

Experiment participation report

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Abstract

This report is experiment participation report, which talks about the experiments participation experiences in two major experiments. There are three reasons for writing this report. Firstly, recording the processes of taking the experiments. Secondly, generating my own feelings about taking the experiments. Thirdly, getting some inspiration for improving our own website valuable and attractive to users.

Introduction

This experiment participation report is mainly talks about the experiences when taking the “Facial Expression Identification Study” and “The effect of culture on visual perception” experiments. Nowadays, some people are doubted about the value and convincing when doing psychology experiment. After participating in the experiments and communicating with the experimenters, I found it interesting and valuable when gathering the data and analyze them. This report will go through deeply into two parts, “Facial Expression Identification Study” and “The effect of culture on visual perception” experiments. Summaries each experiment, describe my own experience on them and comment on the cons and pros that I found in both of them. In the third part, I will make some comparison based on these two parts. At last, I will talk about my idea of how to improve user-participation experiments to web design and development.

First Experiment: Facial Expression Identification Study

Summarize Experiment

Generally speaking, according to the information sheet, Facial Expression Identification Study is supposed to identify ambiguous stimuli. By presenting a large amount set of same photos in different order and sequence, this task is designed to test the point at which people change their mind to categorizing the face from neutral to threatening part or reversely. Personally speaking, what I need to do in this experiment is to click the mouse. If I think the photo presented on the screen is

belongs to neutral expression part, I will click the “neutral” button. If I think the photo should be categorized in “threatening” part, I will click the “threatening” button.

Describe Experiment

When I was taking the experiment, I found it hard to categorizing all the pictures 100% sure. As a mechanical task, what I need to do is to click the “threatening” or “neutral” button as well as drag the confidence rate bar. The confident range is from 1 to 100, means, if I’m 100% sure that one face expression belongs to “threatening” part, I can drag the confident rate to 100%.

I do enjoy the experiment in the beginning but felt exhausted in the middle and last. When I just start the experiment, I found it interesting because I can see several faces and found out their facial expression. I would like to observe people’s facial expression in the real world. However, because it is a mechanical task and my tasks are only click and drag. What’s more, the same photos show and again and again, although randomly, is annoying and easy to become sleepy. During the experiment, what I did is to see the progress bar and think about why we need to do the experiment and what kind of data they are gathering which includes the time that I spent on choosing, the confident rate I used, the correct rate I achieved as well as how many time the same photo shows and my different behaviors toward it.

I find it difficult to do the experiment. Firstly, it’s hard to concentrate to it after one thirds of the task. Secondly, it’s hard to be confident after seeing the photo for several times, although my confident rate is always 100%. Thirdly, it’s hard to judge the facial expression when staring on the photo. The longer time I stared on the photo, the less confidence I had.

I am able to understand about what I need to do. Because the interface is quite clear to present and the instruction that the experimenter gave me is quite clear.

Comment on Experiment

In my opinion, this experiment really has strengths and weaknesses.

*The strengths are:

1. It’s easy for user to participate and control. This strength can decrease the possibilities of making mistakes because of misunderstanding or chaotic activities.
2. The data type is very clear and easy to generate. This strength can help experimenters to form an accurate report without data missing or disorderly.

3. The experiment is testing in different dimensions. Users may need to choose their opinion and mark confidence without skipping function. Experimenters can compare the correct rate, confidence rate from participants side as well as confidence rate from experiment report side and analyze the psychology of human beings.

*The weaknesses are:

1. It's too much workload and participants may lose their heart since the middle of the experiment. I just do not want to continue but I have to. This is more like a passive task for me but not a voluntary one.
2. It has no challenge for participants and mechanical actions may drive me to work quickly and do not care much or the result in the end. I hope more VARK elements may add into the experiment and I can find something new in it.

Although it has weakness, I think this experiment met the aims that showed in the Information Sheet. The design of the experiment as well as the data it gathered from both subjective view and objective view can achieve getting the “people shift categorizing point” information. What's more confidence ratings are subjective view that can identify the ambiguous stimuli of the participants. It's not hard to find out that the experiment is well-conducted because there are lots of similar experiments exist, experimenters are clearly about what they need and can instruct us logically. However, the only consideration I have for this experiment is the reliability from participants. Personally speaking, I'm tired and can't focus on the experiment during the middle of the experiment and I choose randomly by distinctive.

Second Experiment: The effect of culture on visual perception

Summarize Experiment

Generally speaking, “The effect of culture on visual perception Study” aims at comparing the differences between different culture group. After finishing the experiment and reading the information sheet, I talked with the experimenter, Jolene Cox, about this experiment. She told me that in current stage, there's no fully understanding about this experiment since it's a new experiment which is a derivative version of the previous experiment and she is working on it. The main purpose of the experiment is to analyze the differences between different culture group people.

