation in physical activity

Further Work Planned
I plan to have my literature review and survey completed over the Christmas break. I will be sending out my survey to Trinity and various other colleges throughout Ireland on January 15th. After one to two weeks of awaiting responses I plan to begin analysing my results.
have set a deadline of March 1st to have my draft report completed by so that I will have one month to edit it. I am looking forward to continuing work on this project.
C Online Questionnaire

Student Involvement in Physical Activity

Information

I am conducting this research in various 3rd level institutions throughout Ireland to identify reasons for participation and non-participation in sport at by undergraduates at 3rd level and then identify recommendations to increase student participation in physical activity.

This survey will take no longer than five minutes to complete and in it you will be asked questions relating to your involvement in physical activity.

You have the option to enter yourself into a draw to win one of two Vodafone Smart Tabs at the end of this survey.

Your data will be treated with full confidentiality and, if published, it will not be identified as yours.

This survey is voluntary and at any time during its completion, you have the right to withdraw and to omit individual responses without penalty. This can be done simply by clicking the exit button.

There are no anticipated risks/benefits to you.

On request, you may be debriefed i.e. given a brief explanation of the study.

The results will be published as part of my final year project in MSSS. However all data will be anonymised and you will not be identifiable from it.

In the extremely unlikely event that illicit activity is reported to me during the study, I will be obliged to report it to appropriate authorities.

DECLARATION:

I am 18 years or older and am competent to provide consent.

I have read, or had read to me, a document providing information about this research and this consent form. I have had the opportunity to ask questions and all my questions have been answered to my satisfaction and understand the description of the research that is being provided to me.

I agree that my data is used for scientific purposes and I have no objection that my data is published in scientific publications in a way that does not reveal my identity.

I understand that if I make illicit activities known, these will be reported to appropriate authorities.

I freely and voluntarily agree to be part of this research study, though without prejudice to my legal and ethical rights.

I understand that I may refuse to answer any question and that I may withdraw at any time without penalty.

I understand that my participation is fully anonymous and that no personal details about me will be recorded.

I understand that if I or anyone in my family has a history of epilepsy then I am proceeding at my own risk.

I have received a copy of this agreement.

1. Do you agree to participate in this survey?
   - Yes
   - No
2. Were you a member of a local school sports team in your final year of secondary school?
   - Yes
   - No

3. Are you currently a member of a college or local sports team?
   - Yes
   - No

4. Sport: An activity involving physical exertion and skill in which an individual or team competes against another or others eg Hockey, Rugby (matches or training) etc
   
   Exercise: Activity requiring physical effort, carried out especially to sustain or improve health and fitness eg a moderate intensity gym session, going for a run etc

   Based on the above definitions, do you...
   - Play sport only
   - Exercise only
   - Play sport AND exercise
   - Don't bother
Student Involvement in Physical Activity

Only play sport

5. How important are the following factors in motivating you to engage in sport?

- Competition
- Affiliation/Sense of Belonging
- Enjoyment
- Positive Health
- Physical Appearance
- Social Reasons

Is there anything else that motivates you to engage in sport?

6. Exercise: Activity requiring physical effort, carried out especially to sustain or improve health and fitness eg a moderate intensity gym session, going for a run etc

Do any of the following discourage you from doing exercise?

- Lack of time
- Intimidation of the activity
- Intimidated by group atmosphere
- Lack of access
- Lack of interest
- Parents do not encourage me to
- Distance from home
- Lack of information available
- Inadequate clothing and equipment
- Cost
- Lack of ability
- Not confident in own ability
- Other (please specify)

7. How many times per week do you play sport for at least 30 mins? Please note, a 60+ min session = 2 times, 90+ min session = 3 times etc

- Once
- Twice
- 3 times
- 4 times
- 5+ times

Processed by SurveyMonkey
Check out our Terms, Privacy, and Cookie policies for more information.
Only exercise

8. How important are the following factors in motivating you to engage in exercise?

<table>
<thead>
<tr>
<th>Motivating Factor</th>
<th>Most Important</th>
<th>Very Important</th>
<th>Not Very Important</th>
<th>Least Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Affiliation/Sense of Belonging</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Enjoyment</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Positive Health</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Physical Appearance</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Social Reasons</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Is there anything else that motivates you to exercise?

9. Sport: An activity involving physical exertion and skill in which an individual or team competes against another or others eg Hockey, Rugby (matches or training) etc

Do any of the following discourage you from participating in sport?

