



The Human Brain Thermo Receptors: The Best Indicators for Reflecting the Feelings

¹Pedro V. Ramos ²Abdul Razaque ³Kathleen Engelmann

^{1,3}Department of Biology & ²Department of Computer Science and Engineering
University of Bridgeport, CT, USA

ABSTRACT

Thermo receptors are part of the human brain, which reflect differently with changed conditions. Thermo receptors are classified into two categories: Warm and cold thermo receptors. In this abstract, an acceptable temperature analysis incentive is used for measuring the warm and cold cup of coffee used by different age group individuals. Both of the thermo receptors perceive the feelings through the gird of cup that is applied on the palm of the hand. Thus, both cold and warm probes are used with different kinds of temperatures. The cold cup of coffee was about 50 degree Fahrenheit and the warm cup of coffee about 115 degree Fahrenheit. In this experiment, participants showed different responses and reactions to the cold and warm cup of coffee. We measured their responses by giving them questionnaires based on five Likert formula. The experiment assumes that the feelings of human beings can be judged by creating portrait and reverse situation.

INTRODUCTION

Thermo receptors are neurons, which are sensitive with subject to the change of temperatures. These neurons usually sense the temperature within the normal range based on the environment. Many organisms depend on these neurons for the variety of things. Thermo receptors provides the information to the brain regarding the environmental temperature. These can be very significant while alerting the body based on warm or cool temperatures. These also give instructions to parts of the body based on the nature of condition that might need an action. The neurons also provide more overall information about body's temperature. Thermo receptors make the part of the body's multifaceted and consistent with the series of systems that put the body in balance.

