

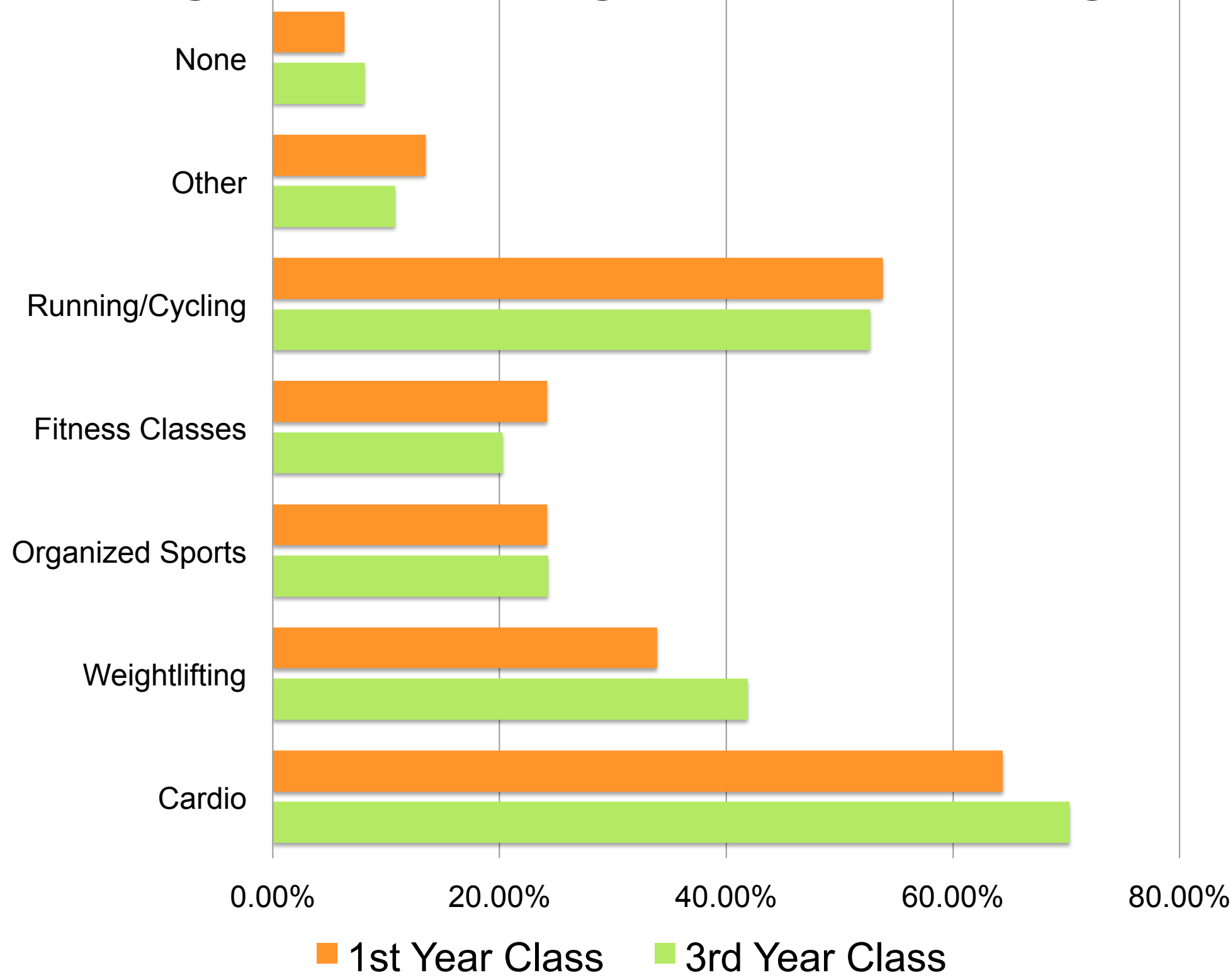
# Student well-being: Further studies on physical activity by undergraduate students