<table>
<thead>
<tr>
<th>Discouraging Factor</th>
<th>Yes, a lot</th>
<th>Yes, a bit</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of time</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Interdiction of the activity</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Intimidated by group atmosphere</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Laziness</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Lack of interest</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Parents do not encourage me to</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Distance from home</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Lack of information available</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Hassle of clothing and equipment</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Cost</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Lack of ability</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Not confident in own ability</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

10. How many times per week do you exercise for at least 30 mins? Please note, a 60+ min session = 2 times, 90+ min session = 3 times etc

- □ Once
- □ Twice
- □ 3 times
- □ 4 times
- □ 5+ times

Acknowledged by SurveyMonkey
(Your name)
### Exercise and play sport

11. **How important are the following factors in motivating you to engage in sport?**

<table>
<thead>
<tr>
<th>Competitor</th>
<th>Most important</th>
<th>Very important</th>
<th>Not very important</th>
<th>Least important</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affiliation/Sense of Belonging</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enjoyment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Appearance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Reasons</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Is there anything else that motivates you to engage in sport?

12. **How important are the following factors in motivating you to engage in exercise?**

<table>
<thead>
<tr>
<th>Competitor</th>
<th>Most important</th>
<th>Very important</th>
<th>Not very important</th>
<th>Least important</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affiliation/Sense of Belonging</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enjoyment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Appearance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Reasons</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Is there anything else that motivates you to exercise?

13. **How many times per week do you play sport for at least 30 mins?** Please note, a 60+ min session = 2 times, 90+ min session = 3 times etc.

- Once
- Twice
- 3 times
- 4 times
- 5+ times
### Student Involvement in Physical Activity

#### 4/5+ times sport

14. How many times per week do you exercise for at least 30 mins? Please note, a 60+ min session = 2 times, 90+ min session = 3 times etc.

- [ ] Once
- [ ] Twice
- [ ] 3 times
- [ ] 4 times
- [ ] 5+ times

#### Once sport

14. How many times per week do you exercise for at least 30 mins? Please note, a 60+ min session = 2 times, 90+ min session = 3 times etc.

- [ ] Once
- [ ] Twice
- [ ] 3 times
- [ ] 4 times
- [ ] 5+ times

#### Sport 2 times

14. How many times per week do you exercise for at least 30 mins? Please note, a 60+ min session = 2 times, 90+ min session = 3 times etc.

- [ ] Once
- [ ] Twice
- [ ] 3 times
- [ ] 4 times
- [ ] 5+ times
14. How many times per week do you exercise for at least 30 mins? Please note, a 60+ min session = 2 times, 90+ min session = 3 times etc

- Once
- Twice
- 3 times
- 4 times
- 5+ times

8. Sport: An activity involving physical exertion and skill in which an individual or team competes against another or others eg Hockey, Rugby (matches or training) etc

Do any of the following discourage you from participating in sport?

- Lack of time
- Intimidation of the activity
- Intimidated by group atmosphere
- Laziness
- Lack of interest
- Parents do not encourage me to
- Distance from home
- Lack of information available
- Hassle of clothing and equipment
- Cost
- Lack of ability
- Not confident in own ability
- Other (please specify)

7. What would encourage you to participate in more physical activity?

---

8. Would you attend a free time management talk specifically aimed at making time for physical activity in your schedule were it made available to you?

- Yes
- No
### Student Involvement in Physical Activity

#### Only exercise

5. How important are the following factors in motivating you to engage in exercise?

<table>
<thead>
<tr>
<th>Factor</th>
<th>Most Important</th>
<th>Very Important</th>
<th>Not Very Important</th>
<th>Least Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affiliation/Discipline</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enjoyment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Appearance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Reasons</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Is there anything else that motivates you to exercise?

---

6. Sport: An activity involving physical exertion and skill in which an individual or team competes against another or others eg Hockey, Rugby (matches or training) etc

Do any of the following discourage you from participating in sport?

<table>
<thead>
<tr>
<th>Factor</th>
<th>Yes, a lot</th>
<th>Yes, a bit</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intimidation of the activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intimidation by group atmosphere</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of access</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of interest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents do not encourage me to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance from home</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of information available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hindrance of clothing and equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of ability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not confident in own ability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

7. How many times per week do you exercise for at least 30 mins? Please note, a 30+ min session = 2 times, 90+ min session =3 times etc

- Once
- Twice
- 3 times
- 4 times
- 5+ times

[SurveyMonkey](https://www.surveymonkey.com)
**Student Involvement in Physical Activity**

**Not Physically Active or Physically active < 5 times per week**

5. Sport: An activity involving physical exertion and skill in which an individual or team competes against another or others eg Hockey, Rugby (matches or training) etc

Do any of the following discourage you from participating in sport?

