

Written Report

Project Active Lifestyle (PAL)

Group 4-39

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Abstract

Our project, Project Active Lifestyle (PAL), is catered to HCI students who are not physically active. These include students who are not in sport CCAs or do not exercise regularly. Hence, through this resource package, we hope to encourage healthy lifestyle in them through an online website as our resource.

1. Introduction

1.1 Rationale

An article by Ministry of Health, 2014, states that Singapore views good health as a top priority and an “important dimension in ensuring a good quality of life”. Given the detrimental consequences on Singaporeans’ health in the long run, obesity is a key concern that must be tackled. Furthermore, childhood obesity creates significant financial strains on households and society, as the lifetime medical expenses for an obese teen could reach US\$19,000 more than that of a healthy weight child (Finkelstein, 2014).

1.2 Objective and Target Audience

The objective of PAL is to help youths adopt an active lifestyle so that they can live healthily and happily. The target audience for this project is mainly HCI students who do not exercise regularly and/or engage in any vigorous sport activities. These students often do not get enough exercise, compared to those in sports CCAs who can easily get enough exercise hours during trainings.

1.3 Resources

As such, we have created posters and a website to provide information and tips on how to maintain a healthy lifestyle. The website includes videos such as an exercise video and an informative whiteboard video about the importance of leading an active lifestyle, as well as multiple posters.

2. Literature Review¹

Currently, there is a rising trend of childhood obesity globally, with the proportion of obese children increasing by about 60% in the past 20 years. This is especially pronounced in developed nations, where the prevalence of childhood obesity is 11.7%, compared to 6.1% in developing countries. Similarly, Singapore's childhood obesity rates have increased significantly from 2.2% in the 1980s to 15.9% in 2012 (AsiaOne, 2014). Obesity poses physical health concerns to children, facing long term exposure to risk factors of heart disease and stroke, like diabetes and high blood pressure, thus increasing their likelihood of suffering from these conditions in their adult years (Dr Stanley Liew, an endocrinologist in Raffles Hospital, 2014).

Nowadays, younger age groups are more prone to illnesses like ischaemic heart disease, as compared to the past (Lee Y.S, 2014). One reason for this is that in Asia, obese kids are still seen as cute. In Asia, many still consider it cute or part of growing up to be obese when young. Another reason is that parents constantly overfeed their children. Indeed, one mistake that parents often make is to provide unhealthy snacks, such as potato chips, sweets and sweetened beverages, constantly available (Dr Barathi Rajendra, 2014). In terms of mental health problems, obese children and teens are more likely to be bullied and suffer from self-esteem issues.

Physical activity increases people's total energy expenditure, which can help them stay in energy balance or even lose weight, as long as they do not eat more to compensate for the extra calories they burn (Harvard Health). Obese children are

¹ Sources in 6. References

likely to stay obese during adulthood and are more prone to health problems (Khalik, 2016). However, obesity can be easily prevented by practicing healthy lifestyle habits, which are effectively sustained into adulthood if cultivated from young (Plante, 2012). Furthermore, when children and teenagers have a pleasant introduction to exercise, the habit is likely to continue into adulthood (Tan.B, 2015), therefore we chose teens as our target audience.

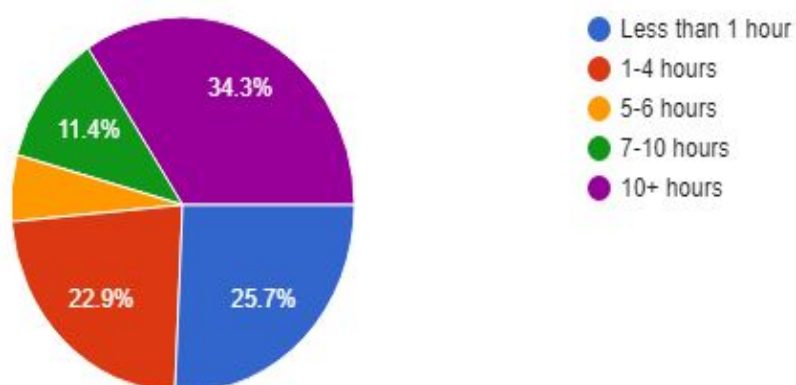
3. Methodology

3.1 Needs Analysis

We conducted 2 surveys to find out about the concepts and ideas respondents have on active lifestyle. The questions asked were about the time one spends on exercising, the advantages of an active lifestyle, and disadvantages of not having one. Through these questions, we concluded only 45% of our respondents met the recommended hours of exercise, while over 25% admitted to having less than an hour of exercise per week, taking into account that students may miss PE lessons, and do not have them over holidays. It is evident from the needs analysis survey that HCI students are not getting enough exercise and there is a strong need for our product.

