

# The Correlation Between Awareness and Oral Communication Competency in Students of X from Ages 13 to 18

Ji Woo Chae

Student, Surabaya Intercultural School

## ABSTRACT

The research aims to frame an individual's awareness of being monitored as potentially exclusive in altering the quality of one's oral communicative speech by controlling other extraneous factors and isolating the aforementioned variable of interest. A mixed, qualitative, and quantitative method study was conducted by quantifying the qualitative data collected during voluntary interviews. A total of 14 subjects were engaged in the quantitative part of this research study, interview. The results showed that the Hawthorne Effect has a positive and negative relationship between awareness and efficacy in ameliorating speech disfluencies. However, it is not necessarily negatively moderated by the magnitude of explicitness of their state of being monitored. As with any dependent measures, variability in speech is one concern as it may obscure potential differences or indicators due to speech disfluencies for other diseases. Because this study validated that the number of speech disfluencies one exhibits are moderately dependent on the state of awareness, such may be a problem depreciating the credibility of diagnosis of speech disfluencies or other relevant ailments. Exploring this field will advance the contemporary understanding of speech disfluencies, the Hawthorne effect, and the nudge theory.

**Keywords:** Hawthorne Effect, Awareness, Correlational Study, Oral Communication, Speech Disfluencies

## INTRODUCTION

Occasional mistakes in speaking are inevitable and omnipresent regardless of sex, race, age, and even intellectual abilities. According to research conducted by Bortfeld et al. published in the journal article Language and Speech validates the statistical information that disfluencies occur around 6% in spontaneous speech, suggesting the inevitable nature of speech disfluencies (Bortfeld et al. 123). However, the frequency of speech disfluencies may differ due to factors such as "corpora, sex, eye contact, and familiarity" (Lickely 93). This research will explore an unprecedented new factor in this field: awareness of being monitored.

Although there could be differing standards for speech disfluencies, this research will adopt maze-type disfluencies.

According to Bedore et al., all from the University of Texas at Austin, in the Journal of Bilingualism: Language and Cognition encapsulate the nuanced concept of speech disfluencies and clarifies the ambiguity by organizing the maze content based on "filled pauses, repetitions, connectors, grammatical

revisions, lexical revisions, and phonological revisions" (Bedore et al. 239). This research will adhere to this (Figure 1) classification when addressing types of speech disfluencies, as it clears the ambiguous area.

**Figure 1: Maze-type speech disfluencies description and examples from English and Spanish narratives (Bedore et al.)**

Maze type	Description	Examples
Filled pause	Non-linguistic vocalizations that occur at the beginning of utterances or between words.	(Um) he's in the water. (oh) se lo tiró. [(Oh) he threw it to him.]
Repetition	Sound, part-word, whole-word, or phrase repetition.	The (f*) frog jumped out the window. Viendo (el ni*) el niño. [Seeing (the bo*) the boy.]
Phonological revisions	Correction of phonological errors.	And then (sikha) she got his nose. Y el (nino) niño estaba cantando. [And the (poy) boy was singing.]
Lexical revisions	Correction of overt word choice errors; to add or delete lexical information.	And (they) he said goodbye. Cuando él dijo (estaba ca*) que se quería meter aquí. [When he said (was ca*) that he wanted to put himself here.]
Grammatical revisions	Correction of overt grammatical errors.	And (the) he threw the dog off too. Y (el) la señora allá estaba comiendo. [And (the-masculine) the-feminine lady was there eating.]
Connectors	Repetitive use of conjunctions or time markers at the beginnings of utterances.	(And then) the frog he's over there. (Entonces) la rana se escondió allí. [(Then) the frog hid there.]

Note: Maze is in parentheses. Translations from Spanish are in brackets.

Apart from the general concept of speech disfluencies, the contextualization of the Hawthorne effect should also be established. This rudimentary principle that now prevails in clinical trials and experimental research, initially delineated following research to investigate how to increase productivity levels in Western Electrical Companies Hawthorne Works in Chicago during the 1920s and 30s (Mayo). The paradoxical results of this investigation yielded the principles of the Hawthorne effect, which is coined for "situations in which the introduction of experimental conditions designed to identify salient aspects of behavior is designed to identify. When people recognize that their behavior is being examined, they change how they act" (Brannigan and Zwerman 56). This correlation between awareness and change in how individuals execute certain behaviors is crucial in understanding the context of this research.