<table>
<thead>
<tr>
<th></th>
<th>Yes, a lot</th>
<th>Yes, a bit</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intimidation of the activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intimidated by group atmosphere</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laziness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of interest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents do not encourage me to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance from home</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of information available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hassle of clothing and equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of ability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not confident in own ability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Exercise: Activity requiring physical effort, carried out especially to sustain or improve health and fitness eg a moderate intensity gym session, going for a run etc

Do any of the following discourage you from participating in exercise?

<table>
<thead>
<tr>
<th></th>
<th>Yes, a lot</th>
<th>Yes, a bit</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intimidation of the activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intimidated by group atmosphere</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laziness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of interest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents do not encourage me to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance from home</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of information available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hassle of clothing and equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of ability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not confident in own ability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. What would encourage you to participate in more physical activity?

8. Would you attend a free time management talk specifically aimed at making time for physical activity in your schedule were it made available to you?

- Yes
- No
15. What is your gender?
- Male
- Female

16. What University are you in?
- TCD, College Dublin
- UCD
- UCC
- NUI Galway
- NUI Maynooth
- UL
- UCD

17. What faculty do you study in?
- Arts, Humanities and Social Science
- Medicine, Nursing and Health Science
- Engineering, Maths, Science and Computing
- Business and Law

18. What is your current year of study?
- 1st Year
- 2nd Year
- 3rd Year
- 4th Year (First Year)
- 4th Year (2nd Year)
- 5th Year (First Year)

19. How many timetabled hours per week is your course in your current year of study?
- 0-10 hours
- 11-20 hours
- 21-30 hours
- 31+ hours

20. On average, how tired would you say you are on a daily basis?
- Very tired
- Tired most of the time
- Tired a good bit of the time
- Tired some of the time
- Never tired

21. How far away from your college campus do you live?
- Living on campus
- 1-20 minute journey
- 21-40 minute journey
- 41-60 minutes + journey

22. If free exercise programs were made available on your college sports website in an effort to get students more active, would you use them?
- Yes
- No

23. Would you attend a free information evening on the benefits of being physically active in college were it made available to you?
- Yes
- No

24. If you would like to be entered in the draw to win one of two Vodafone Smart Tab IIIs, please provide your email address here:

[Email Address]
D ANALYSIS OF ONLINE QUESTIONNAIRE RESULTS

D.1 Demographics

FIGURE D.1.1 - Percentage of Respondents by Faculty

FIGURE D.1.2 - Percentage of Respondents by Year of Study
D.2 School Sports Team versus College/Local Sports Team

TABLE D.2.1 – Percentage of Students who were on a School team and whether they are on a College/Local Team now or not

<table>
<thead>
<tr>
<th>Was on school team</th>
<th>On College/Local team</th>
<th>Not on college/local team</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>78%</td>
<td>34%</td>
</tr>
<tr>
<td>n=445</td>
<td>n=1113</td>
<td></td>
</tr>
</tbody>
</table>

FIGURE D.1.3 – Percentage of Male and Female Respondents

FIGURE D.2.1- Percentage of Respondents on School Team/College Team/Local Team by Gender

Page D.2
TABLE D.2.2 – Table of Respondents by Year of Study and Type of Physical Activity Practiced

<table>
<thead>
<tr>
<th></th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
<th>4th Year (Final Year)</th>
<th>4th Year of 5 Years</th>
<th>5th Year (Final Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do neither</td>
<td>15%</td>
<td>13%</td>
<td>16%</td>
<td>14%</td>
<td>13%</td>
<td>23%</td>
</tr>
<tr>
<td>Exercise only</td>
<td>45%</td>
<td>51%</td>
<td>48%</td>
<td>52%</td>
<td>53%</td>
<td>61%</td>
</tr>
<tr>
<td>Play sport AND exercise</td>
<td>37%</td>
<td>32%</td>
<td>34%</td>
<td>32%</td>
<td>29%</td>
<td>13%</td>
</tr>
<tr>
<td>Play sport only</td>
<td>4%</td>
<td>5%</td>
<td>2%</td>
<td>2%</td>
<td>5%</td>
<td>3%</td>
</tr>
</tbody>
</table>

n=404 n=376 n=343 n=281 n=55 n=31

D.3 Respondents by gender and type of PA they do

FIGURE D.3.1- Percentage of Types of Physical Activity Practiced by Respondents
FIGURE D.3.2- Percentage of Types of Physical Activity by Gender

