

# Experiment participation report

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## Abstract

This report is about experiment participation report, which include two experiments in total. There are three different reasons to participate these two different experiments. Firstly, participating these experiments will give me some skills to improve my website in visual part and image choosing. Secondly, participating these experiments will help me to know the steps of the experiment and find the detailed information about the feeling of a website. Thirdly, if I want to conduct a survey about my website, I can use the same way to carry out this survey.

## Introduction

The first experiment is about Facial Expression Identification Study. The second experiment is about Study of Categorization of Objects. These two experiments are both about categorization. The first experiment focuses on the feeling in face. In the experiment, I was presented with pictures of faces displaying different emotional expressions on a computer screen and asked to make judgements about them such as this face is a threatening expression or a normal expression. The first study takes me about 1 hour to complete. The second experiment focus on investigating line drawings of objects. In this experiment, I was given a pen to write the words related what you see on the paper in 30s. This report will include three main parts. The first one is about summarizing the two experiments, describing the experiments and describing the strength and weakness of these two experiments. The second part will talk about the similarity and differences between the two experiments. At the last, the third part will cover relevance between the experiments and the web design and how to improve the visual effect in web designing.

## First Experiment: Facial Expression Identification Study

### Summarizing experiment

In the Facial Expression Identification Study experiment, according to the instruction of the experiment, I will come and look at different facial expression and identify whether this facial expression is a threatening or a neutral expression. This facial

expression was presented in different orders on the computer screen. After presenting the facial expression image, the computer will ask me to mark this facial image. The mark ranges from 0% to 100%. 100% means that this facial image is 100% threatening. 0% means that the facial expression is neutral. In the experiment, I just need to drag the mouse to give the mark of the presenting facial expression picture. If I think that the facial expression is threatening, I will give a higher mark from 60%-100%. If I don't think this facial expression picture is a threatening picture, I will give a mark from 0%-40%. If I am not sure whether this picture is threatening or not, I will give a mark from 40%-60%.

## **Describing experiment**

When I was participating this experiment, I found that sometimes this picture will appear twice in different time, it is hard to give the same mark to the same picture. Sometimes, I can't identify whether this picture is threatening or not because some facial expression is not natural on the computer screen.

Although it is hard for me to identify the facial expression, I still like this facial expression experiment. At the beginning of the facial expression experiment, I found that it is hard to identify whether this facial expression is threatening or not. I am not sure this facial expression is 100% threatening or not. It is hard for me to give a reliable mark for the expression. What's more, because the same picture displayed several times in the following experiment, it is very annoying and boring. But after I finish identifying several facial expressions, I found that I should identify the facial expression in the shortest time, not think about this expression twice so it will become much easier. In addition, after I was familiar with this experiment's step, I just need to do the mechanical tasks such as dragging the mouse and give the marks for different facial expression. Now it become much funnier for me to complete this experiment because I can feel the emotion of each different facial expression. I want to listen to different story behind the facial expression. Different facial expression will tell different stories. Some stories are sad, some stories are joyful.

## **Comment on experiment**

In the information sheet, it said that the computer will present a facial expression picture on the computer screen. You will be asked to identify whether this expression is neutral or threatening and then was to rate your confidence of that decision. In my opinion, all the aims that were presented in the information sheet were met. However, this experiment has some strengths and weaknesses.

### **The strengths are:**

1. The experiment process is simple. If you want to participate this experiment, just need have little knowledge about computer. In the experiment, you just click the mouse to identify the facial expression.

2. The data type of the experiment is simple. In the experiment, there is only one independent variable you need to choose. What's more, this data type is percent. It is easy to deal with.
3. The replicability of the experiment is high. Everyone can do this experiment at home. You just need a computer. If the number of the participant is high enough, the result of the experiment is reliable.

**The weaknesses** are:

1. The order of the experiment will impact the result of experiment. This experiment is about 45 minutes in total. Many people participating in this experiment may become tired, fed up and boring by the time they come to complete the remaining experiment.
2. The data is not reliable. In the experiment, many picture data are choosed randomly from online source. It is hard for people to give a reliable mark. In addition, the mark data is not reliable because participant's emotion will have effect on the mark. If the participant feels happy, they will give a high mark. If the participant feels not happy, they will give a low mark.

Although this experiment is well-conducted, the data of this experiment is not reliable enough. The manager of the experiment should take the random factors into consideration.

