School of Professional Education and Executive Development (SPEED)

The Hong Kong Polytechnic University

Integrated Study submission for the award of the

Bachelor of Science (Honours) in Applied Sciences

A study on how somatosensory game using motion controller can encourage HongKongers to do more exercise

Final Report

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Number of words: 3678 words

Submission date: 22nd April, 2016

Integrated Study Report Declaration Form

I, Chan Kwan Wing (student no: 14011142S), hereby declare that the Integrated Study report, the title of which is A study on how somatosensory game using motion controller can encourage HongKongers to do more exercise , submitted on **22nd April, 2016** for PolyU SPEED programme(Bachelor of Science(Honours) in Applied Sciences), is my work and that, to the best of my knowledge and belief, it reproduces no material previously published or written, nor the work of other students, nor material that has been accepted for the award of any other degree or diploma, except where due acknowledgement has been made in the text.

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Table of Content

Abstract

As HongKongers is very busy nowadays, they do less sport every week. This research want to find out some technology that can help to motivate HongKongers to do or learn sport in the home. Somatosensory game using motion controller is one of the technology that can help on this situation. Therefore, this research finds out some past research, information of some of the motion controller and do a survey in the Internet to find out how it can help the HongKongers. Finally, this research has suggest some recommendation for the development.

Keywords

Somatosensory game, motion controller, learning sport, Hong Kong, Kinect, Wii

1 Introduction

HongKongers are very busy nowadays. They too often work hard in the office and have no time to do exercise. According to Lai (2012), less than 40% of adults and elderly respondents do more than 30 minutes of moderately intensive exercise three days a week. The main reason of the exercises is “lack of time”, “too tired” and “laziness”. Another survey in 2013 by the University of Hong Kong’s Public Opinion Program for HKU’s School of Public Health discovered that 49.5 percent of the respondents failed to meet the standard of the World Health Organization, which requires at least 150 minutes of moderate-intensity sports per week. These reason is only an excuse to them for not doing exercise. Therefore, it is not a good situation to Hong Kong. If everyone keep on not doing enough exercise, Hong Kong would become a “fat city” and the medical expense of government would be bigger and bigger. This study want to help on this situation.

Somatosensory game is a new technology these years. These game use motion controller to capture the player movement and finish the task in the game. Therefore, these technologies can help on learning sport. The motion controller can capture the movement of the user and the system can compare to the expert of the sport and give a feedback to user. User can learn from the sport to improve the skill of the sport. As it is easy to learn at home and on any time, HongKongers can use it for learning and doing more exercise.

2 Objective and Outline of Report

This research has 4 main objectives. First, this study want to discover that the definition of a somatosensory game and the feature of the motion controller. Second, this research want to know that how these games with motion controller can help the user to do more exercise and easily learn the sport. Thirdly, this study would create a questionnaire to find out some user requirement, for example, type of the controller, expect price. Finally, the study would create a proposed framework based on the result for HongKongers.

This research would be start by some literature review and find some journal that they may have similar research like the journal talked about in the literature review part to discover that how they use the motion controller to create the somatosensory games to help the research group to learn or doing exercise. After that, this research would also try to have a research on different motion controllers and have a comparison between them. As different motion controllers may have different features and this research want to know that is fit and suitable for the situation.

After the research on other work, this research would be start to create some prototypes that is based on the Hong Kong living situation and the habits of HongKongers. As most of the idea from the previous research is from the foreign country, it may be different to Hong Kong. Therefore, this research want to focus on Hong Kong and provide a solution to HongKongers. This research would also find some

volunteers to try on the prototype to test on the advantages and limitation to the prototypes by interview them after using it. This is very important for further research and development.

3 Literature Review

3.1 How motion controller encourage user learning sport

This study would like to discover some similar research on the motion controller that can help on playing sport. There are different approach for the previous research.

According to Ganesan and Anthony (2012), they build a prototype with Kinect, which is a motion sensor built by Microsoft. They found five older adult to test the prototype. After they use the prototype, three of them start to exercise with the recommendation of the doctor or therapist. Although the prototype may not been the main reason for the focus group to continuous to do more exercise, it is the first step for them. This research would want to further find more on this topic and want to develop a prototype for the Hong Kong situation.

There are another prototype developed by Kinect. According to Cassola and Morgado et al. (2014), they have created a prototype to help the research group to do the gym. They build an online system, which the research group can login with their Kinect and do the gym together with other online. They discovered that it is possible to help them on the gymnastics activities. HongKongers love to do gym and it is possible to do some more research on this topic in this research.

Professional dancer can also use the motion controller to practice dancing. According to Chan and Leung (2011), their research is a self-learning system for dancer with Virtual Reality (VR) with motion capture technology. A virtual teacher would be stay in the system to teach the participant using VR and some feedback and score would display in screen. The result shows that there is a significant difference before and after the training. Also, the system motivate the participants to learn more in dancing in the future. The idea is same with this research.

Motion controller also can help patient to do some exercise in the rehabilitation period. According to Lange and Chang et. al. (2011), their research create a prototype base on the Microsoft Kinect to help the patient, who are stroke, TBI and SCI, to do some rehabilitation activities. Also, there are 10 clinician to help on giving some feedback of the prototype. Overall in the result, the prototype is successful that the participants fell challenging and fun to the prototype and it helps on the rehabilitation. The clinicians also existed about the use of this type of technology within the clinical setting. It shows that the motion sensor may not be useful for normal people, but also to the patients.

This is some of the example of using motion controller to help on encouraging learning sports. However, what is the best practice for HongKongers. This research wants to find out more.

3.2 Comparison of Motion Controller

There are different motion controller with different approach. This research would like to find out that how these motion controller can capture the movement of people.

The first type of controller is on-hand controller. It is a very traditional motion controller. There are two part for detecting the movement. One of the sensor is connected to the device and a remote hold on the hand of the user. Two part connected with wireless. When the user move their hand, the sensor notice the movement of the remote and it is also the movement of the user.

