De La Salle University
College of Computer Studies

RESEARCH INFORMATION SHEET (VERSION-DECEMBER 9, 2016)

You are being asked to participate in a research entitled,

RECOGNIZING READER'S AFFECT USING EEG DATA

You must be 18 years or older to participate in this study. Your participation is voluntary. Please carefully read the information below and do not hesitate to ask any questions regarding the experiment that may not be clear to you.

This study is conducted by Kristine Ma. Dominique F. Kalaw, supervised by Prof. Ethel Chua Joy Ong, as part of her work towards a Master's degree in Computer Science at De La Salle University.

A. INTRODUCTION/PURPOSE

This study aims to associate brainwave patterns to specific emotions while reading literary fiction.

B. PROCEDURE

You are asked to read at least two (2) short stories. One session involves reading one story in a single sitting. The second session may not necessarily be immediately after the first. Each session will last approximately 1 hour and 30 minutes. If you agree to participate in this research, this would imply the following:

1. During the session, you will wear an Emotiv Insight headset to measure and capture your brain activity. While wearing the headset, hair ornaments or accessories should be removed.
2. A camera will be used to record the whole session.
3. Prior to reading the story, a baseline of your brain activity will be recorded. You are asked to close your eyes and be as relaxed and as comfortable as possible for a period of two (2) minutes.
4. You will be asked to read the pre-selected short story, which is presented in segments, using the software developed by the researcher. Please note that you may not go back to previous segments. Only the immediate previous segment of the current segment is displayed for your reference.
5. For each current segment, you will identify the degree of *pleasantness*, *attention*, *sensitivity*, and *aptitude* it causes you. You will also indicate if whether the segment has struck you or caught your attention. Lastly, you will indicate whether the emotion you are experiencing is an evaluative feeling, narrative feeling, aesthetic feeling, or others. All this is done using the software developed by the researcher.
6. Steps 4 and 5 are repeated until you have finished the story.
7. After, you will answer a participant profile questionnaire as well as have a short interview about the experience. Both of these are used as part of the data collected from you. Please note that the short interview will be voice-recorded.

C. DATA ANNOTATION

I. What did you feel towards the segment?

- **Pleasantness** refers to your amusement to the segment. It ranges from grief to ecstasy.
- **Attention** refers to your interest in the segment. It ranges from amazement (negative surprise) to vigilance (positive surprise).
- **Sensitivity** refers to your comfortability towards the segment. It ranges from terror to rage.

- **Aptitude** refers to your confidence (trust) in the segment. It ranges from loathing to admiration.

II. What triggered your feelings?
- **Evaluative feelings** toward the text, such as the overall enjoyment, pleasure, or satisfaction of reading a short story.
- **Narrative feelings** toward specific aspects of the fictional event sequence, such as empathy with a character or resonance with the mood of a setting.
- **Aesthetic feelings** in response to the formal (generic, narrative, or stylistic) components of a text, such as being struck by a metaphor.

D. POTENTIAL RISKS AND DISCOMFORT

The Emotiv Insight is a 5-channel, wireless EEG headset that records your brainwaves. It is a commercial product marketed worldwide and is designed for everyday use. It uses a polymer sensor that is safe to use and offers great electrical conductivity with the convenience of a dry sensor. These sensors read the brainwave signals and then transmits these signals to a computer via Bluetooth.

This device has global recognition for its personal usage such as assessing athletic performance, cognitive training, or health and well-being (*Source: http://emotiv.com/insight/*). The technology is also backed and trusted by the scientific, academic, engineering and media communities and has been validated by many independent research papers (*Source: http://emotiv.com/the-science/*).

EEG or brainwave recording procedures are quite safe and has been in use for over 30 years; it is used routinely in hospitals to test brain function and to diagnose illness such as temporal epilepsy. There are no known major risks associated with this procedure other than a mild discomfort for some people who have sensitive skin when wearing the headset. This is not permanent and is of no serious consequence (*Source: https://emotiv.zendesk.com/hc/en-us/articles/204701495-EEG-Basic-Participant-Information-and-Safety*). However, if you find the headset uncomfortable to use or if you decide to stop the session for any other reason, the experiment will be halted immediately.