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## Introduction

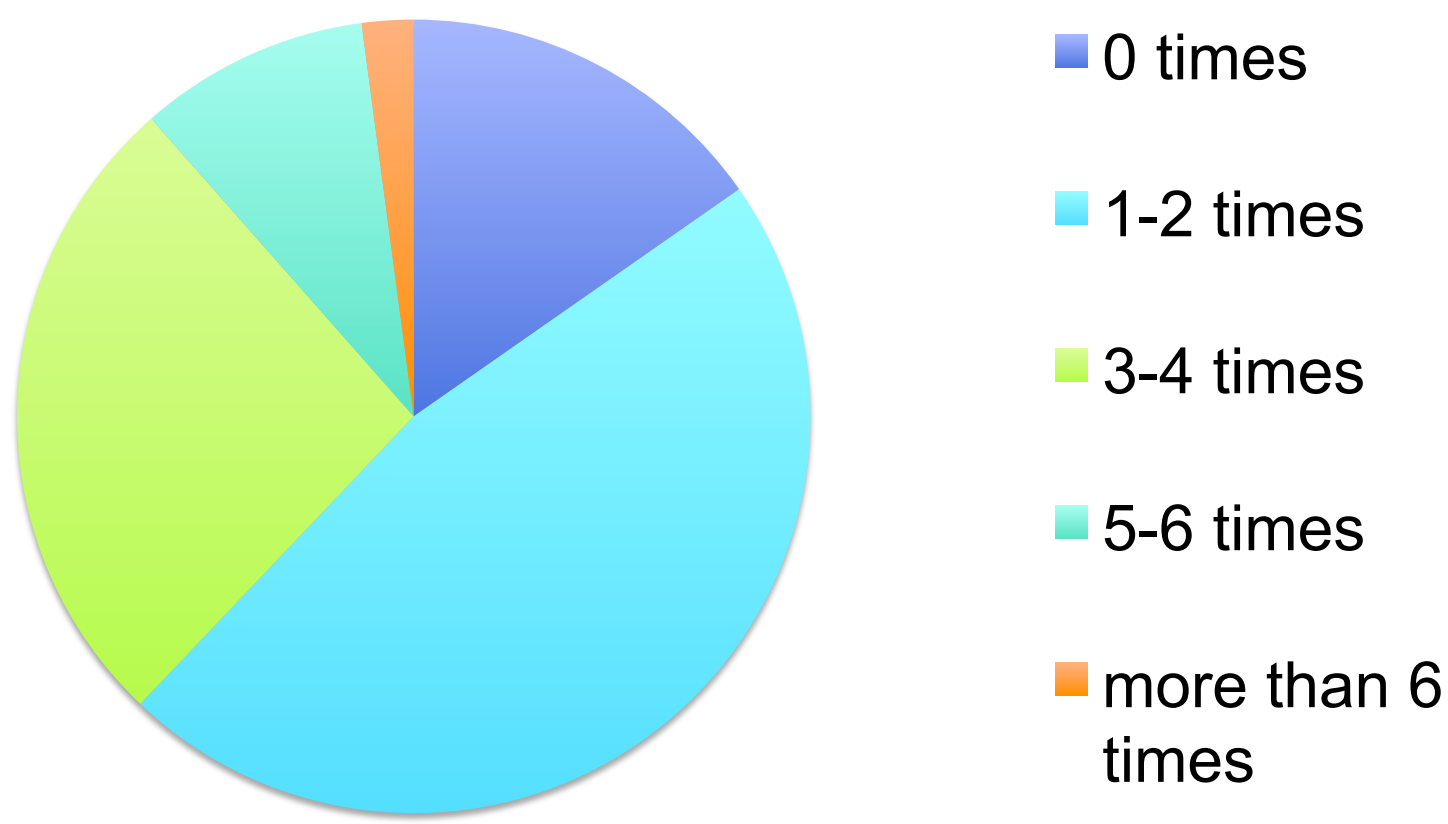
The Canadian Physical Activity Guidelines recommend at least 2.5 hours per week of moderate-to-vigorous-intensity aerobic physical activity plus muscle and bone strengthening exercises at least 2 days per week. This level of physical activity is not met by many students at the University of Ottawa (Doniya Quenneville; Winter 2014 UROP recipient). This research project compares levels and types of physical activity between first year and third year students to determine if third year students have developed better time management skills that allow them to incorporate more exercise into their busy schedules. Additional goals were to explore perceived impediments to the regular use of university facilities as well as ways in which the university could promote and facilitate physical activity. The conclusions from this research provide some ideas for realistic ways in which the University can better promote physical activity on campus with the ultimate goal of improving the overall health of many students and enhancing their academic experience.