FIGURE D.3.3- Percentage of Respondents by Faculty and Type of Physical Activity Practiced
D.4 Frequency of Physical Activity

FIGURE D.4.1- Percentage of Respondents Meeting Physical Activity Requirements by Gender

FIGURE D.3.4- Percentage of Respondents who do no Physical Activity
FIGURE D.4.2 - Times per Week Students are Physically Active by Year of Study

FIGURE D.4.3- Correlation of Fatigue versus Physical Activity Levels
D.5 Motivations for Physical Activity

FIGURE D.5.1 - Men’s Motivations for Sport

FIGURE D.5.2 - Women’s Motivations for Sport
TABLE D.5.1 - Pearson's Chi-squared Test Comparing Male and Female ratings of Motivation as factor for Sport Participation

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most Important</td>
<td>65</td>
<td>34</td>
</tr>
<tr>
<td>Very Important</td>
<td>140</td>
<td>122</td>
</tr>
<tr>
<td>Not Very Important</td>
<td>69</td>
<td>84</td>
</tr>
<tr>
<td>Least Important</td>
<td>18</td>
<td>11</td>
</tr>
</tbody>
</table>

Results:
p-value=0.01135

FIGURE D.5.3- Men's Motivations for Exercise
FIGURE D.5.3- Women’s Motivations for Exercise

D.6 Deterrents to Physical Activity

FIGURE D.6.1- Deterrents to Sport by all Respondents
FIGURE D.6.2- Deterrents to Exercise by all Respondents

FIGURE D.6.3- Deterrents to Sport by Males
FIGURE D.6.4- Deterrents to Sport by Females

FIGURE D.6.5- Deterrents to Exercise by Males
FIGURE D.6.6- Deterrents to Exercise by women
E SUBSETS OF QUESTIONNAIRE OPEN ENDED RESPONSES

E.1 Is there anything else that motivates you to engage in sport?

- Find it helps with stress and frustration levels.
- Not really
- Skill it requires
- Stress relief
- Brings you away from stresses of work and clears mind
- Improved confidence
- Improvement
- Love of the sport itself.
- Tradition
- the prestige of certain sports... how it looks on your cv
- learning a new skill
- Aspiration of professional level
- living longer, mental health
- The feeling after
- No
- Improving my skills and willpower.
- Family
- Releases stress
- Pride in team
- Learn new skills
- Keeping in Shape
- no
- Something to do
- Winning feeling
- Huge sporting community in my town
- teamwork
- The way it makes me feel-like I'm looking after myself.
- To test my own ability
- Performance satisfaction, not necessarily in a competitive manner
- An innate drive!
- It's sort of covered under 'positive health' but I exercise for stress reduction. Mental health is as motivating a factor as physical health is.
- The enjoyment of winning
- Banter
- Challenge, skills
- Winning is a great motivator.
- Feeling good about yourself
- Friendship
- De-stress from college
- Self-satisfaction, achievement
- No
- Drive to win
- Self achievement
- Stress relief
- Success
- no
- Break/release from study/pressure from college/school
- To relieve boredom or depression
- no
- Contact to nature
- Family
- no
- Improving skills
- To improve your skills/talents every time you play
- To improve my skills and too keep learning the sport i play
- Sense of achievement/self worth
- Addiction. part of my life
- Discipline
- Psychological impacts, relaxation from studies
- Sexy ladies.
- Achievement/Will to achieve
- Fitness
- Mental strength
- Tradition
- Love of the game itself
- Break from college work and stress!!
- Satisfaction when you thrive
- Something to put on my cv
- Fitness
- Money for rent
- Health
- Peer Pressure
- The joy of winning, and the enjoyment of training and exercise.
- Friends
- My boyfriend (v fit) and my cousin and her husband (Olympic gold medallist)
- Improves academic performance
- Practically born into it.
- Boredom
- Need the endorphins-helps with everyday life, studying and the fulfilling feeling after playing a match.
- Would feel lazy and unproductive if I didn't
- Structure in the week
- Sense of achievement and commitment - builds character.
- Improvement
- Being good at the it
- To make my parents proud
- Sense of achievement
- The will to win
- Achievement my goals
- Stress reliever!!!