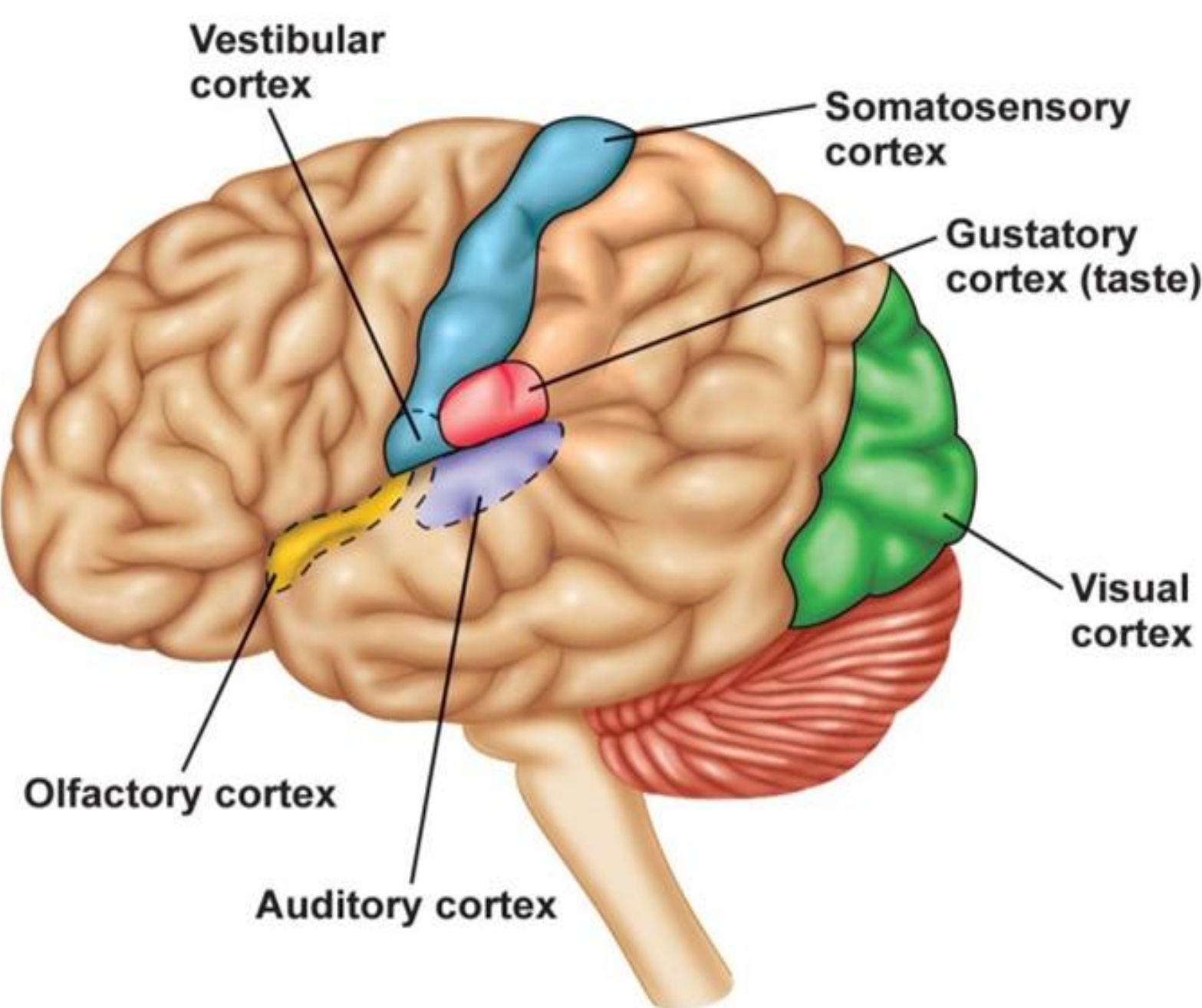


Figure 1: Somatosensory cortex showing major areas affected by heat and cold

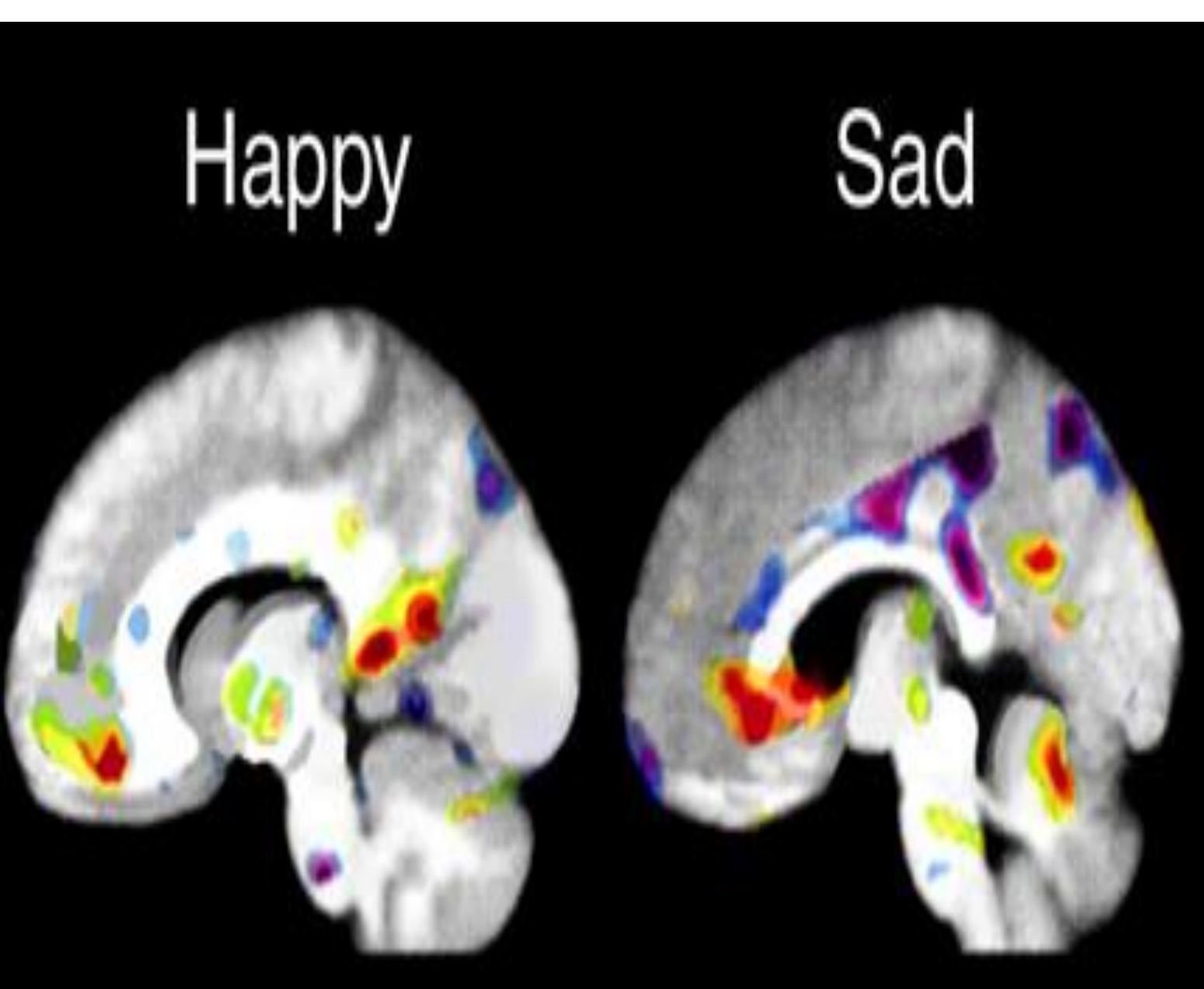


Figure 2: showing what part of the brain is triggered by happiness and what part is triggered by sadness

METHODOLOGY

One of the challenging tasks is to get feedback from people about any new experiment. We conducted the survey in order to determine the feelings and reactions of different persons by giving them a cup of coffee. The decision-making capacity of each individual is completely different, which depends on the needs and requirements of each person. The participants were divided into different age groups. The experiment lasted for two weeks and based on following phases.

A. Setting goals

We have Studied the working function of the human brain. Therefore, we had to conduct a survey in order to determine if there was any connection between the human brain and other parts of the body especially hands. Based on the survey, we conducted the usability testing to know connection of the hands with the brain and its possible consequences using a cup of warm and cold coffee.

B. Data Gathering

In order to collect the data, we conducted the survey between different age groups around campus. Several data sources are applied that covers interviews and observations. In the first phase, we collected the data by giving questionnaire after the person had been holding the warm and cold cup of coffee. In second the phase, we were able to sort out the emotions of each individual based on collected data. Finally, we received feedback through observation, interviews and coordination with skillful persons of related filed in order to obtain helpful suggestions. We used five Likert formula for sorting the data based on the level of trust and mistrust.