The most popular example of these kind of controller should be Wii Remote. This is designed by the Nintendo, a Japan company that produce game console. According to IGN website (No Date), the Wii Remote use Bluetooth to connect to the device. User can hold the remote and the infrared capture the movement of the remote. User's movement area is about 10 meters around the sensor of the device to keep the connection This remote is designed for the game console, called Wii, of that company and supported 4 remote used in the same time. As the remote is on hand, the movement of the leg cannot be captured and the company designed a balance board that is accessory of the game console. The balance board has 4 pressure sensor and can captured some motion like jumping.

Figure 1 - Wii Remote on hand
(Nintendo, No date)

Figure 2 - Wii remote balance board
(Nintendo, No date)

Another example would be PlayStation Move. It is designed by Sony, which is another company form Japan. The method of capturing the movement is different to Wii. On the head of the controller has a light ball. According to PC World (no Date), the device has a small camera to capture the movement of the light box. Therefore, when the user move the controller, the camera would be detect the movement of lightbox. The controller has also a Bluetooth connection to transfer for other information, like the efforts of the movement. However, the user cannot turn around or move

Figure 3 - PlayStation Eye
(Sony, No Date)

Figure 4 - PlayStation Move
(Sony, No Date)

out of the camera as the camera cannot get the light ball and it is a limitation to this controller.

There are another type of the motion controller use camera to capture user movement. The camera and other sensor will capture the user and it can analyse the video and get the movement of the user.

The common example of these kind of controller is the Microsoft Kinect. It was announced in the 2011. It has a camera and some motion sensor which can capture the user view. According to Microsoft (2016), Kinect's key features includes body tracking, depth sensing, 1080p colour camera, new active infrared (IR) capabilities. Also, Microsoft has developed a software development kit for developer to develop application for Xbox 360, which is a game console developed by Microsoft, and Windows platform, which is OS platform also developed by Microsoft. This is also the popular motion controller for the developer.

Figure 5 - Microsoft Kinect 2
(Microsoft, No Date)

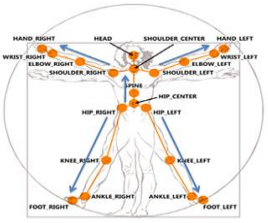

Figure 6 - Point that Kinect detect
(Microsoft, No Date)

Another example is the Asus Xtion Pro. This is a similar sensor type to Kinect. It was introduced by Asus. The feature is similar to Microsoft Kinect. Also, the sensor is similar to the Kinect. However, there are a different between Kinect. It support different OS with OpenNI SDK. (Asus, No Date) In other words, the developer can create the application in different device.

Figure 7 - Asus Xtion Pro
(Asus, No Date)

These motion controller has their own feature and disadvantage. This research would want to find out more about it and find out one solution that is suitable for HongKongers. Below table has a comparison these controller.

	Wii Remote	PlayStation Move	Kinect	Asus Xtion Pro
Type	On-hand controller	On-hand controller	Camera controller	Camera controller
Hand motion capture	YES	YES	YES	YES
Foot motion capture	NO	NO	YES	YES
Support platform	Wii game console	PlayStation game console	Xbox 360 and Windows	Windows, Linux
API	NO	NO	First-party	Third-party
Detecting area	10 m	Where the camera can detect the light ball	Around 6m	Around 6m

4 Questionnaire design

According to Francese, Passero and Tortora (2012, May), they have doing a research on comparing Wii Remote and Kinect in human-computer interface. They have designed two system called Wing and King. Wing system is developed using Wii Remote and King System is developed using Kinect. After that, they designed a usability test to test two system with two navigation tasks. The participants need to complete the navigation of the paths involving Italian cities.

This research want to do a similar data collection based on the research on the above. Therefore, a questionnaire to HongKongers has drafted for this research. The questionnaire would want to find out the acceptance and usability of two controller, Wii Remote and Kinect, to the HongKongers in sport area. The questionnaire is posted in the Internet. All the respondents click to the link to finish the questionnaire. The questionnaire has three parts. The first part is about the habit and learning experience of sport to the respondents. As there are different in motivation to learning sport to the respondents that who are doing more or less sport in the past, the motivation to try a new method to learn sport may also different. The second part of the questionnaire is based on two controllers. The respondents watch the video of the controller and answer some questions to comment on the controller. The questions include the usability and price of the controller. The last part asked for the personal information of the respondents. The full questionnaire is attached in the appendix.

5 Data Collection

The questionnaire posted in the Google Form platform. This research invites some of the students and lecturers from SPEED, which is a college in Hong Kong to join to fill the questionnaire. Also, there are some from the Internet. Finally, 36 respondents has finally finished the questionnaire. They all finished the whole questionnaire and all are valid. 28 males and 8 females are involved. 30 of them are 18-30 and 6 of them are 30-50. The respondents are mainly the teenagers and adults. These people are very busy on their study or work and they have no much time to do exercise. Therefore, these respondents are the suitable one for the research.

Sex	M: 30 (83.33%)	F: 6 (16.66%)
Age	19-30: 30 (83.33%)	30-50: 6 (16.66%)

The result from part one found out that the respondents has not do many sport. Half of them do less them 1 hours in a week and rest of them (44.44%) do 1-2 hours in a week. The most favorite sport among the respondents are jogging and ball game. For the learning experience of the respondents, most of them (94.44%) use less than 6 months to learn one kind of sport. They think that practice and perseverance are the most important factors in learning sport. For the money of learning sport, most (83.33%) pay HK$1000 or below for learning sport. For the rest of them pay more and they only pay HK$1001-5000.