How much time do you spend exercising in a week on average?

35 responses



3.2 Creation of Resources

The second survey we did was to determine the best way to present the solution. Respondents were asked to rate the different forms of resource such as poster, comic book and website on a scale of 1 to 5, with 1 being the least appealing and 5 being the most appealing. The highest scoring type of resource was a website, followed by videos and thirdly, a poster. Hence, we concluded that our resource would be a website, containing videos, and posters.

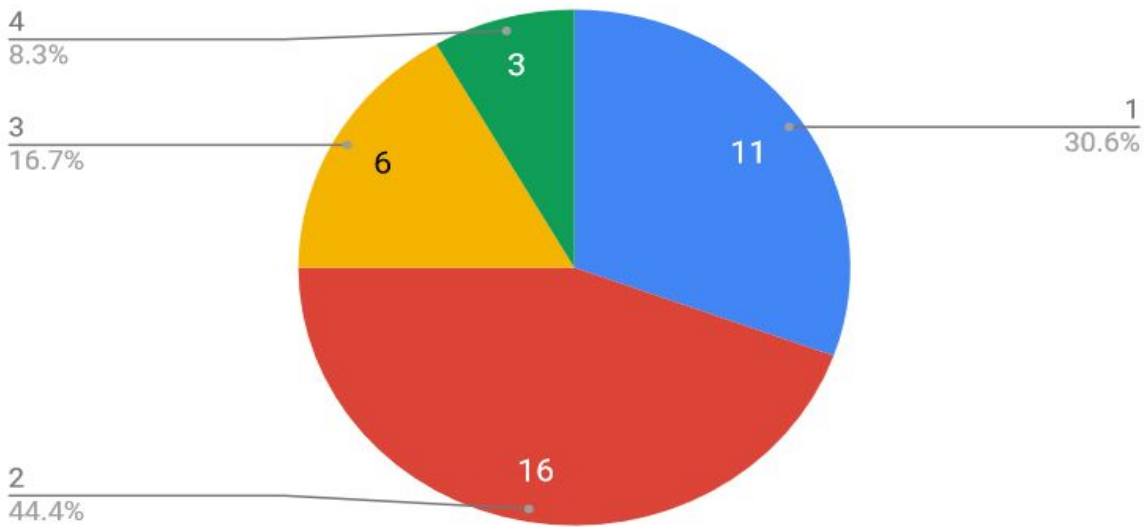
We have chosen to package our project as online resources because youths tend to spend more time online. In a research conducted by Pew Research Center, 89% of surveyed teens said they were online “almost constantly” or “several times a day” (Pew, 2018). As a result, a website can reach more of our target audience. We used wix.com to create our website for midterm evaluation, but eventually used HTML to create the content of our website. For the posters, we used PosterMyWall. The video was filmed in a home setting and a nearby park.

The pilot test was conducted in June, and the respondents were HCI students. This group of teenagers had a mix of active and inactive teens.