Concerning the Hawthorne effect, when subjects are disclosed about their state of being monitored amid the experiment, the method of confession- either explicit or implicit- is anticipated to impact the effectiveness of the Hawthorne effect. Will unequivocal means of confession- remarkably frank, concise, and ruthless comments- be more successful in inducing actions from subjects than when conducted via subtle, nuanced, and ambiguous confessions?

The latter situation emerges from the concept of the Nudge Theory. American economist Richard Thaler and legal scholar Cass Sunstein disseminated and universalized the term to the public in a 2008 book, *Nudge: Improving Decisions about Health, Wealth, and Happiness*. Their book proposes that humans are vulnerable to unconscious influences on their behavior through the deliberate presentation of information and choices due to individual cognitive biases (Thaler and Sunstein). Pelle Guldborg Hansen and Andreas Maaløe Jespersen's research from the *European Journal of Risk Regulation* particularize the nudge theory in two categories: types of thinking and transparency. The transparency of nudges can induce varying effects on individuals. The authors elucidate that a transparent nudge is one in which "the intention behind

it...could reasonably be expected to be transparent to the agent behind the nudge" (Hansen and Jespersen 17). In contrast, non-transparent nudges function in incognito, using subtle and unconscious means to conduct behavior changes (Hansen and Jespersen 18). The latter ultimately insinuates that such an obscure approach to manipulating actions may not be ethically substantiated, arousing controversy over ethicality.

### **Gaps in Research**

Despite the prevalence of vigorous research projects on the dynamics of speaking disfluencies and the Hawthorne effect, those subjects were never probed simultaneously, leaving a gap in research on whether human consciousness can significantly influence oral communication's effectiveness. Therefore, this research can potentially spotlight this previously unilluminated field. To investigate the presence and the magnitude of influence of awareness on the manner of speech, the research paper will adhere to the following research question: To what extent does awareness affect oral communication competency in youths of ages 13 to 18 within X?

### **PURPOSE AND RESEARCH QUESTION**

The research aims to frame an individual's awareness of being monitored as potentially exclusive in altering the quality of one's oral communicative speech by controlling other extraneous factors and isolating the aforementioned variable of interest. The results will validate whether awareness can influence speaking competency, substantiating the Hawthorne effect. Establishing this correlation will be excruciatingly crucial in clinical settings, especially neurology. Hence, the targeted audience for this research is speech therapists, psychologists, and neuroscientists.

### **Hypothesis**

It is hypothesized that in the context of the Hawthorne Effect, the positive relationship between awareness and efficacy in ameliorating speech disfluencies is negatively moderated by the magnitude of explicitness of their state of being monitored. In essence, when subjects are informed explicitly (to a great extent of explicitness) about the state of being monitored, the efficacy of awareness in reducing speech disfluencies will be negligible or even negatively correlated. Comparatively, when the subjects are implicitly (low magnitude of explicitness) aware of their state of being monitored, such awareness will effectively reduce speech disfluencies due to the nudge theory, ultimately yielding enhanced oral communication competency.

### **LITERATURE REVIEW**

As mentioned, this research will probe the magnitude of awareness's effect on youth speaking competency. There needs to be more quintessential research on the effect of the Hawthorne effect on speech disfluencies. Hence, this research ultimately addresses this gap.

### **Evaluation of the Nudge Theory**

Researchers in varying fields cohesively concur that the effectiveness of the nudge theory is, to a moderate degree, evident. Nevertheless, the scope is limited and needs additional research to corroborate the potency. Anneliese Arno and Steve Thomas, in a peer-reviewed journal BMC Public Health, validate that nudge strategies, holistically, are effective in increasing health-beneficial nutrition choices (Arno and Thomas 5). However, they are cautious of making a slippery slope assertion that the auspicious

conclusions from their research may not be replicable in other nations with different socio-economic statuses. Supplementing their research is Koen Bandsma, Ward Rauws, and Gert de Roo's research paper, where they critically evaluate the optimization of the nudge strategies. They express that although nudge theory has practical efficacy, the effect should not be magnified as it is only optimized under the condition of sophistication of human behavior theories (Bandsma et al. 569).