	Wii							Kinect						
	1	2	3	4	5	Mean	SD	1	2	3	4	5	Mean	SD
Q1	6	2	10	14	4	3.22	1.24	8	4	4	16	4	3.11	1.39
Q2	4	8	6	16	2	3.11	1.17	8	2	6	16	4	3.17	1.36
Q3	6	10	12	8	0	2.61	1.02	8	8	6	4	10	3	1.55
Q4	4	4	12	14	2	3.17	1.08	4	4	10	14	4	3.28	1.16
Q5	4	12	4	8	8	3.11	1.39	8	4	6	12	6	3.11	1.43
Q6	8	4	4	16	4	3.11	1.39	6	4	8	14	4	3.17	1.28
Q7	6	8	14	8	0	2.67	1.01	10	6	8	8	4	2.72	1.39
Q8	10	10	10	4	2	2.39	1.18	10	8	14	2	2	2.39	1.13

This is a table that show the result of same questions of two different device, which are Wii and Kinect. These question asked the respondent are agreed to the statement and there are 5 scale on the questions. The fist statement is that the respondent can learn sport with this approach independently. For this statement, most of the respondent are agreed on two device. However, the range of the answer are widely that means the respondent has some of the different opinions. The second statement is that the device is useful on helping the respondent to learn sport. The respondent also agreed on two device. However, the respondent are mainly agreed on the Wii, but they have different opinion on Kinect. The third statement is that the respondent can concentrate on learning not playing when they using the above device to learn sport. The respondent mainly feel strongly agreed on Kinect but natural on Wii. The fourth statement is that the interaction with the device when learning sport seem natural. They are agreed on this statement in two device. For the fifth statement, which is that the respondent like to use the device to learn sport because it saves time and effort in transportation, and the sixth statement, which is that the respondent like to use the device to learn a sport because they can practice in any time they want, the two statement are very similar and the respondents are also agreed on the statement mainly. The seventh statement is that the device can still help the respondent to learn sport using leg like football. The respondent feel natural to Wii but they mainly strongly disagreed on the Kinect. The last statement is that if the device and software cost about a price, the respondent would try to buy one for learning sport. The price is a market price to buy both the hardware and software in Hong Kong. They are disagreed that they don't want to try on the device.

6 Findings and Discussions

As there are time limit, the survey only can do in a small sample size. The result of the survey may limit. For the habit of doing sport, the result are similar to the result from the introduction. They don't do much exercise. Some of the respondents reported that they even don't like to do any exercise. However, according to World Health Organization (WHO, 2016), they suggested everyone should do 60 minutes physical activity every day especially teens. This is not an alert for Hong Kong. The respondents are mainly the teens in Hong Kong and are the future of Hong Kong. This is why this research wants to step more for HongKongers.

For the comparison of two device part, the respondents respond similar opinion to two device but there are some interesting findings. They all think that the devices can help them to learn sport and they can

also do it independently. It means that the motion controller can help the HongKongers to learn sport. It is a good step to use the device to help HongKongers in learning sport. The respondents feel better experience in Kinect. They can use Kinect on learning and not playing and the interaction is more natural. Therefore, this research suggest Kinect as a better device for HongKongers. However, there are interesting findings that the respondents feel strongly disagreed on helping to learn sport with legs using Kinect, but they think it is OK on the Wii. As the survey only give a video to the respondents to watch and the video didn't forces on the device function on foot. As Kinect is using camera, the camera can detect the foot motion. Therefore, the respondent didn't notice on that. The last questions is about the money. As most of the respondents are students, they don't have much money, the range may be low for the real situation. Therefore, a further research should be done for seeing the situation to other groups.

There are a few different limitation to this findings. The sampling size of the questionnaire is too small. As the limits of time and resources are used, the research can't find more people to do the questionnaire. Therefore, the result may have some limitation on making a good conclusion. Another limitation is that the respondents may not have experience on these device and they can only get the situation in the video. Therefore, the respondents may not know the real situation of using these device and they may choose the wrong answer in the questionnaire. If the questionnaire can be done after the respondents use the device, the result would be more accurate.

7 Recommendation System Development

Kinect is the recommend device for developing the device for HongKongers to learn sport because of the previous research, main function and the opinions from the survey. The platform of the development should be Windows. As Windows is the biggest computer OS platform. Nearly every computer use this OS and therefore user didn't buy a special running device and save some money. Also, Kinect has a C# and C++ API. C# API should be chosen as it is more support by Microsoft and the features in Kinect can totally use.

As the development of these system to Kinect is like a game, only a score is shown when finished the game. It is not enough for learning. As the score cannot shown any improvement to the user, the user may doing errors in next time. Therefore, if the user get error in the motion, the system should have a message that to alert him to do better. Also, the expert motion should display so the user can easily to follow. Figure 8 show an example of the UI. This is the recommendation on the UI of the system.

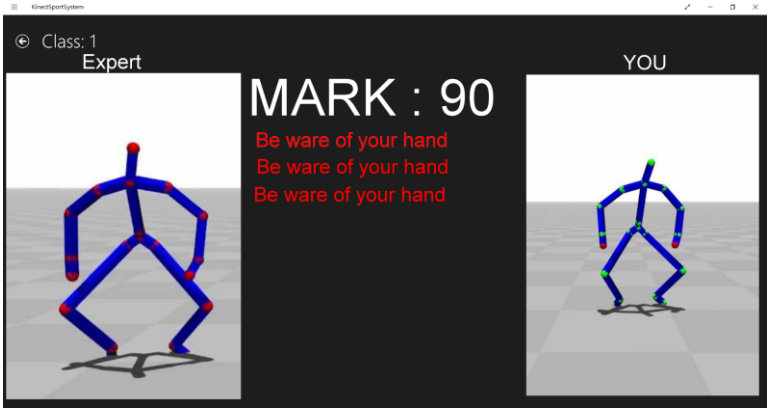

Figure 8:Example of the UI

Another important things that should be aware in the development is that how the system should detect the motion. As the motions in some sport are critical. The detecting point of each motion should be same as the expert. Therefore, communication to the expert is important. The expert should tell that what the most important point in that motion is. Therefore, the system can focus on these area of body. This is important that the user has correct motion and when they play the sport in real, the motion is also correct.

This is the recommendation to the developer so the design of the system could be better to build a goo sport training system to HongKongers.

8 Conclusion

In conclude, motion controller can help HongKongers to learn sports. This is a big step for HongKongers to avoid to become a “fat city” in the future. Kinect is the recommend device for developing the system. For the future, the research should do more on different age group like mature adults in the format of propose sampling. Therefore, the opinion from different people can get and make the proposed system better for Hong Kong. Also, as the device is seem quite experience to individual. This research suggests the school, organization and government can buy the main device and system. Therefore, each of the user can share the device and system and the price can be lower than using it individually.