## Types of Physical Activity



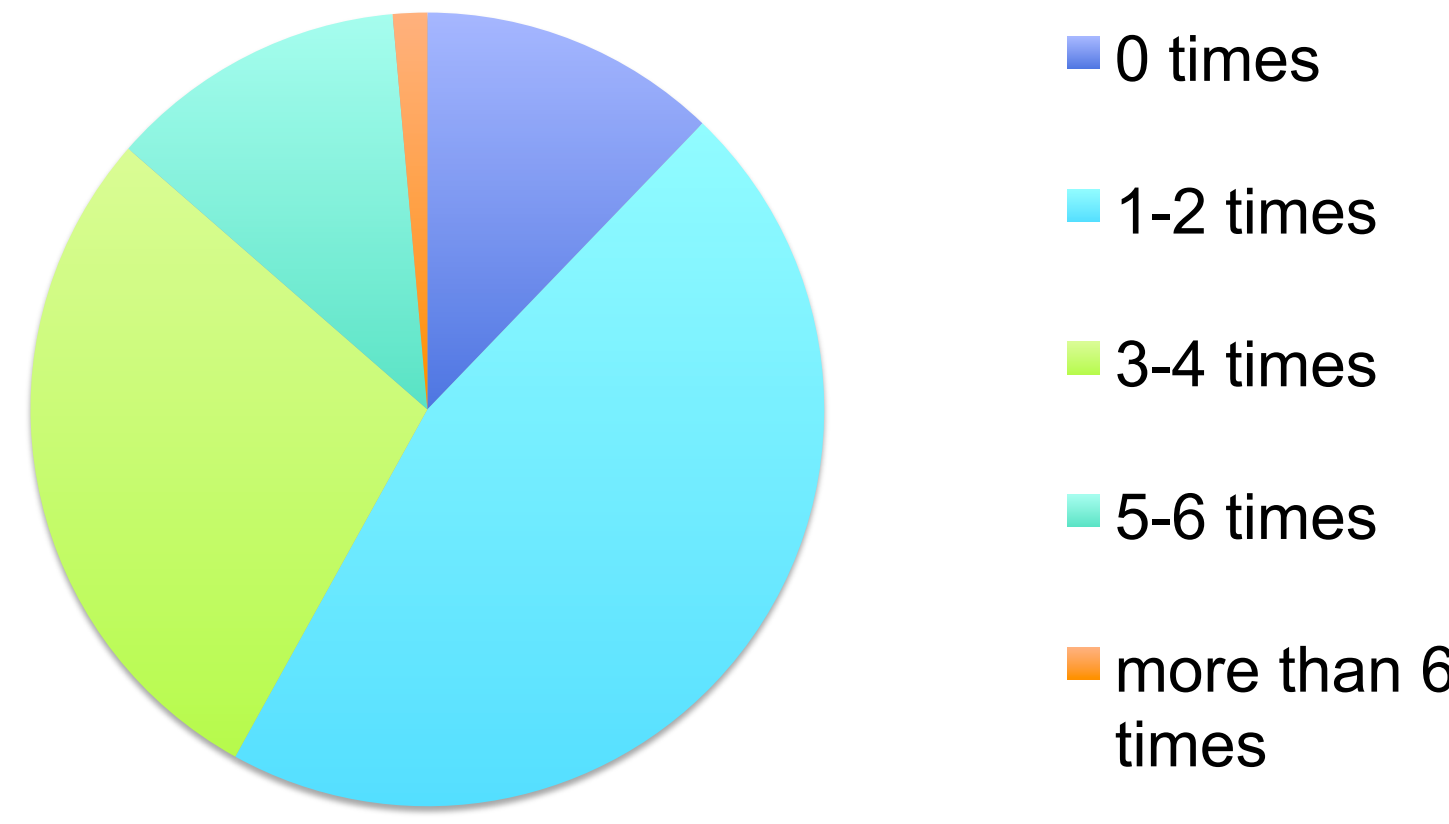
**Figure 1.** Students were asked to select all types of physical activity that they participate in. There is a broad distribution, but both classes are similar.