Regardless of the potential of the nudge strategies, the perennial ethical controversy never pacifies. Current studies on the ethicality of the nudge theory are primarily engrossed in clinical settings, but the rudimentary concepts can be applied to a broader scope. Polychronis Voultos, a scholar at the Aristotle University of Thessaloniki-Thessaloniki-Greece, provides that nudge theories can be ethically problematic as they circumvent the subject's reflective capabilities by influencing "autonomous decision-making capability," yet they can still be vindicated under the circumstances if the nudge positively affects "their reflective choice making capabilities" (Voultos 307). This suggests that the line between moral and immoral nudge theory is obscure, and studies must be cautious about accommodating the ethicality of the studies. Furthermore, researchers Adnan Sharif and Greg Moorlog amplify this polemical perspective of the nudge theories. They conclude that adroitly formulated "nudges are not manipulative in a problematic sense within this specific context" (Sharif and Moorlog 162). Both studies underscore the complexity underlying the code of ethics in applying nudge theories in studies in varying fields. Despite the constrained scope of both research in the clinical area, both sources draw generalizations, making them highly relevant in this study; however, absolutely identical conclusions may need complete confidence, and only some variations may exist in broader fields.

Aside from the clinical settings of the nudge theories, the concepts can also apply in varying files, casting idiosyncratic results each time. According to a peer-reviewed study about Japanese junior and senior high schoolers, nudge-based education on climate change and an effect on "lower emissions of roughly 3.7%" (Mikami et al. 168). This result highlights a prominent example of the successful application of the nudge theory in an environmental context and how such manipulations can alter collective behavior. In a public health publication, additional research continues to augment how nudges can change decision-making by inducing individuals to select healthier work atmosphere compliance behaviors (Cooley et al. 584). Although the results from this study are limited to small populations who "withdrew early from the interventions," the finding is still significant in that it corroborates other literature that "nudges reduce individuals' perceptions of cognitive load associated with choosing alternative behavior choice" (Cooley et al. 584-585). This demonstrates how nudges can significantly affect even the most trivial aspect of human behavior patterns. On balance, research from various fields reinforces the assertion that nudges theories have practical implications on varying fields, yet with nuanced magnitude.

Although numerous studies reveal the applicability of the nudge theory, more research is needed to discuss the function of nudges on speech disfluencies- which should not be trivialized in contemporary society. More research on this particular cognitive function should be executed, hence the purpose of this research paper.

### **The Implication of the Hawthorne Effect**

Among all the present foundational and empirical studies on the Hawthorne Effect, they agree that the effect may change the data or result of a clinical study. However, a few things could be improved regarding the extent of its impact. Some papers project that the Hawthorne effect audibly has significant implications "for clinical research and its generalisability to routine practice" (McCarney et al. 2). However, a different

study where analyzed the magnitude of the influence of being aware of the state of surveillance, which encapsulates the Hawthorne effect, on a cognitive function, eye blinking, rebuts that notifying the subjects that their rate of eye-blinks are being monitored potentially induce a "modest but significant acute influence on blinking activity." However, it does not substantially affect the blink rate over prolonged tasks (Kabiri et al. 1383). Even so, it is critical to note that the latter study is limited due to the low sample size, and the results should only be considered moderately. In this manner, Kabiri et al. undermine the assertion made by McCarney et al. by clarifying that while the Hawthorne effect may have a modest influence on eye blinking, it ultimately does not alter the results over prolonged tasks. It suggests that dissimilar to what McCarney et al. contend; the Hawthorne effect could be limited in its competency to significantly skew the qualitative and quantitative data. All literature qualifies the Hawthorne Effect and its influence on research. However, they need to discuss the impact on speaking competency, which this study focuses on. They all needed more elaboration on how the Hawthorne effect can lead to speaking disfluencies, therefore casting a significant gap in the research.

### **Factors Influencing Speech Disfluencies**

To validate if the Hawthorne effect can instigate speaking disfluencies, other potential factors that may induce the same results must be identified and designed to be excluded from the study. In their research, Bortfeld and fellow researchers underline various factors that can sway the rate of speech disfluencies; "speakers who try to take more care with their speech may succeed in producing more fluent utterances" (Bortfeld et al. 143). This suggests that an individual's awareness of speaking can reduce speech disfluencies. In addition, "breathing, pragmatic reason, cognitive process, linguistic planning, and nervousness" are all factors that are empirically justified (Ajani 131). Furthermore, Aregu, in a peer-reviewed research paper, probes alternative elements, self-esteem, and self-efficacy, to also dictate speech performances (Aregu 70). Cooperatively, these researchers synchronize in revealing comprehensive aspects contributing to the changes in speaking competencies.