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Appendix 1 - Working Timeline

Date	Event
5th Feb 2016	Submission on the Proposal
middle of February	start of prototype
end of February	finish the literature review
2nd week of March	meet with supervisor for advice of the Progress Report
middle of March	1. end of prototype 2. start some meeting for testing prototype with user
18th Mar 2016	Submission on the Progress Report
first week of the April	1. finalize the research 2. meet with supervisor for advice of the final Report
22th April 2016	Submission on the Final Report

A study on motion controller and sport

I am the student of Bachelor of Science (Honors) in Applied Sciences (Information Systems and Web Technologies) from SPEED, PolyU. I am now conducting a survey on how somatosensory game using motion controller can encourage HongKongers to do more exercise
This survey should only take 10 minutes to complete. Be assured that all your answers will be kept in the strictest confidentiality. Your feedback is important.
The survey would be in English with Traditional Chinese.
我是香港理工大學專業進修學院應用科學系（資訊系統及網絡科技）的學生。我正在研究採用運動控制器的體感遊戲如何可以鼓勵香港人多做運動。
這份問卷只需要10分鐘。您的回答會嚴格保密。您的反饋對我來說很重要。

*Required

Habit in doing exercise and method of learning sport (運動習慣和學習運動的方法)

1. **How many hours would you do exercise per week?** *
   你每星期做多少小時的運動？
   Mark only one oval.

   - ◯ 30 minutes below (30分鐘以下)
   - ◯ 30 minutes - 1 hours (30分鐘 - 1小時)
   - ◯ 1-2 hours (1 - 2小時)
   - ◯ 2-3 hours (2 - 3小時)
   - ◯ 3 hours above (3 小時以上)

2. **Which exercises do you like to do most?** *
   你喜歡哪一個運動最多的？
   Tick all that apply.

   - ☐ jogging (跑步)
   - ☐ ball games (球類活動)
   - ☐ hiking (登山)
   - ☐ fishing (釣魚)
   - ☐ Skateboarding (滑板運動)
   - ☐ Martial arts, such as taekwondo(武術,例如跆拳道)
   - ☐ cycling (單車)
   - ☐ Gym (健身運動)
   - ☐ Ice skating (滑冰)
   - ☐ Golf (高爾夫)
   - ☐ Other: .....

3. **How long do you think you can learn one kind of sports?** *
你覺得需要大約多久學會一種運動？
Mark only one oval.

- ◯ less than one moth (少於一個月）
- ◯ 1-6 month (1-6個月)
- ◯ 7-12 moth (7-12個月）
- ◯ 1-3 years (1-3年)
- ◯ 3years above (3年以上)

4. **Which factors are important in learning sport?** *
哪些因素在學習運動很重要？
Tick all that apply.

- ☐ Practice (練習)
- ☐ Coach (教練)
- ☐ Physical Fitness(體能)
- ☐ perseverance (恆心)
- ☐ Other: .....

5. **How much will you give to pay for learning sport in HK dollars?** *
你肯付出多少錢（港幣）來支付以學習運動？
Mark only one oval.

- ◯ HK$1000 or below
- ◯ HK$1001-5000
- ◯ HK$5001-10000
- ◯ HK$10000 or above

Somatosensory game using motion controller（採用運動控制器體感遊戲）

Please see the video first and answer the question afterward.
請先看視頻和隨後回答問題。

On-hand controller (在手控制器)

http://youtube.com/watch?v=zqaPFAZS1K8

The controller is on the hand of the user. 所述控制器上在用戶的手。

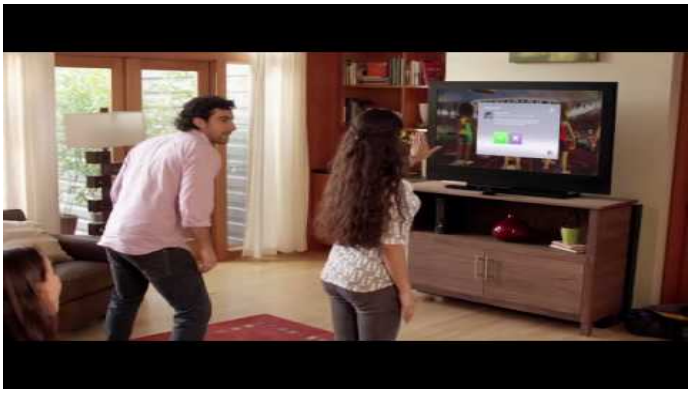
6. **To what extent are you agree on these question when you are using the above approach to learn sport?** 你對這些問題在多大程度上同意當您使用上述方法來學習運動？ *

Mark only one oval per row.

	1-Strongly Disagree (1-完全不同意)	2-Disagree (2-不同意）	3-Natural (3-中立)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)
I can learn sport with this approach independently我可以這種方法獨立學習運動					
The device is useful on helping me to learn sport. 該裝置在幫助我學習運動是有用。					
I can concentrate on learning not playing when I using the above device to learn sport使用上述設備，我能夠專注於學習而不只是遊戲					
The interaction with the device when learning sport seem natural 使用上述設備學習運動的互動體驗很自然					
I like to use the device to learn a sport because it saves time and effort in transportation. 我喜歡使用上述設備學習運動，因為它可以節省交通時間和工作。					
I like to use the device to learn a sport because I can practice in any time I want. 我喜歡使用上述設備來學習運動，因為我可以在任何時候練習運動。					
The device can still help me to					

learn sport using leg like football. 該設備仍可幫我學習用腿的運動，例如足球。					
If the device and software cost about HK$3500, I would try to buy one for learning sport. 如果設備和軟件的成本約 HK $3500，我會嘗試購買一台學習運動。					

Camera Controller 攝像頭控制器



http://youtube.com/watch?v=V817dgHn54M

The controller is on the camera 所述控制器上在攝像頭。

7. **To what extent are you agree on these question when you are using the above approach to learn sport?** 你對這些問題在多大程度上同意當您使用上述方法來學習運動？ *

Mark only one oval per row.

