

CAT 4 RESOURCE DEVELOPMENT

Group 4-35

ACTIVESG FOR HAPPY HEALTHIER PRESCHOOLERS

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ABSTRACT

ActiveSG for Happy Healthier Preschoolers is an integrated resource package, made to teach preschoolers how and why to have a good exercise and diet and to lead a healthier lifestyle. The name “ActiveSG for Happy Healthier Preschoolers” was thus chosen for this project. We made an app, a video, a poster, a comic and an online portal as we believed these mediums can be the best way to reach out to preschoolers. All of these are archived in our online portal. As for the app, it has many functions for the preschooler and their parents to learn together, The video is an attractive and appealing way to teach the preschoolers through animation. The comic and poster is made to appeal to the preschoolers.

1 INTRODUCTION

1.1 Rationale

When researching ideas for this project, we found a problem with some preschools and their students and that was that many of them seem to neglect the importance of exercising and having a good diet. Even resources that were already made had a lot of problems. We decided that if we do not target people when they are young, the problem may worsen as they grow up, causing future generations to lead an unhealthy lifestyle. Thus, we decided to embark on this project. We believed that this was more than just a project, but an opportunity for us to make something for the community.

1.2 Objectives

- To promote an active and healthy lifestyle for preschoolers

- To encourage preschoolers to have a healthy diet and exercise regularly

1.3 Target audience

- Preschoolers (4-6 years old)
- Parents of the preschoolers

1.4 Resources

1. App
2. Video
3. Comic
4. Poster
5. Online portal

2 REVIEW

1. Fitness board game
 - Aimed towards children aged 6 and up
 - Amazon Review: “gets repetitive after a while”
 - Does not show importance of exercising
 - Only helps with exercise

2. Children Gyms

- Expensive (~\$40)
- No interaction unless you sign up for the course with a trainer
- Only in some areas of Singapore

3. ActiveSG

- Very little programmes for preschoolers
- Most programmes only aimed towards exercise through dance
- There is a fee
- No courses on diet

4. Pre-school programmes

- “Preschool children to get one hour of physical activity a day.” (Straits Times, 2016)
 - “Among primary, secondary and ITE students, only 10 per cent engage in physical activity of 60 minutes or more per day” (TodayONLINE, 2017)
 - Does not teach importance of exercise
 - Only applies to full-day, government pre-schools
- Healthy Meals in Pre-schools Programme
 - Does not teach importance of good diet well.

5. Exercise comics

- Not age appropriate

3 METHODOLOGY

3.1 Research and methodology

To ensure that this package benefits the community and is needed, we did research from many sources, including conducting an interview with 3 preschool teachers, Mrs Petrine Tan (from “Red Schoolhouse”), Ms Yvonne Tan (from “Little Village”) and Ms Carol Wong (from “Workplayz Montessori”). Also, we did our survey with 30 preschoolers.

Our research proved that this product is needed.

3.2 Needs analysis

A survey was conducted with 30 preschoolers to see if there is a need for this project.

The options available were in a likert scale and these were the questions:

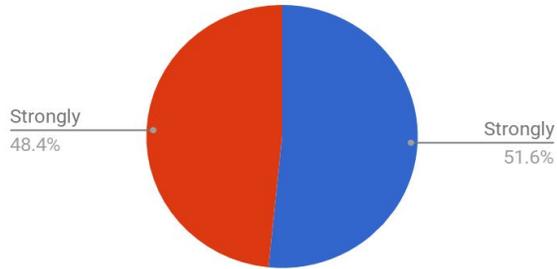
1. I exercise only when my parents remind me.
2. I play sports (like catching or football) more than three times every week.
3. I know what exercises are the best for fitness.
4. I know how to exercise without getting hurt.
5. I know when to exercise.
6. I know the bad effects that will happen to me if I do not exercise regularly.
7. I eat one or more whole fruits (like apple, orange, banana) every day.
8. I prefer to eat fruits and vegetables to fried chicken or french fries.
9. I prefer drinking water to canned drinks.
10. I like to eat fruits as snacks.
11. Half of my plate for lunch and dinner is made up of vegetables.