However, the factors are entangled in a complex manner. While Bortfeld simplistically asserts that age can slightly affect speaking abilities, with a positive correlation between age and rate of disfluencies, Juste and Andrade complicate by specifying how age is more of a qualitative variable rather than quantitative (Juste and Andrade 63). This implies that period modifies the type of disfluencies instead of altering the rate of disfluencies. Such discrepancies obscure the role of age in speaking disfluencies and ultimately thwart consonant conclusions about different relationships between them. This is further convoluted by gender; Erviona and Arsyad clarify how "female students were better than male students in the speaking as seen from the results of comprehension, vocabulary, and pronunciation. On the other hand, male students had better scores in grammar and fluency" (Erviona and Arsyad 43). From this, even the sex of an individual is not equivocal in affecting speaking ability. Although many factors undoubtedly yield varying magnitudes of influence on one's speaking ability, research is ambiguous. Consequently, these factors should be considered to fill the gap, and more research should be done to draw a transparent assessment of the correlation.

## **METHODOLOGY**

### **Study Design**

This study analyzes the correlation between awareness of being monitored and oral communication competency with the ambition to determine the most optimal means to enhance one's articulating qualities.

Consequently, this study can expose the contemporary flaws in speech disfluency treatments and provide an unprecedented method to placate fluctuations in speaking.

A mixed method study was conducted by quantifying the qualitative data collected during voluntary interviews. The hybrid method was utilized as it was the sole and optimal means to probe individuals' speech disfluencies rate. It rudimentarily requisites linguistic data garnered via qualitative methods. This method was effective since "unlike the stereotype of qualitative research as loose and random, theory---building requires methodological rigor on par with quantitative methods" (Malina et al. 13).

### **Subjects**

Initially, subjects for this study were students aged 10 to 18. However, due to the narrowness of the total potential population size (n=122), the actual minimum age of the sample is 13. A consent form, parental consent form, and participation form were sent to the students of interest, and subjects were accumulated via voluntary sampling. The invitation presented a "fake" research topic and the question: "The Correlation between Age and their Interpretation on 19th Century Artworks". Approximately 15 students volunteered to participate, with one who reversed their decision and opted out; hence a total of 14 students were analyzed in this study. Among the initial 15 subjects, individuals were subjectively allocated to control, nudge, and experimental groups. Each group consisted of equal distributions of sex, ethnicity, multilingualism, and age to ensure that the awareness of being monitored is the only variable responsible for yielding any results. Sex was regulated due to inherent linguistic proficiencies between genders, which may be the cause for increased or decreased rates of speech disfluencies. Similarly, as identified in the literature review, multilingualism and ethnicity should be modulated to warrant the conclusion that awareness is the sole determinant of changes in the rate of speech disfluencies. Last but not least, age on its effect on maturity can change the rate of speech disfluencies. This equal distribution avoids any random, unequal density of inherent varieties of language proficiency levels (for example, to avoid most of the younger subjects being concentrated in a group). To best leverage speech disfluency practices as biomarker, it is cardinal to acknowledge how its function can potentially be modified by demographic, environment, cognitive, and pathological factors. Although a sample size of 14 may appear insufficient to be statistically significant, in nonprobability sampling, 12 is sufficient to garner saturated results from a qualitative research approach (Guest et al.).

### **Quantitative Study Procedure: Interview**

Regardless of the allocations, everyone will be interviewed for 10 minutes, which will be recorded for reference and transcription. They will be asked about reflections on a 19th-century painting. This is merely to motivate spontaneous talking and avoid prepared speech. What they respond to will not have any significance in the research. However, the number of times the subject had speaking disfluencies will be monitored to evaluate their oral communication competency.

The painting was selected to stimulate oral speech to moderate the effect of stress or anxiety amidst the interview. As illustrated in a Journal of Environmental Psychology, visual arts, especially those depicting natural scenes with vegetation, effectively promote recovery from stress even for non-patient groups (Hartig and Staats 105). A different scholarly study elucidates that "according to emotional congruence theory, a healthy person in good spirits may tend to respond to abstract or ambiguous paintings in an emotionally matching positive manner" (Unrich and Gilplin 123). Hence, regardless of the elements of paintings, it is proven that visual arts can reduce stress and anxiety, which can also alter the result of the

data.