	1-Strongly Disagree (1-完全不同意)	2-Disagree (2-不同意）	3-Natural (3-中立)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)
I can learn sport with this approach independently我可以這種方法獨立學習運動	◯	◯	◯	◯	◯
The device is useful on helping me to learn sport. 該裝置在幫助我學習運動是有用。	◯	◯	◯	◯	◯
I can concentrate on learning not playing when I using the above device to learn sport使用上述設備，我能夠專注於學習而不只是遊戲	◯	◯	◯	◯	◯
The interaction with the device when learning sport seem natural 使用上述設備學習運動的互動體驗很自然	◯	◯	◯	◯	◯
I like to use the device to learn a sport because it saves time and effort in transportation. 我喜歡使用上述設備學習運動，因為它可以節省交通時間和工作。	◯	◯	◯	◯	◯
I like to use the device to learn a sport because I can practice in any time I want. 我喜歡使用上述設備來學習運動，因為我可以在任何時候練習運動。	◯	◯	◯	◯	◯
The device can still help me to					

learn sport using leg like football. 該設備仍可幫我學習用腿的運動，例如足球。					
If the device and software cost about HK$4000, I would try to buy one for learning sport. 如果設備和軟件的成本約 HK $4000，我會嘗試購買一台學習運動。					

Personal Information

8. **Sex**性別

Mark only one oval.

- M 男
- F 女
- Other: .....

9. **How old are you?**你幾多歲？

Mark only one oval.

- 0-18
- 19-30
- 30-50
- 50-65
- 65 or above 65歲或以上

	Part 1					Personal Information	
NO	How many hours would you do exercise per week?	Which exercises do you like to do most?	How long do you think you can learn one kind of sports?	Which factors are important in learning sport?	How much will you give to pay for learning sport in HK	Sex性別	How old are you?你幾多歲？
1	2-3 hours (2 - 3小時)	fishing (釣魚)	less than one moth (少於一個月)	perseverance (恆心)	HK$1001-5000	M 男	19-30
2	1-2 hours (1 - 2小時)	jogging (跑步)	1-6 month (1-6個月)	Practice (練習)	HK$1000 or below	M 男	19-30
3	30 minutes - 1 hours (30分鐘 - 1小時)	jogging (跑步), cycling (單車)	1-6 month (1-6個月)	Practice (練習), Physical Fitness(體能), perseverance (恆心)	HK$1000 or below	M 男	19-30
4	30 minutes below (30分鐘以下)	不愛運動	less than one moth (少於一個月)	興趣	HK$1000 or below	M 男	19-30
5	30 minutes - 1 hours (30分鐘 - 1小時)	Swimming	1-6 month (1-6個月)	Practice (練習), Coach (教練), perseverance (恆心)	HK$1000 or below	M 男	19-30
6	1-2 hours (1 - 2小時)	ball games (球類活動), cycling (單車)	1-6 month (1-6個月)	Practice (練習), Coach (教練), Physical Fitness(體能), perseverance (恆心)	HK$1000 or below	F 女	19-30
7	30 minutes - 1 hours (30分鐘 - 1小時)	jogging (跑步)	less than one moth (少於一個月)	Practice (練習), Physical Fitness(體能)	HK$1000 or below	M 男	19-30
8	30 minutes below (30分鐘以下)	cycling (單車)	1-6 month (1-6個月)	Practice (練習), Physical Fitness(體能), perseverance (恆心)	HK$1000 or below	F 女	19-30
9	2-3 hours (2 - 3小時)	fishing (釣魚)	less than one moth (少於一個月)	perseverance (恆心)	HK$1001-5000	M 男	19-30
10	30 minutes - 1 hours (30分鐘 - 1小時)	ball games (球類活動), hiking (登山), cycling (單車)	less than one moth (少於一個月)	Practice (練習), Physical Fitness(體能), perseverance (恆心)	HK$1000 or below	F 女	19-30
11	1-2 hours (1 - 2小時)	jogging (跑步), ball games (球類活動), Gym (健身運動)	1-6 month (1-6個月)	Practice (練習), perseverance (恆心)	HK$1000 or below	M 男	19-30
12	30 minutes - 1 hours (30分鐘 - 1小時)	jogging (跑步)	1-6 month (1-6個月)	perseverance (恆心)	HK$1000 or below	M 男	19-30
13	1-2 hours (1 - 2小時)	hiking (登山), Gym (健身運動)	1-6 month (1-6個月)	Practice (練習), perseverance (恆心)	HK$1000 or below	M 男	19-30
14	30 minutes - 1 hours (30分鐘 - 1小時)	jogging (跑步)	less than one moth (少於一個月)	Practice (練習), Physical Fitness(體能)	HK$1000 or below	M 男	19-30

15	30 minutes - 1 hours (30分鐘 - 1小時)	ball games (球類活動), hiking (登山), cycling (單車)	less than one moth (少於一個月)	Practice (練習), Physical Fitness(體能), perseverance (恆心)	HK$1000 or below	F 女	19-30
16	1-2 hours (1 - 2小時)	ball games (球類活動)	1-6 month (1-6個月)	興趣	HK$1001-5000	M 男	19-30
17	30 minutes - 1 hours (30分鐘 - 1小時)	jogging (跑步)	1-6 month (1-6個月)	perseverance (恆心)	HK$1000 or below	M 男	19-30
18	1-2 hours (1 - 2小時)	jogging (跑步), ball games (球類活動), cycling (單車)	1-6 month (1-6個月)	Practice (練習), Coach (教練)	HK$1000 or below	F 女	30-50
19	1-2 hours (1 - 2小時)	ball games (球類活動), cycling (單車)	1-6 month (1-6個月)	Practice (練習), Coach (教練), Physical Fitness(體能), perseverance (恆心)	HK$1000 or below	F 女	19-30
20	1-2 hours (1 - 2小時)	hiking (登山), Gym (健身運動)	1-6 month (1-6個月)	Practice (練習), perseverance (恆心)	HK$1000 or below	M 男	19-30
21	1-2 hours (1 - 2小時)	jogging (跑步), ball games (球類活動), cycling (單車)	1-6 month (1-6個月)	Practice (練習), Coach (教練)	HK$1000 or below	F 女	30-50
22	1-2 hours (1 - 2小時)	hiking (登山)	7-12 moth (7-12個月)	Practice (練習), Coach (教練), perseverance (恆心)	HK$1000 or below	M 男	19-30
23	1-2 hours (1 - 2小時)	jogging (跑步)	1-6 month (1-6個月)	Practice (練習)	HK$1000 or below	M 男	19-30
24	30 minutes below (30分鐘以下)	jogging (跑步), hiking (登山)	less than one moth (少於一個月)	Coach (教練)	HK$1000 or below	M 男	30-50
25	30 minutes below (30分鐘以下)	cycling (單車)	1-6 month (1-6個月)	Practice (練習), Physical Fitness(體能), perseverance (恆心)	HK$1000 or below	F 女	19-30
26	1-2 hours (1 - 2小時)	jogging (跑步)	1-6 month (1-6個月)	Practice (練習), perseverance (恆心)	HK$1001-5000	M 男	19-30
27	1-2 hours (1 - 2小時)	jogging (跑步)	1-6 month (1-6個月)	Practice (練習), perseverance (恆心)	HK$1001-5000	M 男	19-30
28	30 minutes below (30分鐘以下)	不愛運動	less than one moth (少於一個月)	興趣	HK$1000 or below	M 男	19-30
29	30 minutes below (30分鐘以下)	jogging (跑步), hiking (登山)	less than one moth (少於一個月)	Coach (教練)	HK$1000 or below	M 男	30-50