**E.2 Is there anything else that motivates you to exercise?**

- Relaxation
- Competition between friends with regards physical appearance
- Mental health / stress management
- Mental well-being
- Health and well being
- Weight gain
- Wedding
- No
- Positive mental health
- To feel healthy
- Pressure to look a certain way
- Social pressures
- No
- Fresh Air
- I want to do the mini marathon
- Weight loss
- Helps with my sleep and depression
- Nice weather
- Friends also share common interest in health
- My bf and I go together
- Proximity to a gym or outdoor recreation area (i.e. a park)
- Relaxation
- Mental and physical health
- It helps me manage stress.
- Being unfit
- Strives off boredom
- Health and well being
- Positive mental health -
- Break from life
- To take a break from studying
- Stress Relief
- Sense of accomplishment
- Be busy
- It helps me destress
- Not really
- Watching what's around while walking, esp. by the sea.
- If I'm stressed to relax
- My muscles feeling unused
- Clear my head. By having a tired body I can focus on college work and projects
• To feel fitter
• Mental Health
• Off day from lectures/placements
• I cycle to save money
• Stress relieving
• Setting an example to my two kids
• Mental health
• Psychologically calming
• Transportation-cycling to college. It's a good way to clear my head and makes me feel good.
• To lose weight!
• Sense of achievement.
• Mental Health
• A way of de-stressing and letting off steam
• Clarity of the mind
• Reduce stress levels from college/work
• To destress
• Improve studying by keeping fit
• Sport classes that I have never tried before
• No, mainly physical appearance
• Feel good
• Basically, I just want to lose weight.
• Improves concentration and energy levels for working
• Physiotherapy
• Sense of accomplishment due to improvement.
• Mental health
• Stress relief
• Lose weight
• Releases stress (positive effects on mental health during stressful times)
• Weight loss and fitness
• Endorphins
• It relieves the stress of studying, ie. it puts me in a good mood
• Fitness, fun
• Run mini marathon
• Gain strength/fitness/stamina
• Following an exercise program
• I like teaching
• Clears the head
• I have to in class
• Life changes, eg going from single to couple or visa versa
• To feel strong
• Clearing your mind
• Mental Wellbeing
• Relaxation/stress release
• Takes my mind off coursework/stress
• Personal goals in terms of fitness
• Relieve Stress
• To be skinny
• Positive mental health
• Weight loss
• I like watching my progress, kind of like an RPG
• Relaxation
• Procrastination
• Being part of your community
• Noticeable improvement in skill/ coordination/ speed/ balance
• Stress relief
• The rush you get!
• Good for stress
• To challenge yourself. sense of accomplishment/ achievement.
• Interesting sports/ Challenging sports
• It helps alleviate depression symptoms / balances my mood.
• Stress relief
• Mood particularly negative moods
• I feel left out in my family
• Looking better and thus feeling better about it.
• Sense of achievement
• Family Health History
• Release of anxiety
• Movement itself. One should move all the time or it will become too late. Use it or lose it.
• Self improvement
• It's important for both physical and mental health
• Stress relief, sleep better
• So I can eat more without feeling guilty
• Runner's high but maybe that comes under enjoyment
• To eat without guilt
• Feel guilty if not doing it.
• Healthy body is a healthy mind. Keeps my focused for college.
• Transport
• Helps to reduce stress
• Fitness
• Weight loss
• good weather
• Mode of escape. Jogging allows me to forget and just go at a steady rhythm for a while
• Magazine covers.
• Looking good
• Friends
• Positive effect on mental health and overall sense of wellbeing
• Guilt for eating rubbish or to avoid studying
• Destress
• To have a routine around study time when its coming close to exams
• Improvement of my performance in sport is the primary motivation.
• Fitness
• Relief stress
• Distraction/break from study
• The challenge
• I feel better/happier when and after I exercise.
• Clears my head
• Training will power
• Satisfaction of being exhausted
• Being in good condition for sport
• To be better at sport
• Training for sport. Also, cycling is my primary form of transportation.
• I am doing a health science course where a lot of emphasis is put on health promotion, and meeting physical activity guidelines.....feel i must “practice what i preach”
• Relieve the stress
• Compliments Sport
• Fitness for sport
• Break from college
• Fear of what'll happen if I don't!
• Stress relief
• Positive mental health and wellbeing; release of positive endorphins to improve my mood!
• Improve in sport
• Mental health, distraction from work, de-stressing
• Relieves stress and helps relaxing
• Improving skills
• Personal improvement/ release - physical and psychological
• Energy boost during long study periods
• Routine
• Progress/Sense of Improvement and achievement
• Mental strength
• Love of being active
• Seeing overweight people who obviously don't excercise
• Prepare for sport
• Financially it makes more sense for me to cycle to college, I do it for the exercise but the financial gain is a factor
• Stress relief
• Wanting to be the best.
• An event coming up, seeing other people go
• To clear my head after studying
• Train to supplement the sports I play
• Makes me feel more energetic
• Exercise makes me feel better in general
• Sex
• To improve performance in sport
E.3 Sport: An activity involving physical exertion and skill in which an individual or team competes against another or others eg Hockey, Rugby (matches or training) etc Do any of the following discourage you from participating in sport? Other (please specify)