Different data accumulation will be employed based on the group allocations. In the Control Group, for 10 minutes, they would be motivated to discuss their analysis of famous paintings freely. The participants will be told that the research objective is to garner qualitative information regarding how individuals analyze famous paintings. In reality, their oral communication competency will be secretly measured. Since these individuals are in the Control Group, it must be regulated that Hawthorne Effect does not influence the study- the reason fake intention of the study was requisite. A subject will be tallied accordingly whenever they exhibit any of the previously mentioned maze types. In the experimental group, from the beginning of the study, they will be told the real intention. The subjects in this group are explicitly instructed to be aware of their oral communication competencies. Last but not least, in the Nudge Group, individuals before the interview will be nudged to be aware of their speaking ability, implying that their communication competency is being measured. Every time they express maze-type speech disfluency, a screen where they can view it will tally it. This will make them nudged to be aware of their speaking abilities but remain oblivious about the study’s intention. Every other condition will be held in equilibrium so that awareness can be isolated as the only variable potentially responsible for any significant changes in the rate of speech disfluencies.

Although an interview is a qualitative research method, because the words spoken during the discussion will be quantified via transcription and calculating the rate of disfluencies, this section of the study will be considered quantitative.

**Figure 3: Equation for the Rate of Speech Disfluencies**

$$\text{Rate of Disfluency} = \frac{(\text{number of maze speech disfluencies})}{(\text{total amount of words spoken by subject})} \times 100 (\%)$$

**Qualitative Study Procedure: Post Interview Survey**

At the end of the 10-minute interview, every participant will be required to complete a survey regarding their stress and shame levels. While other variables (age, sex, ethnicity, and multilingualism) were controlled, the stress level can act as an uncontrollable variable and modify the results. The survey attempted to target all feasible origins of stress: current emotions, current stress levels, plans after the interview, and humiliations. View Appendix C for more information.

**Instrument**

The questionnaire asked these subjects for their analysis and interpretation as follows:

**Table 1: Questionnaire about 19th Century Art Analysis to Stimulate Speech (Tritt).**

Question 1	Question 2	Question 3	Question 4	Question 5
How do you feel looking at the artwork?	What do you think the author was feeling?	What emotions are captured in the piece? If there are people in the piece, what are their expressions?	How has your opinion changed about this piece from the time you started looking at it until now?	Does the piece bring to mind any of your own life events or memories?

However, note that other appropriate questions were impromptu to stimulate the dialogue. The aforementioned questions emanated from a bank of sample cognizant questions suggested by B.R. Howard & Associates Inc., an expert corporation to conserve arts.

When transcribing a documented interview, the program was an application called “Transcribe - Speech to Text” by DENIVIP. This instrument was exploited as it detected speech disfluencies most clearly. However, the confidence of its transcription oscillates greatly.

The research method preferred for this study is the optimal choice as it attempts to isolate awareness from other extraneous variables that may vary the outcomes. Furthermore, multiple groups were established to analyze the efficacy of nudging and unequivocal means to divulge the state of being observed to the subjects.

## RESULTS

### Quantitative Results

A total of 14 subjects were engaged in the quantitative part of this research study, interview. Initially, the sample size was 15, but one person opted out, diminishing the sample size. This person was allocated to the Nudge Group; hence there are 4 participants in the Nudge Group.

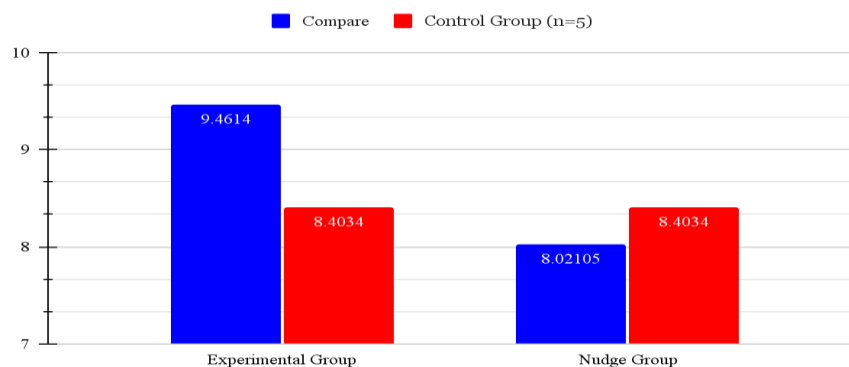
Table 3 below shows the rate of disfluencies in percentage (calculated using the equation in Figure 3). All values were rounded to the nearest four significant figures. Graph 1 encapsulates the average rate of speech disfluencies and presents the values in a bar graph comparatively.