## **Second Experiment: investigate line drawings of objects.**

### **Summarizing experiment**

This experiment is investigating line drawings of objects. In this experiment, the lecture shows me the line drawings of the objects. Then the lecturer asks me to write down all of the related words in the shortest time. The purpose of this experiment is to study visual brain and understanding about the line drawing. Different people will have different visual recognitions about the line drawing. Although people in the world have different culture background and education degree, they can understand the line drawing and give some description on it.

### **Describing experiment**

In this experiment, the researcher gives me the line drawing on a paper. Then this line draw was passed to me. The researcher gives me a pen. After all the preparation was done. The experiment was started. Firstly, the researcher gives me a line drawing, it looks like a moon. He asked me to write down all the related words with this picture. I

write the words such as light, space, far and so on. After 30 seconds, the collect the paper and give me another paper with different line drawing. It is intelligent participant because I must think about different word about the different picture. After completing this task, I move on to another task. It is about listen to a word, then I was asked to speak another related word. However, this part is a little hard for me because English is my second language. Sometimes I can't understand the meaning of the word so I can't give the related word correctly. After 45 minutes speaking and writing, I completed this experiment.

### **Comment on experiment**

**In my opinion**, all the aims that were stated in the information sheet were met. However, this experiment has some strengths and weaknesses.

#### **The strengths** are:

1. This experiment is funny. This experiment is funny and don't last too long so that I can focus on the experiment. The result of the experiment will become more accurate. Some of the line drawing is funny so that the participant will more likely to enjoy this experiment.
2. The result is accurate. In the experiment, all the participant will be asked to complete writing in 30 seconds. The writing process will be monitored by the researcher to ensure that writing is completed in 30s.

#### **The weaknesses** are:

1. It is not friendly for second language speaker. This experiment will require that the participant have excellent communication skills such as speaking skills and writing skills. If you don't understand the researcher' meaning, you can't give a correct answer to the question.
2. The data type can't be calculated. Because the researcher just asks the participant to write down some words not numbers. The words can't be used to calculate when the researcher want to analyze the result of the experiment.

In my opinion, the experiment was well- conducted. The participant can understand the experiment well. The time of the experiment is suitable for the participant. People on this experiment will not feel tired and boring. However, the data of the experiment maybe not reliable because the number of words participant can write based on the education background and language skills. The participant's education background will have great effect on the result of the experiment. However, the information sheet doesn't record the education information of the participants. Therefore, the result of this experiment is not reliable.

## Comparison of the two Experiments:

The Facial Expression Identification Study and The Investigating Line Drawings of Objects have some similarities and differences.

**The similarities** are as listed below:

**First of all**, only one researcher monitors all the experiment process. At the beginning of the experiment, the researcher will have a talk about the experiment requirements. After that if you have any questions, you can ask for the researcher.

**Secondly**, at the beginning of the experiment, I feel happy about the experiment. However, at the end of the experiment, I feel tired because both the experiments last about 45 minutes in total.

**Thirdly**, both the experiments run well from the beginning to the end. Both the researcher prepared well for the experiment.

**The differences** are as listed below:

**First of all**, The Facial Expression Identification Study experiment is based on the computer, I only need to click the mouse to choose the answers. I don't need to write my answers on the paper. However, The Investigating Line Drawings of Objects experiment is based on communication with the researcher. It requires me to write down the answers on the paper. Every answer is monitored by the researcher. The researcher asks me to complete every question in 30 seconds. So, I need to complete the question as soon as possible.

**Secondly**, the first experiment doesn't need me to read a lot of materials, it just need me to watch different facial expressions. After watching the different facial expressions, I just click the answers to complete the question. However, the second experiment require me to read a lot of the materials and give an answer and write it down on the paper. Sometimes, it requires me to listen to a description about a graph. So, the experiment method is different from each other.

## User-participation idea to web design

The Human Computer Interaction is about what happens when you and your computer work together. HCI consists three main part: the user, the computer and the ways they work with each other (Poole & Ball, 2006). Running experiments on your website is very important for your website design such as testing the headline, the background color and so on. These tests results will help you identify the problems of your website (Montgomery, 2017). But firstly, you should analyze data to find you

website's problem areas, which is similar to my experiment. By designing the experiments, we can get the data from a lot of user's experiences. In addition, when you want to do the experiment about your website, you can choose software to make it easy to test your website (Kanda, 2013). So, the software will collect the user's data automatically. Which is similar to my first experiment, the first experiment is based on computer, I just need to click the mouse to choose the answer, which is very convenient.

## **References:**

Research debriefing sheet of face identification study.

Research debriefing sheet of investigate line drawings of objects.

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