ANALYSIS RESULT

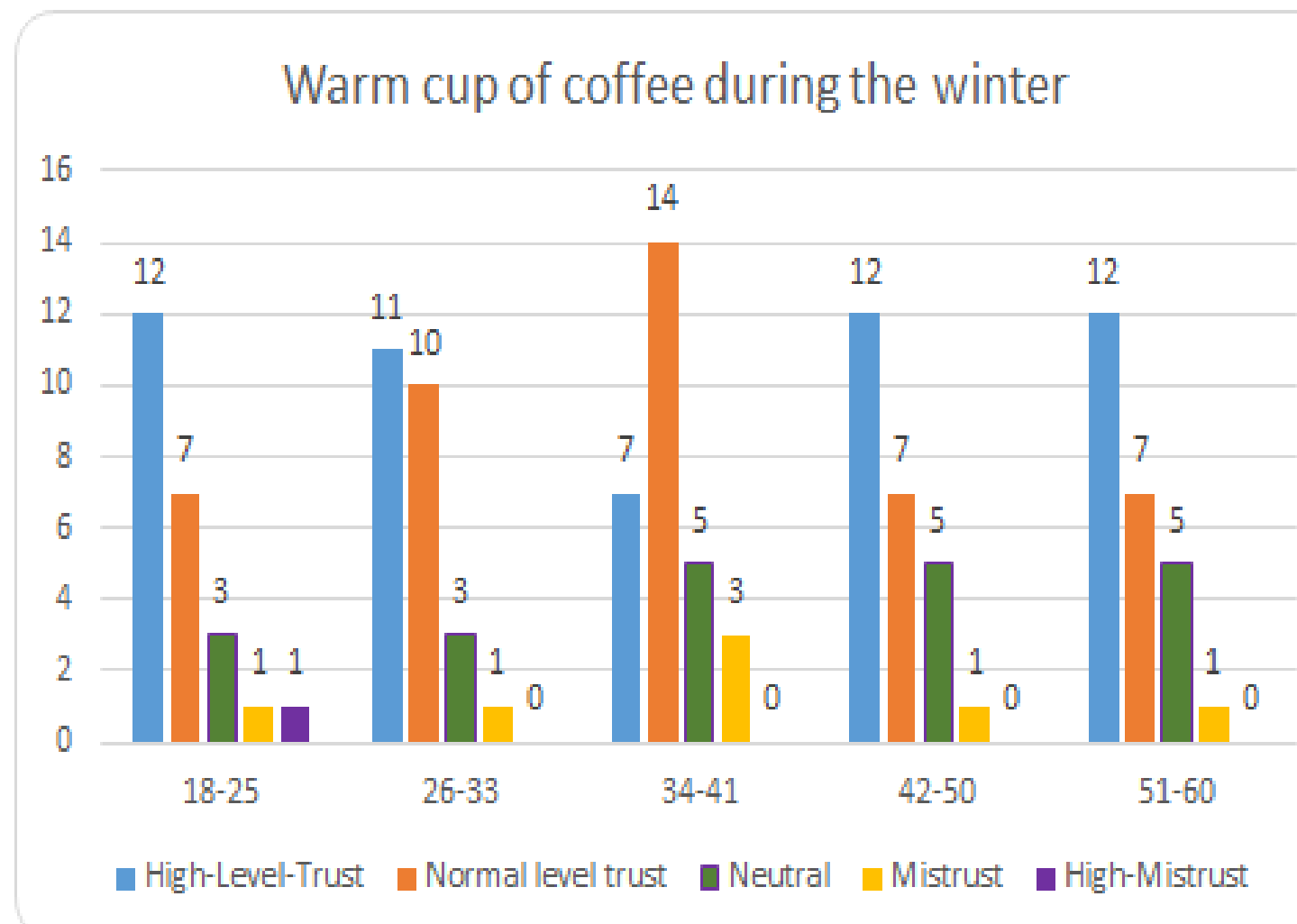


Figure 3: Showing the behavior of individuals when holding warm cup of coffee during winter