**Table 3: The Rate of Speech Disfluencies for the Different Groups**

		Rate of Speech Disfluencies (number of times stuttered/total words spoken) %				
		1	2	3	4	5
Groups	Experimental Group (n=5)	8.004	9.756	10.143	11.08	8.324
	Control Group (n=5)	13.56	10.41	3.218	9.797	5.032
	Nudge Group (n=4)	14.62	5.943	10.542	0.9772	

**Graph 1: The Average Rate of Speech Disfluencies for the Different Groups**

Comparative Analysis of Experimental and Nudge Groups





As seen in Graph 1, the average rate of speech disfluencies for the experimental group, individuals who were disclosed about the genuine intentions of the study, had the highest rate of speech disfluencies, at 9.4614%. Conversely, the lowest rate of speech disfluencies was identified in the Nudge Group of 8.02105%. However, the Control Group’s value was dissimilar to the average rate of disfluencies identified in the research published by Bortfeld et al. where the latter scholarly investigation resulted in a 6% rate in spontaneous speech (Bortfeld et al. 123). The varying results articulate that the findings are not consistent with past literature. Hence, this insinuates that the results amassed in this investigation could potentially be localized, at most, and encounter challenges when delineating universal generalizations.

**Table 4: Consistency among Data Collected in Each Groups**

	Variance	Standard Deviation
Experimental Group (n=5)	1.6472318	1.147948361
Control Group (n=5)	17.7034498	3.763344236
Nudge Group (n=4)	34.62061481	5.095631571

Such polarities are further corroborated in Table 4 as it displays the variance and standard deviations of the three groups. The experimental group had the lowest variance and standard deviation value, suggesting that the values among themselves are concentrated and not vastly proliferated numerically. Nevertheless, as for the Nudge Group, variance and standard deviation, 34.62 and 5.096, respectively, in four significant figures, are remarkably high. This high value warrants the results from Table 3 with a dispersed data set from the mean and among the values.

**Qualitative Results**

The post-interview survey was sent out to all participants after the interview session. View Appendix C to view all the questions in detail. The purpose of the survey is to analyze if superfluous factors, such as stress and shame levels during the interview, that could not have been filtered during the delimitation of groups have a great significance in altering the result of the study.

**Table 5: Responses of Subject’s Self-Evaluation of Emotion and Magnitude of Stress**

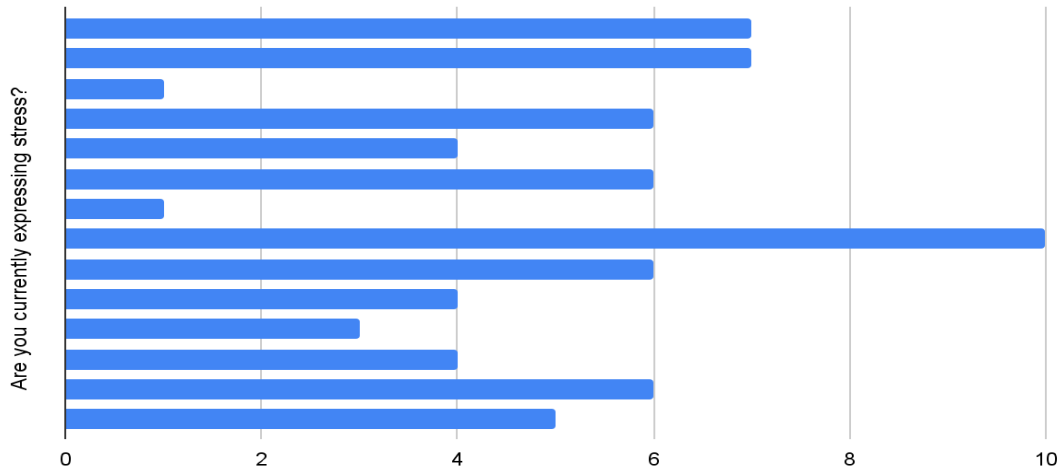
What is your name?	How are you feeling right now? (You may select more than one applicable)	Do you have other plans after this interview? (This question is to evaluate if the individual is under urgent situations, or feeling pressure)	If you answered "yes" to the previous question, please choose one.
Subject 3 Experimental Group	Relaxed, Uncomfortable	No	