## Number of Times 1<sup>st</sup> Year Students Exercise Per Week



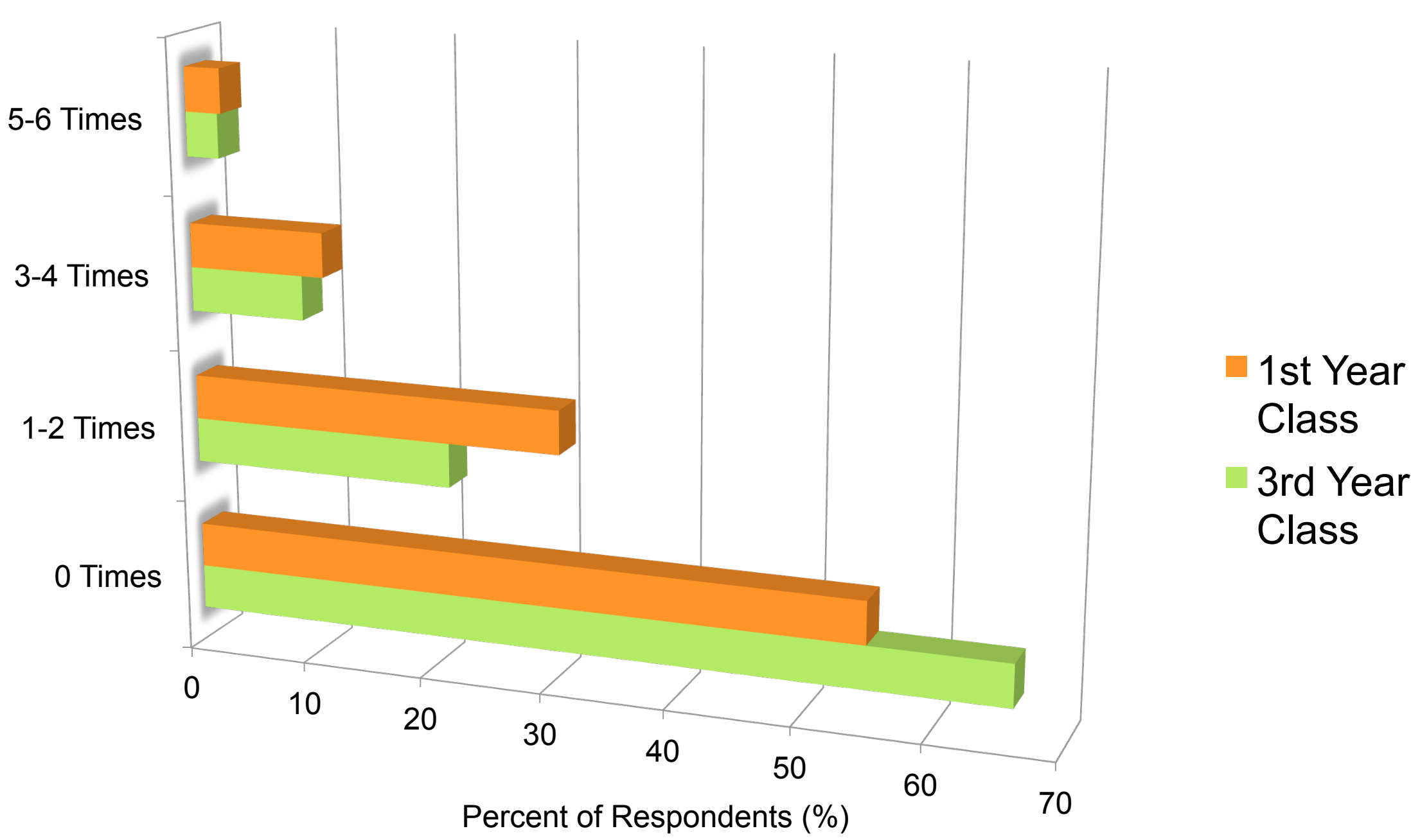
**Figure 2.** 47% of first year students exercise only 1-2 times per week, and 15% do not exercise at all.