30	1-2 hours (1 - 2小時)	jogging (跑步), ball games (球類活動), Gym (健身運動)	1-6 month (1-6個月)	Practice (練習), perseverance (恆心)	HK$1000 or below	M 男	19-30
31	30 minutes below (30分鐘以下)	ball games (球類活動)	1-6 month (1-6個月)	Practice (練習), Physical Fitness(體能), perseverance (恆心)	HK$1000 or below	M 男	30-50
32	30 minutes below (30分鐘以下)	ball games (球類活動)	1-6 month (1-6個月)	Practice (練習), Physical Fitness(體能), perseverance (恆心)	HK$1000 or below	M 男	30-50
33	30 minutes - 1 hours (30分鐘 - 1小時)	Swimming	1-6 month (1-6個月)	Practice (練習), Coach (教練), perseverance (恆心)	HK$1000 or below	M 男	19-30
34	1-2 hours (1 - 2小時)	hiking (登山)	7-12 moth (7-12個月)	Practice (練習), Coach (教練), perseverance (恆心)	HK$1000 or below	M 男	19-30
35	1-2 hours (1 - 2小時)	ball games (球類活動)	1-6 month (1-6個月)	興趣	HK$1001-5000	M 男	19-30
36	30 minutes - 1 hours (30分鐘 - 1小時)	jogging (跑步), cycling (單車)	1-6 month (1-6個月)	Practice (練習), Physical Fitness(體能), perseverance (恆心)	HK$1000 or below	M 男	19-30

	Part 2 - Wii							
NO	Q1 I can learn sport with this approach independently	Q2 The device is useful on helping me to learn sport.	Q3 I can concentrate on learning not playing when I using the above device to learn sport	Q4 The interaction with the device when learning sport seem natural	Q5 I like to use the device to learn a sport because it saves time and effort in transportation.	Q6 I like to use the device to learn a sport because I can practice in any time I want.	Q7 The device can still help me to learn sport using leg like football.	Q8 If the device and software cost about HK$3500, I would try to buy one for learning sport.
1	3-Natural (3-中立)	2-Disagree (2-不同意)	2-Disagree (2-不同意)	2-Disagree (2-不同意)	2-Disagree (2-不同意)	3-Natural (3-中立)	2-Disagree (2-不同意)	1-Strongly Disagree (1-完全不
2	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)	3-Natural (3-中立)	3-Natural (3-中立)	4-Agree (4-同意)	3-Natural (3-中立)	3-Natural (3-中立)
3	3-Natural (3-中立)	3-Natural (3-中立)	2-Disagree (2-不同意)	4-Agree (4-同意)	3-Natural (3-中立)	4-Agree (4-同意)	1-Strongly Disagree (1-完全不	2-Disagree (2-不同意)
4	1-Strongly Disagree (1-完全不	1-Strongly Disagree (1-完全不	1-Strongly Disagree (1-完全不	5-Strongly Agree (5-完全同意)	1-Strongly Disagree (1-完全不	1-Strongly Disagree (1-完全不	2-Disagree (2-不同意)	1-Strongly Disagree (1-完全不
5	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	3-Natural (3-中立)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)
6	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	2-Disagree (2-不同意)	2-Disagree (2-不同意)	3-Natural (3-中立)	3-Natural (3-中立)
7	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)
8	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	3-Natural (3-中立)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	4-Agree (4-同意)
9	3-Natural (3-中立)	2-Disagree (2-不同意)	2-Disagree (2-不同意)	2-Disagree (2-不同意)	2-Disagree (2-不同意)	3-Natural (3-中立)	2-Disagree (2-不同意)	1-Strongly Disagree (1-完全不
10	4-Agree (4-同意)	3-Natural (3-中立)	3-Natural (3-中立)	3-Natural (3-中立)	4-Agree (4-同意)	4-Agree (4-同意)	2-Disagree (2-不同意)	2-Disagree (2-不同意)
11	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	3-Natural (3-中立)	3-Natural (3-中立)	2-Disagree (2-不同意)	1-Strongly Disagree (1-完全不	4-Agree (4-同意)	1-Strongly Disagree (1-完全不
12	3-Natural (3-中立)	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	3-Natural (3-中立)	2-Disagree (2-不同意)
13	1-Strongly Disagree (1-完全不	1-Strongly Disagree (1-完全不	1-Strongly Disagree (1-完全不	1-Strongly Disagree (1-完全不	1-Strongly Disagree (1-完全不	1-Strongly Disagree (1-完全不	1-Strongly Disagree (1-完全不	1-Strongly Disagree (1-完全不
14	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)
15	4-Agree (4-同意)	3-Natural (3-中立)	3-Natural (3-中立)	3-Natural (3-中立)	4-Agree (4-同意)	4-Agree (4-同意)	2-Disagree (2-不同意)	2-Disagree (2-不同意)
16	1-Strongly Disagree (1-完全不	2-Disagree (2-不同意)	2-Disagree (2-不同意)	3-Natural (3-中立)	2-Disagree (2-不同意)	2-Disagree (2-不同意)	3-Natural (3-中立)	1-Strongly Disagree (1-完全不