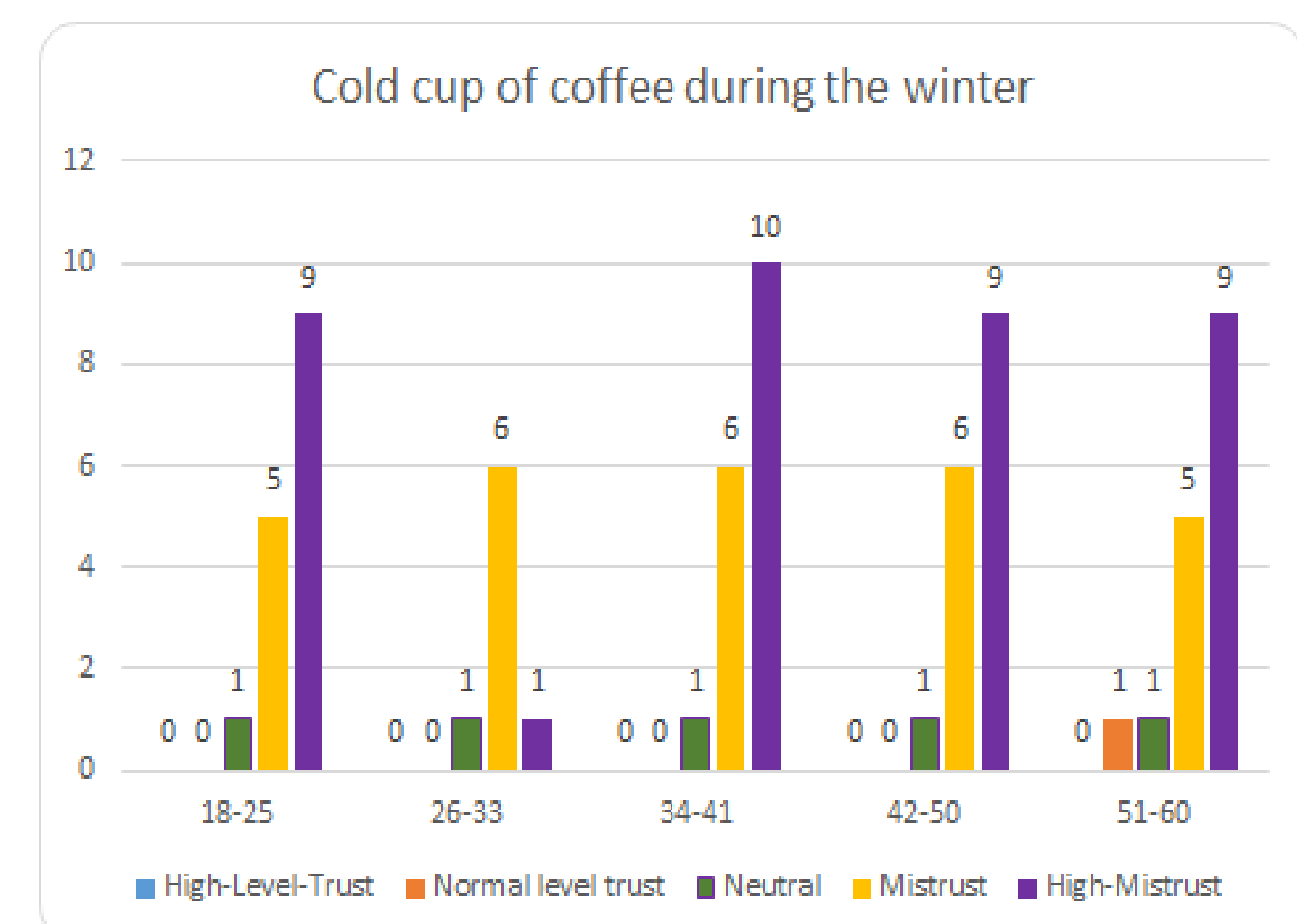


Figure 4: Showing the behavior of individuals when holding cold cup of coffee during winter