- Too busy with work, school work and my kids
- Inconsistent weekly work timetable
- Mostly due to massive college work load and therefore lack of time
- Regularly on placement away from main campus and thus sports facilities on campus. When rotating around the different placements it is also difficult to get into a routine.
- I hate athletic competition
- Not having other friends/teammates to play with, not wanting to sign up as an individual.
- Physical disability - fused spine (scoliosis)
- I feel like it is too late to join a sports team in college because I am at the end of my degree.
- Injury to knees and ankles
- I'm a mature student with two small kids and a husband so taking time out to play a sport or even go for a run makes me feel very selfish.
- Medical reasons
- Injury (Rugby)
- Transporting equipment especially to where there's no parking, such as college gym.
- Commitment issues: I do not like having to attend practice at a specific day/time every week
- I only engaged in group sports for fun and dislike the atmosphere of organised sports clubs. Also, my friends no longer engage in sport and I no longer do because of this.
- I work full time 5 days a week and I am am studying a degree part time 3 nights a week.
- I wouldn't want to make a show of myself to be honest.
- College has many outlets of "competitive interaction " so group sport is not necessarily the only way of feeling as part of collective effort.
- I like that I have total control over when I exercise i.e. I don't have to go when not in the mood.
- I have children so time is a factor
- Being out of shape
- Finding something to be able to crack into. Having not got involved in first year it can feel very difficult to begin something a few years into college.
- Not a competitive person, not good at skills/co-ordination
- Scheduling issues
- Fear of failure
- Disability
- Part-time job
- Disability in hands
Primary reason: training times clash with lecture times. very unfortunate
No time being main reason as part time work interferes with commitment to a sport and work is a need.
Narrow boundaries. One can only play football, when joins a football team. Most 'play' for achieving smth e.g. Leinster champions. One would rarely 'play' just to play e.g. like kids
Think it might be more difficult to find something suitable due to my age (42)
Being sweaty, having to change shower and re-do makeup etc
Weather
Specific combination of lack of ability and confidence in my own ability - Few clubs welcome beginnees
Too much commitment to join a team that has practice on a sat morning. need a break! did rowing in high school but not in ireland and here it rains way too much for me to want to row outside here. too cold and rainy.
Cliquers in teams
I don't like sweating
In TCD I would have like to play & or join the tennis club but the courts are very small and there are only 3. Not worth the money.
Suffering from ancient injury that forbid the participation to a certain number of sports
Women's sports do no equal that of men.
Injury
Ongoing Illness causing fatigue and lack of energy
I am an international student with different physical appearance and this demotivates me from joining anything sports in college.
Injury
I don't want to go on my own but it's difficult to find a friend to go with me (locations, schedules...)
Being busy with work & college
I dance 10 hours a week i dont think it falls under either of your definitions?
I am restricted as I have a problem with my spine.
Buying equipment/uniform/kits is expensive

E.4 Exercise: Activity requiring physical effort, carried out especially to sustain or improve health and fitness eg a moderate intensity gym session, going for a run etc Do any of the following discourage you from doing exercise? Other (please specify)