17	3-Natural (3-中立)	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	3-Natural (3-中立)	2-Disagree (2-不同意）
18	3-Natural (3-中立)	2-Disagree (2-不同意）	1-Strongly Disagree (1-完全不	2-Disagree (2-不同意）	2-Disagree (2-不同意）	3-Natural (3-中立)	3-Natural (3-中立)	3-Natural (3-中立)
19	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	2-Disagree (2-不同意）	2-Disagree (2-不同意）	3-Natural (3-中立)	3-Natural (3-中立)
20	1-Strongly Disagree (1-完全不	1-Strongly Disagree (1-完全不	1-Strongly Disagree (1-完全不	1-Strongly Disagree (1-完全不	1-Strongly Disagree (1-完全不	1-Strongly Disagree (1-完全不	1-Strongly Disagree (1-完全不	1-Strongly Disagree (1-完全不
21	3-Natural (3-中立)	2-Disagree (2-不同意）	1-Strongly Disagree (1-完全不	2-Disagree (2-不同意）	2-Disagree (2-不同意）	3-Natural (3-中立)	3-Natural (3-中立)	3-Natural (3-中立)
22	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)	3-Natural (3-中立)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	3-Natural (3-中立)	2-Disagree (2-不同意）
23	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)	3-Natural (3-中立)	3-Natural (3-中立)	4-Agree (4-同意)	3-Natural (3-中立)	3-Natural (3-中立)
24	3-Natural (3-中立)	4-Agree (4-同意)	3-Natural (3-中立)	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)	4-Agree (4-同意)
25	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	3-Natural (3-中立)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	4-Agree (4-同意)
26	4-Agree (4-同意)	3-Natural (3-中立)	2-Disagree (2-不同意）	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	1-Strongly Disagree (1-完全不	3-Natural (3-中立)
27	4-Agree (4-同意)	3-Natural (3-中立)	2-Disagree (2-不同意）	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	1-Strongly Disagree (1-完全不	3-Natural (3-中立)
28	1-Strongly Disagree (1-完全不	1-Strongly Disagree (1-完全不	1-Strongly Disagree (1-完全不	5-Strongly Agree (5-完全同意)	1-Strongly Disagree (1-完全不	1-Strongly Disagree (1-完全不	2-Disagree (2-不同意）	1-Strongly Disagree (1-完全不
29	3-Natural (3-中立)	4-Agree (4-同意)	3-Natural (3-中立)	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)	4-Agree (4-同意)
30	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	3-Natural (3-中立)	3-Natural (3-中立)	2-Disagree (2-不同意）	1-Strongly Disagree (1-完全不	4-Agree (4-同意)	1-Strongly Disagree (1-完全不
31	2-Disagree (2-不同意）	2-Disagree (2-不同意）	2-Disagree (2-不同意）	1-Strongly Disagree (1-完全不	2-Disagree (2-不同意）	1-Strongly Disagree (1-完全不	2-Disagree (2-不同意）	2-Disagree (2-不同意）
32	2-Disagree (2-不同意）	2-Disagree (2-不同意）	2-Disagree (2-不同意）	1-Strongly Disagree (1-完全不	2-Disagree (2-不同意）	1-Strongly Disagree (1-完全不	2-Disagree (2-不同意）	2-Disagree (2-不同意）
33	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	3-Natural (3-中立)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)
34	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)	3-Natural (3-中立)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	3-Natural (3-中立)	2-Disagree (2-不同意）
35	1-Strongly Disagree (1-完全不	2-Disagree (2-不同意）	2-Disagree (2-不同意）	3-Natural (3-中立)	2-Disagree (2-不同意）	2-Disagree (2-不同意）	3-Natural (3-中立)	1-Strongly Disagree (1-完全不
36	3-Natural (3-中立)	3-Natural (3-中立)	2-Disagree (2-不同意）	4-Agree (4-同意)	3-Natural (3-中立)	4-Agree (4-同意)	1-Strongly Disagree (1-完全不	2-Disagree (2-不同意）

	Part 2 - Kinect							
NO	Q1 I can learn sport with this approach independently	Q2 The device is useful on helping me to learn sport.	Q3 I can concentrate on learning not playing when I using the above device to learn sport	Q4 The interaction with the device when learning sport seem natural	Q5 I like to use the device to learn a sport because it saves time and effort in transportation.	Q6 I like to use the device to learn a sport because I can practice in any time I want.	Q7 The device can still help me to learn sport using leg like football.	Q8 If the device and software cost about HK$3500, I would try to buy one for learning sport.
1	2-Disagree (2-不同意）	2-Disagree (2-不同意）	1-Strongly Disagree (1-完全	3-Natural (3-中立)	2-Disagree (2-不同意）	2-Disagree (2-不同意）	2-Disagree (2-不同意）	1-Strongly Disagree (1-完全
2	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)	3-Natural (3-中立)	3-Natural (3-中立)	3-Natural (3-中立)	3-Natural (3-中立)	3-Natural (3-中立)
3	3-Natural (3-中立)	3-Natural (3-中立)	2-Disagree (2-不同意）	3-Natural (3-中立)	4-Agree (4-同意)	4-Agree (4-同意)	1-Strongly Disagree (1-完全	2-Disagree (2-不同意）
4	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	5-Strongly Agree (5-完全同意)	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全
5	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	5-Strongly Agree (5-完全同意)	5-Strongly Agree (5-完全同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)
6	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)
7	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)
8	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)	4-Agree (4-同意)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)
9	2-Disagree (2-不同意）	2-Disagree (2-不同意）	1-Strongly Disagree (1-完全	3-Natural (3-中立)	2-Disagree (2-不同意）	2-Disagree (2-不同意）	2-Disagree (2-不同意）	1-Strongly Disagree (1-完全
10	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)	3-Natural (3-中立)	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)	2-Disagree (2-不同
11	5-Strongly Agree (5-完全同意)	5-Strongly Agree (5-完全同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	5-Strongly Agree (5-完全同意)	5-Strongly Agree (5-完全同意)	1-Strongly Disagree (1-完全
12	4-Agree (4-同意)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	3-Natural (3-中立)	3-Natural (3-中立)	2-Disagree (2-不同意）	2-Disagree (2-不同意）
13	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	2-Disagree (2-不同意）	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全
14	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)
15	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)	3-Natural (3-中立)	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)	2-Disagree (2-不同
16	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	2-Disagree (2-不同意）	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全