Based on our results, we learnt that there is a need for our product.

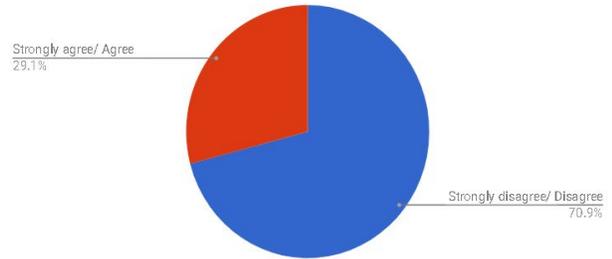
Key points:

- 77% do not know when to exercise
- 72% do not know the effects of not exercising
- 77% do not have half of their plate filled with vegetables every meal.
- 70% preschoolers do not know how to exercise effectively

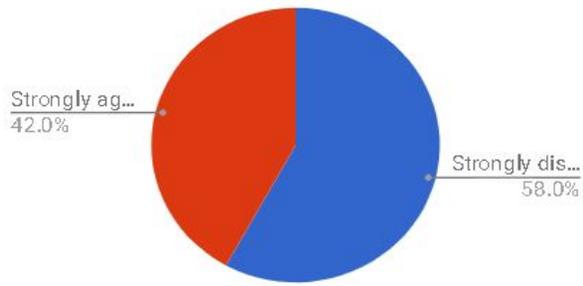
I exercise only when my parents



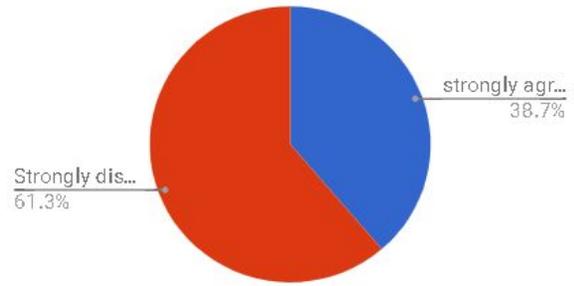
I know the bad effects that will happen to me if I do not exercise regularly



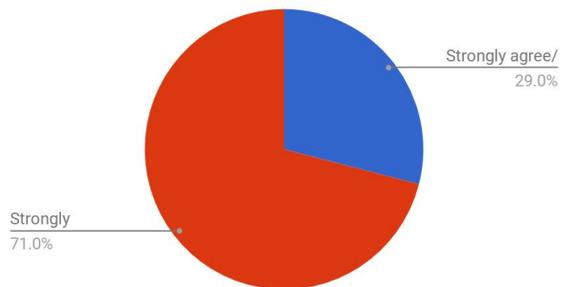
I play sports (like catching or foot...)



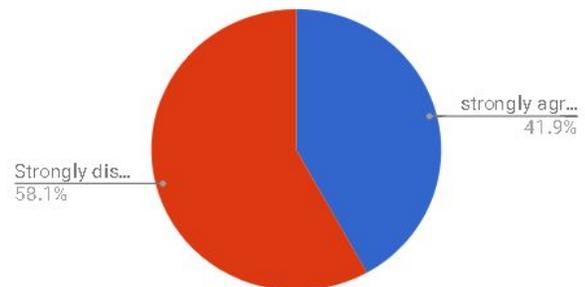
I eat one or more whole fruit (like...)