These answers are in response to exercising at home. Different answers would be given in reference to using a gym, eg: intimidation would be “Yes, a lot”
Feeling sick or weak
Temporary health issues
The gym in college is always packed and I don't like the hassle of showering etc in college changing rooms. trawling a gym bag around along with books and lunch etc is also an effort when u have to walk 15mins to bustop and then take a 40min bus journey. its all just discouraging but laziness is a major factor.
- Weather would discourage me from exercising.
- Naturally slim so less motivation
- Transporting equipment where there's no parking available.
- Gym is small, no free treadmills/crosstrainers
- I run so it's mostly a battle with myself to get out side and go!
- too self conscious for changing rooms in gym. window on to pearse street in college gym renders it unusable.
- I have kids so time is a factor
- Being out of shape
- Prioritising, as exercising has not ever been something necessary for me in terms of a curriculum or a team to answer to it doesn't take priority when I have other things to. I currently have final exams coming up so my exercising time has decreased by a very large amount.
- Disability
- Energy levels sometimes prevent
- The weather (e.g. rain would discourage me from running). Lack of adequate washing and changing facilities at gym
- Tiredness, lack of energy
- Lack of immediate benefits.
- Ongoing Illness causing fatigue and lack of energy
- I was not exposed to the equipments in gym and how i can use them for exercise or toning my body or any kind. plus, my culture back in my country is so much different that teenagers do not spend much time at gym or doing exercises, so the lack of knowledge is the main factor to why i do not spend time in gym. i dont even know how to swim. for anything outdoor such as jogging or cycling, the lack of time is the main factor as i need to spend more doing something related to my course and studies.
- Going to the Gym at Peak times

E.5 What would encourage you to participate in more physical activity? Other (please specify)