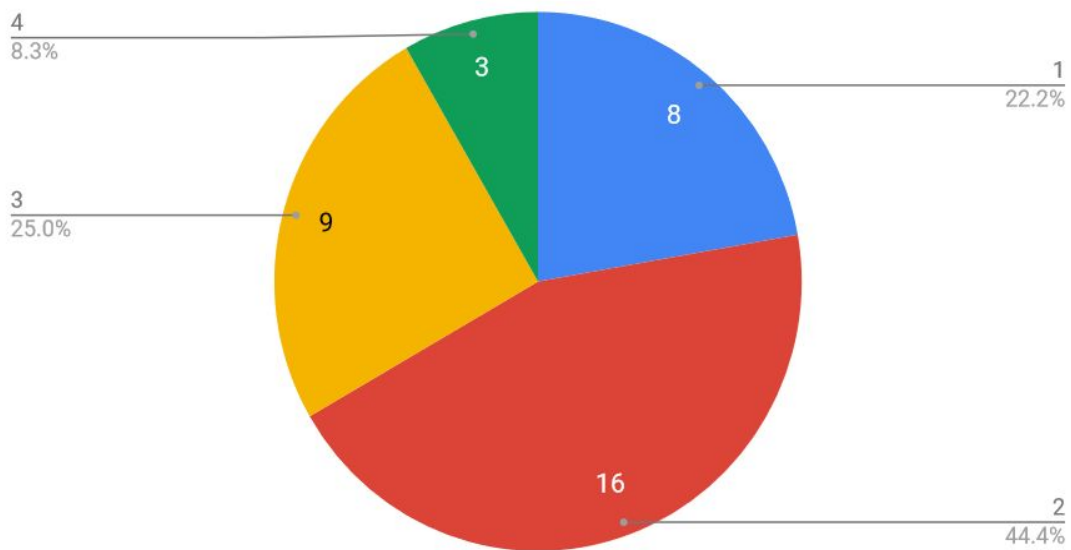
3.3 Pilot Testing

The pilot testing of our website was carried out on HCI students, mostly non sports CCA students. They were asked to use our website rate their understanding of an active lifestyle, and whether they would adopt an active lifestyle, before and after using the product.

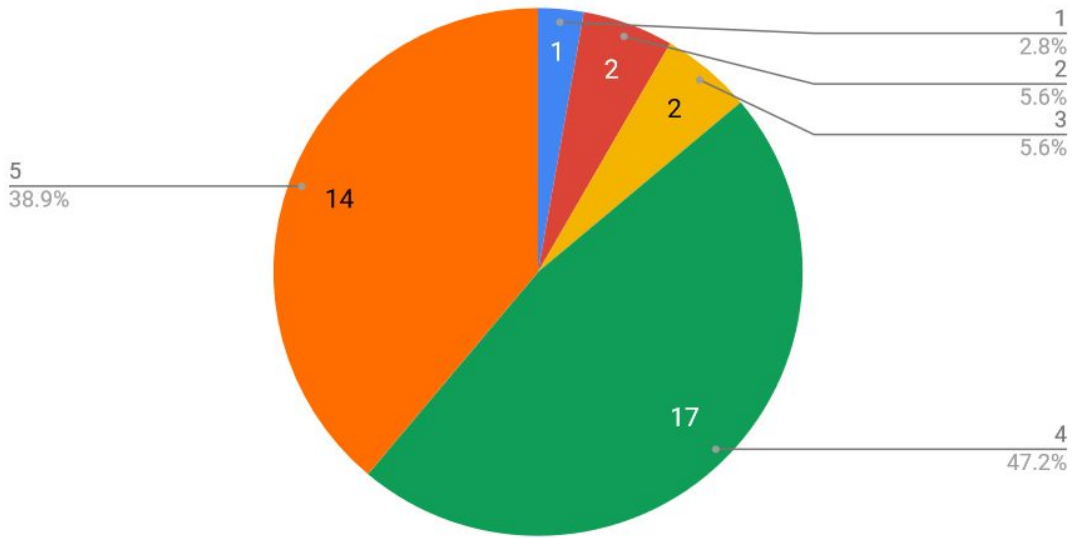
I had an active lifestyle before using the product (Strongly Disagree - Strongly Agree)



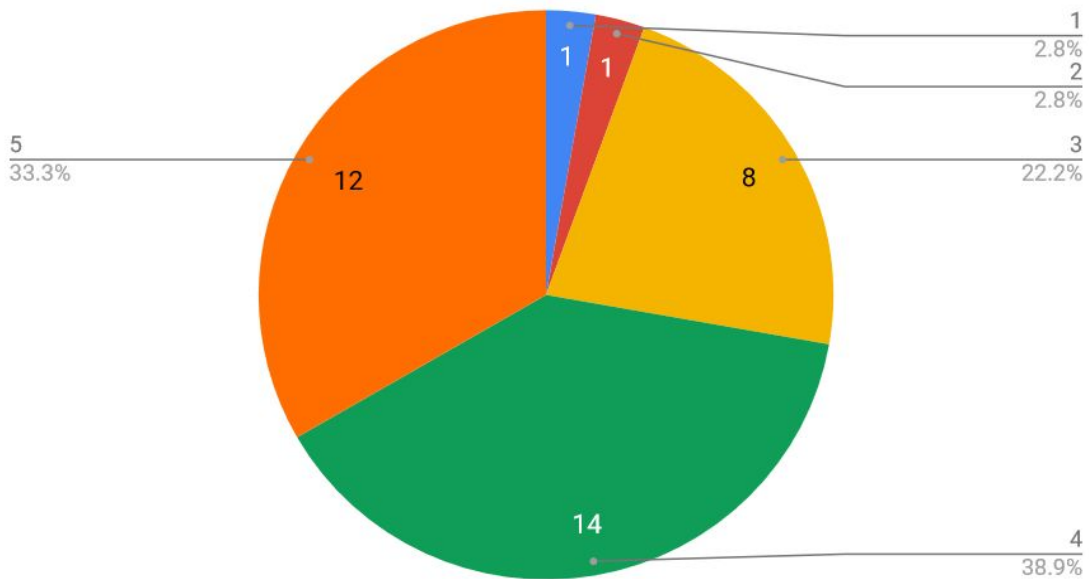
I understood the importance of an active lifestyle before using the products (Strongly Disagree - Strongly Agree)