Describe Experiment

This experiment is a mechanical task. What I need to do in the experiment is to click

the mouse. There is a pattern shows on the screen, if I think this pattern is more like a “firework”, I would click the left mouse. If it’s more like a “swirl”, what I need to do is to click the right mouse. This experiment has two parts, one is to put both mouses on my thigh which is under the desk and I can’t see my hands. Another part is to stick the mouses on both side of the computer and I can see my hands.

This experiment is hard for me but I’m really enjoy doing it. It’s difficult because the pattern is too hard to categorize. Even in the practice site which has the easies pattern to identify, I can’t judge them correctly. I found it randomly and chaos of the pattern. What’s more, the patterns are just popped immediately and then the screen remains blank. It’s hard for me to remember the patterns and then to categorize. Although it’s hard to identify, I do enjoy taking the experiment and I had the expectation to see what the next pattern is. This experiment is not hard to understand and I asked the researcher to show me again about the expel to make sure I can fully understand what I need to do.

Comment on Experiment

This experiment has both strengths and weaknesses.

*The strengths are:

1. It’s interesting and has suitable size of challenge that I can focus on the experiment without distractions. If the task is too hard, I will lose my heart and don’t want to do it anymore. If it’s too easy, I will feel a sleep.
2. It’s a new experiment and it has value to work on it. Nowadays, there are little similar experiments. I do hope my data can help this experiment to do better analyzation.

*The weaknesses are:

No fully explanation about the aim of the experiment.

1. Firstly, in the practice site, if I click the wrong mouse, it would show me “incorrect”, but I don’t know why I’m incorrect. Therefore, I think some explanation from the computer or from the researcher would be helpful. They may know if I’m not quite understand about the definition or other question exist.
2. Secondly, I don’t know why my eyes have to put on the relax shelf. This will influence the result or why. I want to know some reason about why and also what is the difference between the two parts of the experiment. I’m the participant and I think I have the right to know more about the experiment.

I think the experiment met the aims in the Information Sheet as it has many testing

methods. It has the comparison between individuals, visible of hands and invisible of hands, as well as the comparison between different groups, Asian and other local area. It's well-conducted since everything about the test is in sequence and has great logical. Experimenter provided sufficient explanation and instruction about how to do the experiment. Personally speaking, I think the data from participants are reliable because for me, I can concentrate and focus on my job during the whole experiment.

Comparison of the two Experiments:

“Facial Expression Identification Study” and “The effect of culture on visual perception” experiments share some similarities as well as some differences.

*The similarities can be listed as followed.

1. They both are mechanical tasks. What I need to do is to click mouse and categorize the photo/pattern that shows on the screen. No any different activities need to do for both of these two experiments.
2. They both are computer interactive tasks. Participants only need to communicate with computer and click mouse.
3. They just show photos/patterns which is suitable for V group under the idea of VARK. These people enjoy look at pictures. However, in regarding to A, R, K group participants, who enjoy listening, reading paragraphs and watching before trying respectively, this experiment is not attractive enough. If it's easy for participants to become tired, the data from them is not reliable to some extent.

*Two differences are listed below.

1. When I was participating in the first experiment, the “Facial Expression Identification Study”, I found it bored after finishing the first several photos categorizing. I'm looking at the progressing bar to see when I can finish the experiment. However, when I'm doing the second experiment, “The effect of culture on visual perception” experiment, I found it more interesting and challenging, I'm looking forward to see the next pattern and hope I categorizing it correctly.
2. The first experiment can involve more people to participate in the experiment in the same time but in separate computer. It doesn't need participants to fill in questionnaire. It runs well and many of my classmates attended it and some participants are very interesting in it. Personally speaking, I like the second experiment and think it really runs great. It's a one-to-one experiment and has two parts. These two parts have strong contrast and it's easy to find out the difference although I can't clearly describe it. What's more, after the computer interaction, I

did the questionnaires which asked my ambiguous and some other questions that is related to my personality. It runs systematically and I think it runs quite great.

User-participation idea to web design

Human-Computer Interaction studies the interaction between people and computers. It is an area that includes both user-evaluation experiments as well as web design. After analyzing the user-evaluation experiments data, Chang Liu found that there are four key dimensions which are related to the design quality of web sites. They are playfulness, information and service quality, system design quality as well as system use.(Liu et al., 2016).

After participating in the experiments and especially the second experiment, surfing others website as well as reading several HCI topic essays, I totally understand and agree some of the ideas that can be used in web design to attract audience. Firstly, try best for consistency. Secondly, enable frequently visit users to use shortcuts. Thirdly, offer informative feedback.(Blanton *et al.*, 2009) A good web site should involve the interaction and gather data from users and audiences. The second experiment has a great consistency and well organized which can give me some inspiration to my web site design.

References

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