## Number of Times 3<sup>rd</sup> Year Students Exercise Per Week



**Figure 3.** A greater percentage of third year students exercise 3-4 and 5-6 times as compared with first year students. Overall, there is no significant difference in the number of times first and third year students exercise per week ( $p = 0.935$ ).

## Number of Times Students Use University Facilities Per Week

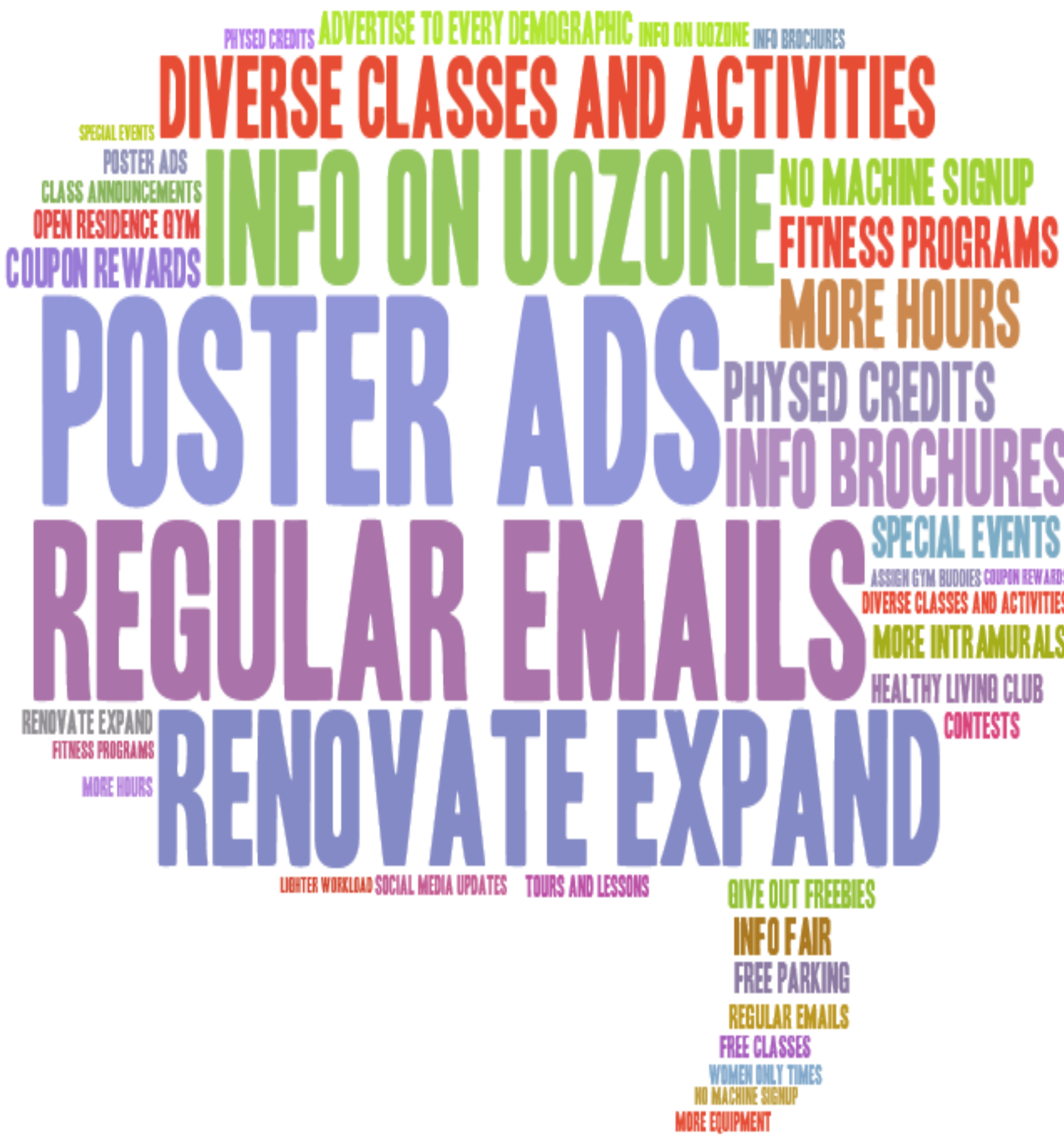


**Figure 4.** 55% of first year students and 66% of third year students say they do not use the University of Ottawa exercise/sports facilities at all.

## I believe... (%)

|                                                                                      | Strongly Agree/Agree |                      | Neutral              |                      | Strongly Disagree/Disagree |                      |
|--------------------------------------------------------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------------|----------------------|
|                                                                                      | 1 <sup>st</sup> Year | 3 <sup>rd</sup> Year | 1 <sup>st</sup> Year | 3 <sup>rd</sup> Year | 1 <sup>st</sup> Year       | 3 <sup>rd</sup> Year |
| I have good time management skills                                                   | 54.6                 | 70.3                 | 28.1                 | 24.3                 | 17.3                       | 5.4                  |
| I do not work out as much as I would like to because I have trouble managing my time | 52.4                 | 33.8                 | 21.2                 | 20.3                 | 26.4                       | 45.9                 |
| I would exercise more often if I had more available time                             | 87.4                 | 78.3                 | 10.0                 | 16.2                 | 2.6                        | 5.5                  |

**Table 1.** Students were asked to rate their agreement with the 3 statements above. There is a significant difference between the first and third year students' ratings of their time management skills ( $p=0.02$ ). An additional question for third year students, not shown above, indicated that 78% of third year students believed that their time management skills had improved since their first year of university.



**Figure 6.** Suggestions from both first and third year students as to how the University of Ottawa can better facilitate/promote physical activity on campus. The most frequent suggestion was sending students regular emails with information about classes and activities offered. Other popular proposals included having poster advertisements on campus, and renovating/expanding the exercise facilities.