I understand the importance of an active lifestyle better after using the products



I will adopt an active lifestyle after using the products

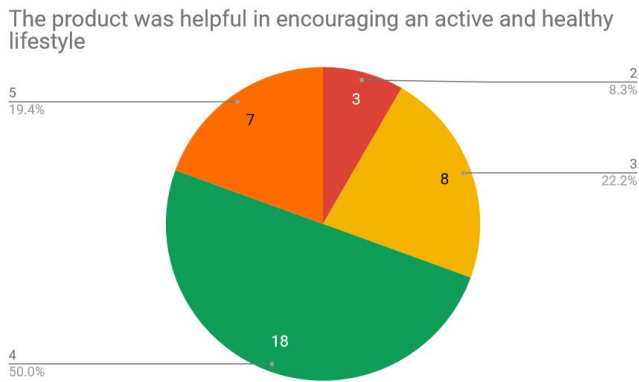


The results were positive, and majority of participants benefited from our product. They also said that it was interesting and interactive.

4. Outcome and discussion

4.1 Outcome

To determine the outcome of our project, we conducted a survey to find out if the respondents had gained knowledge through our product.



This graph shows that our product(website and poster) has been mostly successful encouraging an active lifestyle. About 50% of respondents rated the usefulness of our product as 4 out of 5. Thus, our product was useful in achieving its objective.

4.2 Limitations

The main limitation of our product is that teenagers may be unsure of locating the website. Not much publicity was done, and not many knew of the website. Future projects can publicise their product through social media etc..

Some students will be motivated to lead an active lifestyle for a while, but may return to their previous sedentary lifestyle due to lack of motivation or time. Also, most health lessons learnt at a young age are forgotten after 2 years (Bacon, 2006). As our resource package focuses only on youths and not older age groups, it may be unsustainable and cannot completely curb the problem of inactive and unhealthy lifestyle.

4.3 Suggestion for Further Research

To address the problem of adopting active lifestyle, we can further extend our product to those of other age groups, like adults and primary school children, by

customising our strategies to appeal to the age groups, through developing alternative resources such as games for younger children.

Our product includes crucial information that HCI students can enjoy and learn from. However, we do acknowledge that the website might only be a short term solution and does not change people's mindsets in the long term effectively. A possible solution is to provide a checklist of things to do over a long period of time instead of just suggesting exercises to be done at home.



Our posters also can be made into booklets with guidelines for exercising and healthy eating. These booklets will provide more information and accessibility for users to track their own progress. Future projects can create such booklets which can be used concurrently with our resources to better achieve the objective.

5. Conclusion

5.1 Skills Acquired

In conclusion, our website which aims to encourage a healthy and active lifestyle in HCI students is successful in achieving its objective. Along the way, we learnt many valuable skills and lessons. One useful skill was advanced video and audio editing. The process of making the whiteboard video was tedious and required

some technical knowledge that we did not possess, and only through some self learning were we able to complete the video.

5.2 Challenges

Additionally, we encountered a few obstacles along the way. An example of a major one is the lack of coordination with each other, due to personal commitments and time constraints. Meetings were difficult to organise, and rarely was everyone working together at the same time. Role distribution was also ineffective. This was only partially resolved, resulting in unequal workloads. Such problems can be avoided in the future by more effective communication and higher work efficiency during limited meetings. Teamwork is a key aspect of project work that is not to be forgotten.

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