E. POTENTIAL BENEFIT TO SUBJECTS AND/OR TO SOCIETY

Apart from some personal insights with regards to your awareness of your emotions during the reading process, you will not directly benefit from your participation in this research study.

Since the study will attempt to associate brainwave patterns to specific emotions while reading literary fiction, the results of this study would provide a useful baseline data for studies involved in reader-response or emotion theory, or may serve as reference for future EEG-based affect recognition studies.

F. CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. The information collected about you will be coded using a fake name (pseudonym) or initials and numbers. The information which has your identifiable information will be kept separately from the rest of your data. All the information collected will be stored in a private archive.

The EEG recordings of your sessions will be used solely for experimental purposes, and after the data collection is over, they will be stored in a private archive. Portions of these EEG recordings may be published and/or presented in scientific journals and/or scientific conference proceedings, but will never be published in a non-scientific venue. Further, no information, such as name, address, or other private information, will be included in these publications. Likewise, for this research, your video and voice recordings will be used solely for analysis and gathering insights regarding the experiment. It will also be stored in a private archive.

Apart from this possible usage, such data will only be viewed/used for experimental purposes. At any time during or after the experiment, you may request to review or edit the tapes and/or request that your files be destroyed.

G. PARTICIPATION AND WITHDRAWAL

Your participation in this study is completely voluntary. If at any point in time you wish to withdraw during or after the experiment, you may do so without penalty or consequence of any kind. Any data collected, should you withdraw, will be disposed properly.

H. IDENTIFICATION OF RESEARCHER

If you have any questions or concerns about the research, please feel free to contact:

KRISTINE MA. DOMINIQUE F. KALAW
Master's Student
De La Salle University
Contact No.: (+63) 927 854 4201
Email: kristine_ma_kalaw@dlsu.edu.ph

PROF. ETHEL CHUA JOY ONG
Adviser
De La Salle University
Software Technology Department
Email: ethel.ong@delasalle.ph

CONSENT TO PARTICIPATE IN "RECOGNIZING READER'S AFFECT USING EEG DATA"

I, the undersigned, confirm that (please tick the appropriate boxes):

	TAKING PART IN THIS PROJECT	
1.	I have read and understood the information about the research as provided in the Information Sheet dated December 9, 2016.	☐
2.	I have been given the opportunity to ask questions about the study and my participation.	☐
3.	I voluntarily agree to participate in the study and am aware that taking part in it includes being interviewed and voice-recorded.	☐
4.	I understand that my taking part is voluntary; I can withdraw from the study at any time and I do not have to give any reason for why I no longer want to take part.	☐
	USE OF THE INFORMATION I PROVIDE FOR THIS PROJECT ONLY	
5.	The procedures regarding confidentiality have been clearly explained to me.	☐
6.	Select only **one** of the following:	
	a. I would like my name used and understand that what I have said or written as part of this study will be used in reports, publications, and other research outputs so that anything I have contributed to this research can be recognized	☐
	b. I would like to remain anonymous.	☐
	USE OF THE INFORMATION I PROVIDE BEYOND THIS PROJECT	
7.	I agree for the data I provide be archived by the researchers.	☐
8.	Select only **one** of the following:	
	a. I am allowing other researchers to have access to this data if they agree to preserve the confidentiality of the data and if they agree to the terms I have specified in this form.	☐
	b. I am **not** allowing other researchers to have access to this data and consent only of its use to this project.	☐
9.	If you are **allowing** other researchers to have access to this data (**8a**), select the type/s of data you consent for the other researchers to use. Skip this item if you are **not allowing** other researchers to have access to this data (**8b**). ☐ EEG recording ☐ Video recording ☐ Voice recording	
	SO THAT THIS STUDY CAN USE THE INFORMATION I PROVIDE LEGALLY	
10.	I agree to assign the copyright I hold in any materials related to this project to the Researcher.	☐

PARTICIPANT:

Name of Participant	Signature	Date

RESEARCHERS:

Name of Researcher	Signature	Date
KRISTINE MA. DOMINIQUE F. KALAW		
ETHEL CHUA JOY ONG		