## Methodology

Two large classes of undergraduate students were compared in this study; one first year ( $n=236$ ) and the other third year ( $n=74$ ). Both classes were surveyed within the same week. The data collected included demographic information (sex, age, year of study, residence, etc) as well as other information such as membership on teams, types, timing, locations, and duration of physical activity. A set of open-ended questions explored barriers to the use of University facilities and solicited suggestions as to how the University might promote more participation in programs of physical activity. A set of Likert-based questions assessed student's perception of their time-management skills and their possible influence on physical activity. The collected data was analyzed statistically for frequency of responses and independent-samples t-tests were used to compare means between the two student populations.



**Figure 5 (A, B).** Word Clouds A and B show why first year and third year students, respectively, do not use the University of Ottawa exercise/sports facilities. The biggest factors for first year students were time constraints and too much schoolwork/studying. On the other hand, most third year students say that the gyms are too crowded. Common issues for both populations were lack of time, crowdedness of the facilities and busy with studies.

## Conclusion

Most students are aware of the university exercise facilities available to them. Despite this fact, more than 60% of students do not use them at all. Overall, first and third year students are very similar with regard to exercise patterns and reasons for not using these facilities regularly (overcrowded gyms and lack of time). Although there is no significant difference in the amount of times first and third year students exercise per week, third year students do believe that their time management skills have improved over their years of studies – therefore, they should devote more of their time to exercise. Realistic ideas for ways in which the University of Ottawa can promote exercise on campus include updating students with regular emails and advertising on campus. Also, renovating or expanding the existing facilities in order to motivate students to make use of them would likely increase student's physical activity levels and their overall well-being.

## Contact Information

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## References

The Canadian Society for Exercise Physiology. 2015. *Canadian Physical Activity Guidelines (18-64 years)*. Retrieved February 1st, 2015 from <http://www.csep.ca/english/view.asp?x=949>