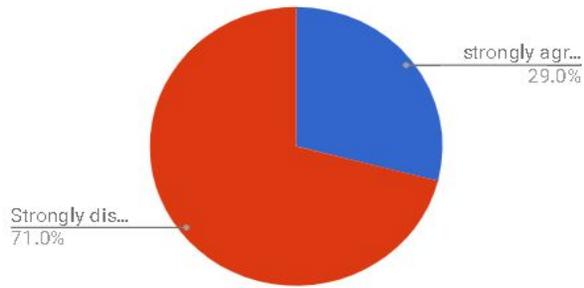
I know what exercises are the best for



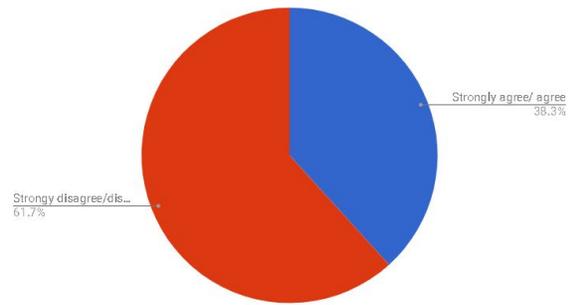
I like to eat fruits as snacks



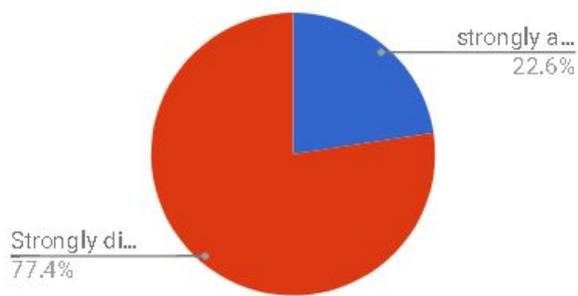
I prefer to eat fruits and vegetables t...



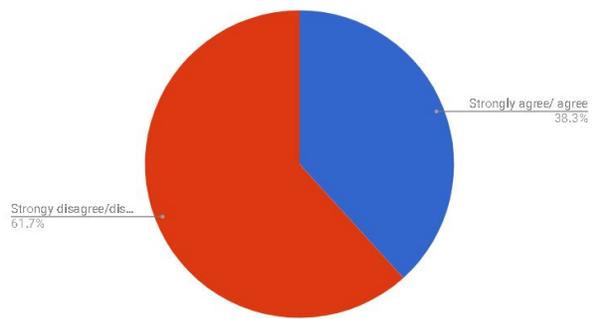
I know how to exercise without getting hurt



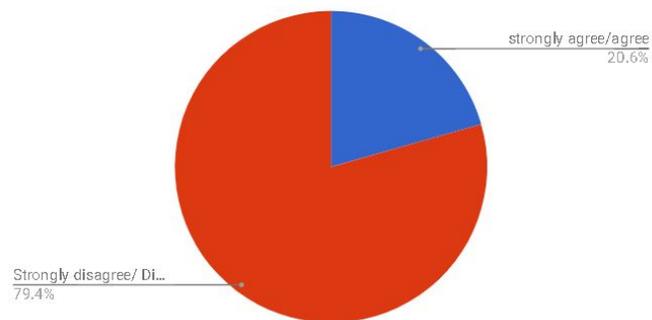
i know when to exercise



I know how to exercise without getting hurt



Half of my plate for lunch and dinner is made of vegetables everyday



3.3 Research:

- “Only 42% of Singaporeans exercised at least once a week, down from 50% in 2005” (MCCY,2015)
- “10% of 5 year olds in Singapore are overweight (Straits Times, 2017)
- “15% of Singapore's population obese by 2024, if left uncurbed.” (Straits Times, 2017)
- “only about one-third of all childcare centres in Singapore - or 427 - are complying with the Government's guidelines on healthy food for preschoolers,” (Straits Times, 2016)

3.4 Interview

We conducted an interview with 3 preschool teachers, Mrs Petrine Tan (from “Red Schoolhouse”), Ms Yvonne Tan (from “Little Village”) and Ms Carol Wong (from “Workplayz Montessori”)

Here are the question and answers:

Interview

Question: In the preschool curriculum, is sufficient attention devoted to teaching your students how to exercise?

“About 30 mins set aside for playing at the playground everyday.”