- I would imagine more spare time
- Less lectures and more free time!
- Cheaper costs and better times of the day, or more than once a week.
- Having a newcomer's week or event at gyms to encourage people who have never used the gym before and don't want to stand out amongst the regulars.
- If I was less intimidated by the atmosphere e.g the gym
- Later gym times, more bad teams
- free fitness classes
- I enjoy exercising privately, partitioned areas in the gym perhaps
- Lack of places to keep my kids before attending the sports centre
- More time
- A more disciplined approach to time management on my behalf
- Self-motivation
- Location
• Team members recruiting people in general to just try the sport, not necessarily join the team but just play a friendly match
• Lower cost of the gym
• None of the above
• Having a person to go along with or know a person on the team
• More spare time
• More time :(
• Hours/times that suit me better
• Lower cost
• Beginner’s courses, introductions
• I prefer running outside, but I find it unpleasant to run on Dublin streets. I would find route advice very helpful.
• Better weather and more time.
• Cost
• More friendly atmosphere, more approachable
• promotion/ campaigns that encourage positive health
• More Time
• Group training. Eg say a group organise to go to the gym each week every week at a said time. Might encourage you not to bail out of exercising/ enjoy it more with friends
• Free equipment
• What are you supposed to do in the gym? how do you breath and swim? who do I ask?
• More hours in the day!
• More free time, final year exams
• wider range of free activities in gyms or cheaper classes
• Temporary parking at the gym for people with heavy/bulky sports equipment
• More free time
• Less jerks at the Gym
• If I had more time
• Motivation by friends participation
• More time
• Just reassurance that beginners Are actually welcome
• If my gym was less intimidating( i like to swim)
• Friends doing it with me
• Cheaper
• Better showers in trinity gym and more machines
• More time available
• More time
• More time.
• If I had more time. Studies take up to much.
• If I was not so busy and tired
• I don’t know anything about the gym, afraid to go in by myself cos I wouldn’t know what to do. I've never been to a gym before, so just stick to the pool
• Free Classes!!
• Self motivation
• less college work to do
In my case none applies, as it is really down to my own efforts of actually going to the gym, ie I need more personal motivation to go to the gym
- Teams for people who aren't very good at sport
- Cheaper facilities
- I can't think of anything currently
- Sports groups aimed at beginners rather than enthusiasts
- Having a simpler less busy life
- Disability friendly programmes
- If I had more time and energy!
- Simply self motivation
- A keener interest by friends/social groups to motivate me and make exercise a more social event instead of a chore
- More time to what I wish with
- More time available
- Non-competitive/ Like ‘friendly’ matches
- More free time
- Better weather!
- Less intimidating gym, gym packed with very sporty people, too intimidating for someone who just wants to use a treadmill for 20 minutes
- The only issue would be my own motivation
- Free Classes
- Less costly, eg gym, swimming
- Encouragement, motivation.
- More free time
- More choice in my living area and offers for students!
- Closer to home
- Having more free time
- Group classes, pilates and cardio classes
- Confidence
- Time is a crucial factor
- Less of a stigma placed on not being physically fit but wanting to make improvements. I feel anxious in the gym because I'm intimidated by people who go regularly
- Sometimes wider choice is not the best option, since too many options are harmful for decision-making. Smarter planning of facilities is vital. That includes using really useful and important tools/machines (s.t. location, target market etc). Smarter and more educated stuff members are vital. They need to nurture new people's interest, so their motivation is sustained. They need to set an example as well. One can't me a fitness instructor with bmi over 20 and double digit body fat index.
- Nothing it a confidence issue
- More time
- If my friends did
- Classes based on persons fitness. So even if they are a beginner it should matter. It should be based on ability to follow the class eg. Cardio, yoga.
- More social events
- Less intimidating atmosphere
• Cheaper, closer to home
• More sessions dedicated specifically to beginners. I've never been to the gym and am intimidated by it because everyone seems to know what they're doing. Have a day just for first timers.
• If I had more time
• More time!
• More spare time
• If friends started to participate in physical activities.
• Time is the prime factor. I think and tell myself that I do not have enough time for such extra-curricular activities, when maybe I do, but work and socialising are the prime uses of my time and they both seem more important to me than exercise.
• Hate having to bring in my gym stuff and carry it around and showering at the gym since I'm a girl and takes forever with hair.
• Inner Calling
• All the resources are there for me to do more physical activity it is pure laziness that I do not
• Less college pressure to get work completed/ more free time to be able to participate in it
• More free time
• More time
• More emphasis on getting groups of friends involved
• Less intimidating atmosphere for fat people.
• More free time, more energy
• Someone as unfit as me to go with
• More time
• Having confidence
• More free time
• If I had more free time
• Time
• Time and cost
• More self motivation!
• Better facilities
• Cheaper cost
• More time available and friends encouraging
• Having the time to
• By information I mean ways to exercise properly. I am aware that there are incorrect and correct ways to exercise, and I'm wary of hurting myself.
• I am just a coward who is ashamed of how unfit they are SO if there was a class explicitly for Getting Started I would be into that.
• Time
• Nothing
• More encouragement
• If there were a team of less fit people aiming to all get gradually fitter.
• fitness groups akin to those set up temporarily under the operation transformation program.
• Personal motivation
• None
• Better organised semester
• Sport practice where my health issues would not be a problem
• Better weather for outdoor walking
• Halls is quite far from the gym! If it required less effort to get to the gym I would probably go more often,
• If it would be closer to my house
• Health scare
• Low cost ways to exercise at home.
• If there was a co-operative atmosphere i.e. with friends.
• Personal motivation
• Need more outdoors stuff
• Nothing really!
• Friend participation/ motivation
• Not being so tired!
• A timeturner
• It’s my own choice, I’d like to get involved in rugby as i used to play it when i was in secondary school but due to size I’d rather not get trampled
• Age
• None of the above
• If I was more insecure about my body or worried about my health
• More non-competitive sports teams/groups for those who want to keep fit and have fun
• Just getting up and doing it
• Having an apartment on campus
• Having someone to share that with me
• A cure for laziness
• More free time from coursework
• More time and less hassle involved. Also, I walk everywhere and eat a healthy diet so I don’t feel the need to participate in more physical activity for the sake of my health.
• I get quite nervous going to the gym when there are lots of other people there, because i only know how to properly use a few machines. I think i’d go a lot more if i knew it'd be quiet there.
• If i was fitter
• Time
• More free time
• more information about gym atmosphere
• Self confidence increase
REFERENCES


- HSE national guidelines for physical activity. Available at http://www.hse.ie/eng/services/healthpromotion/physicalactivity/, 1st April 2013


- Matthew Y. W. Kwan, PhD, Guy E. J. Faulkner Phd, 2011 *Perceptions and Barriers to Physical Activity During the Transition to University*. American Journal of Health Studies 26(2), pp.87-96

- Marcus Kilpatrick, PhD, Edward Hebert, PhD, John Bartholomew, PhD, 2005 *College Students’ Motivation for Physical Activity: Differentiating Men’s and Women’s Motives for Sport Participation and Exercise*. Journal of American College Health, Vol.54, No.2, pp.87-94


- *(1) Do Men like Sport and Physical Activity that is Competitive more than Women?*- available at Trinity College Health Centre

- Associate Professor Ferhan Soyeur, PhD, Dr Demet Unalan, PhD, Dr Ferhan Elmali, PhD, *The Relationship Between Physical Activity and Fatigue in Vocational College Students*. International SportMed Journal, Vol11 No.3, pp.345-355.