FACE EMOTION



Figure 5: Showing joy while holding the cup of coffee



Figure 6: Showing anger holding the cup of coffee

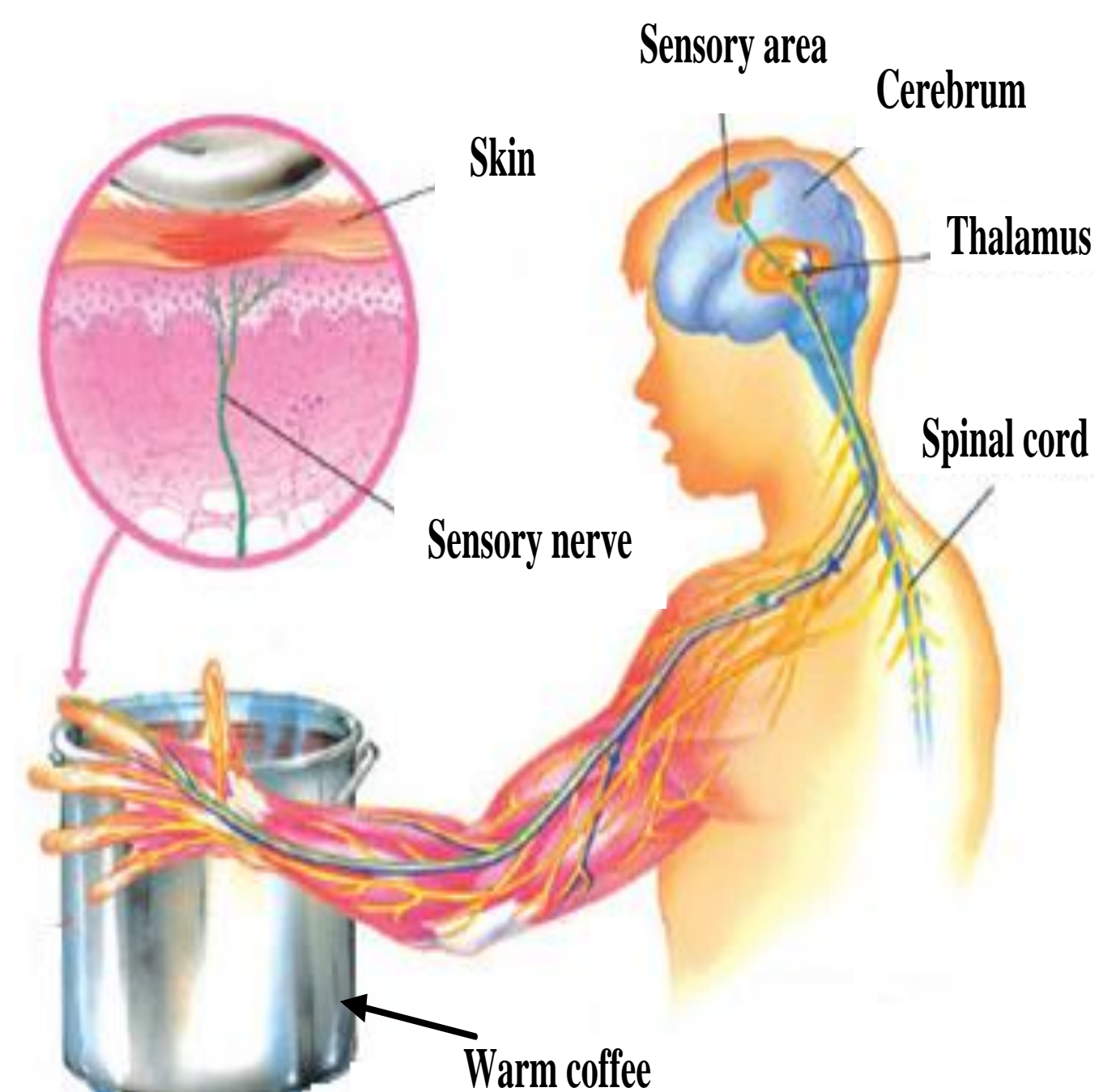


Figure 7: different nerves that are activated when the person touches a hot cup of coffee.

CONCLUSION

In this poster, thermo receptors of the human brain are used to analyze the behavior of each individual based on the cold and warm cup of coffee. The statistical data show that thermo receptors are the best indicators for reflecting the feelings of humans. We have evaluated the behavior of individual of different age group and obtained the reaction by giving them a cold and warm cup of coffee to hold in their hand. At the end, we proved that the human brain behaves according to the subject and condition. If best conditions are provided then human can be happy and will survive for longer period of time.