17	4-Agree (4-同意)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	3-Natural (3-中立)	3-Natural (3-中立)	2-Disagree (2-不同意）	2-Disagree (2-不同意）
18	2-Disagree (2-不同	3-Natural (3-中立)	2-Disagree (2-不同	2-Disagree (2-不同	2-Disagree (2-不同	3-Natural (3-中立)	3-Natural (3-中立)	3-Natural (3-中立)
19	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)
20	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	2-Disagree (2-不同意）	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全
21	2-Disagree (2-不同	3-Natural (3-中立)	2-Disagree (2-不同	2-Disagree (2-不同	2-Disagree (2-不同	3-Natural (3-中立)	3-Natural (3-中立)	3-Natural (3-中立)
22	4-Agree (4-同意)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)	3-Natural (3-中立)	3-Natural (3-中立)
23	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)	3-Natural (3-中立)	3-Natural (3-中立)	3-Natural (3-中立)	3-Natural (3-中立)	3-Natural (3-中立)
24	3-Natural (3-中立)	4-Agree (4-同意)	3-Natural (3-中立)	4-Agree (4-同意)	3-Natural (3-中立)	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)
25	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)	4-Agree (4-同意)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)
26	4-Agree (4-同意)	3-Natural (3-中立)	2-Disagree (2-不同意）	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	1-Strongly Disagree (1-完全	3-Natural (3-中立)
27	4-Agree (4-同意)	3-Natural (3-中立)	2-Disagree (2-不同意）	4-Agree (4-同意)	4-Agree (4-同意)	4-Agree (4-同意)	1-Strongly Disagree (1-完全	3-Natural (3-中立)
28	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	5-Strongly Agree (5-完全同意)	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全
29	3-Natural (3-中立)	4-Agree (4-同意)	3-Natural (3-中立)	4-Agree (4-同意)	3-Natural (3-中立)	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)
30	5-Strongly Agree (5-完全同意)	5-Strongly Agree (5-完全同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	5-Strongly Agree (5-完全同意)	5-Strongly Agree (5-完全同意)	1-Strongly Disagree (1-完全
31	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	2-Disagree (2-不同意）	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	2-Disagree (2-不同意）	2-Disagree (2-不同意）
32	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	2-Disagree (2-不同意）	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	2-Disagree (2-不同意）	2-Disagree (2-不同意）
33	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	5-Strongly Agree (5-完全同意)	5-Strongly Agree (5-完全同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)
34	4-Agree (4-同意)	4-Agree (4-同意)	5-Strongly Agree (5-完全同意)	4-Agree (4-同意)	4-Agree (4-同意)	3-Natural (3-中立)	3-Natural (3-中立)	3-Natural (3-中立)
35	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	2-Disagree (2-不同意）	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全	1-Strongly Disagree (1-完全
36	3-Natural (3-中立)	3-Natural (3-中立)	2-Disagree (2-不同意）	3-Natural (3-中立)	4-Agree (4-同意)	4-Agree (4-同意)	1-Strongly Disagree (1-完全	2-Disagree (2-不同意）

Appendix C - Sample Supervision Log Sheet

Log of the 1st **Meeting** *(eg. 1st Meeting, to be **filled in by student**)*
(Student should submit the original log sheets with the Final Report.)

Date and Time of Meeting:	1/2/2016
Venue and Duration:	1:30pm – 2:00pm
Brief description of work done:	read some journal
Agenda (Any issues, concerns, problems for discussion):	advice on proposal
Supervisor's comments:	The student's initial ideas are ~~initial~~ interesting and feasible.
Agreed tasks or action plan for next meeting:	perpare the proposal
Date and time of next meeting:	
Student Name: Chan Kwan Wing	Student Signature: Ken
Supervisor Name: Adam Wong	Supervisor Signature:

Appendix C - Sample Supervision Log Sheet

Log of the 2nd **Meeting** *(eg. 1st Meeting, to be **filled in by student**)*
(Student should submit the original log sheets with the Final Report.)

Date and Time of Meeting:	2016/3/16 17:00
Venue and Duration:	HHB 804g (40 min.)
Brief description of work done:	Some research on different motion sensor Some research on paper about using game to help doing more exercise ↑ may use other words such as "motion capture"
Agenda (Any issues, concerns, problems for discussion):	Any thing to change in the research method based on the proposal some issues on the prototype creating the method of collecting data on the prototype
Supervisor's comments:	- Give a general picture of similar technologies, then zoom in on Kinect - Use different search words like "motion sensing" or "motion capture" or even wearable devices like smart watches.
Agreed tasks or action plan for next meeting:	- Develop the progress report.
Date and time of next meeting:	
Student Name: Chan Kwan Wing	Student Signature: Kwan
Supervisor Name: Adam Coby	Supervisor Signature: Coby.

Appendix C - Sample Supervision Log Sheet

Log of the 3 **Meeting** *(eg. 1st Meeting, to be **filled in by student**)*
(Student should submit the original log sheets with the Final Report.)

Date and Time of Meeting:	2016/04/20 17:00
Venue and Duration:	WK Campus
Brief description of work done:	Questionnaire done some of data analysis done
Agenda (Any issues, concerns, problems for discussion):	comment on data analysis questions on final report
Supervisor's comments:	- Try to write more on recommendation and suggest of system design and prototype.
Agreed tasks or action plan for next meeting:	
Date and time of next meeting:	
Student Name: Ken Chan Kwan Wing	Student Signature: Ken
Supervisor Name: Adam Cheng	Supervisor Signature: Adam Cheng