Mrs Petrine Tan, Red School House

“Introduction of exercise through nursery rhyme and playtime. Time spent on such activities is no more than 20 mins during the 3.5- 4 hour curriculum”

Ms Carol Wong, Workplayz Montessori

Question: In the preschool curriculum is sufficient attention devoted to teaching your students how to have a healthy lifestyle?

Hardly time devoted to having a healthy lifestyle.

Mrs Petrine Tan,
Red School House

There is a module on healthy food & nutrition for children but this may not be observed by preschools due to budget constraints

Ms Yvonne Tan, Little Village

The exercises are in the form of getting the kids to move and stretch their limbs. The key here is to want to kids to develop motor skills.

Ms Carol Wong,
Workplayz Montessori

Question: How do you think the exercising scheme for the kindergarten you are working in can be improved?

There should be more time given for exercises in the school in addition to playing at the playground. Eg. more dance & drama activities during school hours

Mrs Petrine Tan, Red School House

An exercise scheme will be beneficial to the children

Ms Carol Wong,
Workplayz
Montessori

3.5 Development of Resources

For the video, we used PowToon to create it. It is about a superhero, Mr Fitness, learning how and why to have a healthy lifestyle with his friends. We used superhero

characters as it will attract preschoolers.

As for the app, we used a resource called Appypie.

For the comic, we used Pixton, a comic maker to make an educational comic, showing how Jake, the main character, starts to learn how to have a good diet and why he should exercise. We used children for this comic to make it more relatable.

We made a poster with BeFunky to tell preschoolers to have a healthy lifestyle. The characters are cute fruits saying a simple tagline, as we believed the poster had to be simple.

Lastly, everything is archived in our online portal that we made with Wix.

3.6.1 Pilot test 1

A pilot test was administered to 33 preschoolers. A demo was shown to the parents. We used a survey to ask for feedback, which were incorporated into the fine-tuning of the product. Generally the feedback was positive:

- ~70% of respondents liked our video
- ~72% of respondents liked our app
- ~69% of respondents liked our comic and poster
- ~69% of respondents benefited from the package
- ~69% of respondents were overall satisfied with our product

Altogether, we have proven this package is useful but needs more refinement according to the feedback:

- App
 - Underdeveloped
- Video

- Speech bubbles overlap sometimes
- Some words used were too difficult
- Animation issues
- Poster and comic
 - Low image quality
 - Some words used were a bit too difficult
- Online portal
 - Layout not very good

These were fixed before our next pilot test.

3.6.2 Pilot test 2

Following the refinements, we conducted another pilot test, which gave us positive results. We made sure the preschoolers understood our package. We also made sure that they understood what was being taught by adding a new question. We had 31 respondents and these are the results:

- ~80% of respondents liked our video
- ~80% of respondents liked our app
- ~80% of respondents liked our comic and poster
- ~81% of respondents benefited from the package
- ~81% of respondents were overall satisfied with our product
- ~87% of respondents understood what was being taught
- 100% believe that there has been an improvement since the last time they used it

Thus, we have improved our products and they are suitable for release .

4 OUTCOME & DISCUSSION

Altogether, we believe our project was a success and we have learnt much from this project. We decided to publish this project officially after our finals. However, there are refinements to make which we fixed:

- App
 - More emphasis required for aesthetics (fixed mostly)
 - Some exercises were not suitable (fixed mostly)
 - Bugs (fixed)
- Video
 - Animation issues (fixed)
- Poster and comic
 - Some words used were a bit too difficult (fixed)

5 CONCLUSION

This project has always been difficult to us, due to many factors. However, through this project, we believe we have learned the importance of teamwork, tenacity, compromise and hardwork. If we could do this project again, we will watch out more for time management, as we spent much time doing unproductive work. Having teamwork, resilience and hard work was essential.

6 ACKNOWLEDGEMENTS

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- Ms Quah Lee Hwang for guiding us throughout the project.
- Preschoolers and their parents for helping us with the needs analysis and pilot test.

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