Introduction

Emotional contagion has long been a topic that researchers are intrigued to know more about. The main goal of emotional contagion research is looking for implications and differences between different stimuli and emotional ratings. Early research has focused on cultural differences and gender differences; for instance, Americans are more likely to be self-enhancing and the Japanese are more likely to be self-criticizing. As far as gender difference in emotional contagion is concerned, there is powerful research that supports the idea that females are better than males at recognizing different emotions. For this research, however, it will be focused on the age; As students older, their emotional can be changed in that they had more experience, stress, or other external factors. For instance, research has shown that certain words such as "torture", and "guillotine" are related to anger and can invoke anger-related emotional responses. In detail, present research will explore how an individual is emotionally influenced by different media types (image vs passage) and participant's age (Freshmen vs Senior).

It will be researched the effect of emotional contagion through positive and negative stimuli. Subjects, 50 undergraduate students, were asked to fill out a survey; there were 25 participants in the positive condition and 25 participants in the negative condition. The positive condition had a slideshow of positive images followed by a positive passage, and the negative condition was the same, except using negative images and a negative passage.

Population

The population is all Korean students at UW-Madison, and there were 281 enrolled undergraduate students (UW Office Register, 2018). To be specific, there were 35 freshmen, 62 sophomores, 66 juniors, 50 seniors and 68 transfer students. The gender ratio was 56.2% male and 43.8% female. To compare the difference of reaction between age, it was important to get

data from early 20's and mid-to-late 20's which can be imported from freshmen/sophomores and seniors. This will be an auxiliary data since the group of seniors are much older than freshmen.

Design

While there are large amounts of studies that compare audiovisual stimuli (such as videos) with visual stimuli (such as pictures), there is a lack of research comparing different forms of static stimuli. The main purpose of this research is to address this disparity and learn more about the differences in emotional elicitation between different forms of static stimuli by considering age. Research design aims to address the stimuli types and age differences in emotional elicitation. In addition to looking at which type of static stimuli tends to be the most effective in emotion elicitation, this paper also looks at how positive and negative emotions might differ in an individual's reaction time and the level of emotions that are induced through these different platforms. I predict that visual stimuli will going to have a larger influence on individuals than written stimuli. Also, predict that there will be significant difference in emotional response whether an individual is presented with positive or negative stimuli. This could be interest in that we could understand individual's emotion by considering their ages.

To collect the data, I asked a survey on the UW-Madison Korean Facebook Group. Two online surveys were distributed, one positive and one negative. The participants rated the emotions they were feeling after taking a survey that has either positive or negative images in it. There were two surveys and the participants were randomly assigned to each. The surveys were distributed via Qualtrics. The first part of the survey asked participants in either condition to provide their demographic information, including gender and age and asked them to rate how they were feeling on a continuous scale from 0-100. Next, images were shown to the participant on a timer, so every participant had the same amount of time to see each image.

Participants in the positive condition were shown positive images and participants in the negative condition were shown negative images. After viewing these images, participants were asked to rate how they were feeling on another continuous scale. Next, participants were given a passage to read that matched the condition they were in, either positive or negative. After reading the passage, they rated their emotions on the continuous scale one more time.

Hypothesis

The null hypothesis was that there were no different reactions when they saw both images and passage, which can be representative freshmen and senior. Alternative hypothesis would be that older students will have negative emotional than young students when they were shown negative images. Also, it is required to compare visual stimuli and written stimuli.

Sampling Scheme

For sampling scheme, I plan on using a stratified random sample because I wanted to estimate each of freshmen and senior sample. Stratified random sample have some advantages in that accurately reflects the population being studied because it will be stratified the entire population before applying random sampling methods. To be specific, it ensures each subgroup within the population receives proper representation within the sample. For stratified random sample, I divided entire population into strata and random samples were selected from each stratum. These subsets of the strata are then pooled to form a random sample. Then I will send URL link through Facebook group of Freshmen and Seniors as a sampling scheme.

However, it could be difficult to confidently classify every member of the population into a subgroup. Thus, I have to get rid of some characteristics such as race and ethnicity. Also, there were possibility to using a cluster sampling because it could save cost, time and reduce

variability, but I decided to not use. It was because cluster sampling could create biased data and sampling errors. There are possibilities to have overlapping data because every demographic, community, or population group will have some level of overlap on an individual level.

Sample Size

The data was analyzed from a total of 50 undergraduate students from the University of Wisconsin-Madison Korean students; 25 students from freshmen/sophomores and 25 students from seniors. First, 25 people were assigned to the positive condition, and the other 25 were assigned to the negative condition. The positive condition had 10 males and 15 females, whereas the negative condition had 12 males and 13 females. The materials for the survey were continuous rating scales (i.e. sliding scale points ranging from 0 to 100; 0 = Sad, 100 = Happy), standardized positive and negative images, and positive and negative passages. The images were from a standardized set of images called the Open Affective Standardized Image Set (OASIS), which was taken from a study in which it was shown that people make connections between certain images and either positive or negative emotions (Kurdi, Lozano, & Banaji, 2017). The passages were written by the experimenters, but they used specific words that were shown in a study by Niedenthal, Winkielman, Mondillon, and Vermeulen (2009) to have a connection with either positive feelings of happiness or negative feelings of anger.

Non-Sampling Issues

There only had 50 participants in total, 25 in each condition, which is potentially not a representative sample. The population at large was Korean undergraduates at UW-Madison and 50 participants are small considering the large number of undergraduate students. Even though the sample were from target population, it was hard to get response because there were no rewards for the answer. Thus, it could occur bias and furthermore, this can lead to problems of

reliability as members of the population may not have all been given an equal chance of being selected, as many of participants were drawn through convenience. It was recruited a convenience, because this was the easiest way to recruit people once I realized the issue of our survey. In addition, there might be some bias because it does not perfectly represent participant's year as their age. Some individuals could be more early 20's even if they are in senior. Also, to avoid bias as much, their names and private information were prohibited.

Concerns over reliability and validity arise due to creating our own survey. The pictures that used were standardized images from a database and the words used within the passages were also standardized emotional inducing words. However, I wrote the questions used in the survey, as well as the passage itself. Issues of reliability arise because the passages and the questions were not standardized or used in previous research, therefore it is difficult to determine if the measurement can be depended on as accurate. To elaborate more, I did not include a category for Korean American participants to get rid of cultural difference.

Analysis

After the sampling, to make analysis it is required to estimate population characteristics. In order to test the sensitivity to emotional contagion, we calculated the differences in scores between Prestatus question and Post scores (average of Q1 and Q2 scores). A multiple linear regression will be calculated to predict levels of sensitivity to emotional contagion (Absolute value of Prestatus scores subtracted by Post scores) based on valence (Positive and Negative) and age (Freshmen and Senior). The differences in Prestatus scores and Post scores will indicate how much larger in the negative condition compared to the positive condition. Lastly, I will find a significant interaction effect between the valence and the age.

To make accuracy of estimate, it will be planned to construct a 95% confidence interval. Overall, from these result, it is expected to suggests that a passage or images can directly trigger

similar emotions and behaviors in people, therefore showing that emotional contagion.

References

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