Subject 4 Experimental Group	Stressed, Happy, Sleepy	No	
Subject 4 Control Group	Relaxed	Yes	Plans in less than one-hour
Subject 3 Control Group	Happy, Sleepy	Yes	Plans in 1-3 hours
Subject 3 Nudge Group	Relaxed, Stressed, Uncomfortable	No	
Subject 2 Control Group	Relaxed, Stressed, Happy	No	
Subject 5 Control Group	Chill	No	
Subject 2 Nudge Group	Stressed	Yes	I have important plans now
Subject 1 Control Group	Stressed, Happy, Sleepy	Yes	Plans in 1-3 hours
Subject 1 Experimental Group	Relaxed, Sleepy, After the interview i felt fulfilled for some reason	Yes	Plans in 1-3 hours
Subject 2 Experimental Group	Relaxed, Happy, Sleepy	No	
Subject 5 Experimental Group	Stressed	Yes	Plans in 1-3 hours
Subject 1 Nudge Group	Stressed, Uncomfortable, Sleepy	No	
Subject 4 Nudge Group	Uncomfortable	No	

As identifiable in Table 5, the first question asked to select all of their current state of emotions in a bank of examples. One of the most prevalent answers were “stressed” among seven individuals, It is paramount that about half of the individuals interviewed experienced one type of stress, albeit the reasons here were once unidentifiable. To determine the origin of stress, the second question asked if the subjects had an incoming agenda following the interview, instigating stress. Surprisingly, only three individuals reported stress regarding having plans. Question 2 was supplemented with Question 3, which asked about the time range of the incoming plan.

**Graph 2: Responses of Subject’s Self-Evaluation of Stress Levels**

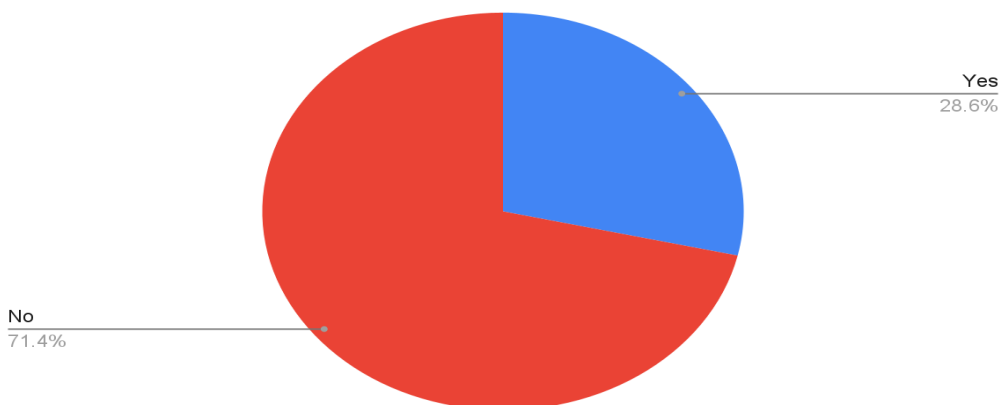
Are you currently expressing stress?



The following questions in the survey asked the subjects to self-evaluate their magnitude of stress levels. Subject 2 Nudge Group gave the highest stress level (magnitude 10). Subject 2 justified the stress felt: “The amount of hesitations or stutters I had stressed me and gave me anxiety.” From Graph 2 and survey responses, the average magnitude of stress levels for subjects in the Control Group was 4.0. For the experimental group, the average stress level was 5.0. The Nudge Group had the highest level of 6.25. Hence, it is suggested that the amount of speech disfluencies experienced somewhat depends on the amount of stress resulting from the Hawthorne Effect. While some individuals, like the aforementioned subject, imputed the design of the study as a source of stress, some subjects, such as Subject 3 in Nudge Group, attributed their deficiency of ability to expound clearly for their origin of stress: “The reason why I felt stressed was because I found it hard to find words that helped me elaborate my feelings.” Lastly, individuals ascribe unrelated reasons in this research (e.g., upcoming test) as their reason for stress: “I had a humanities test after that period, so I was feeling a bit stressed.” View Appendix A.

**Graph 3: Percentage of Subjects Self-Evaluating the Presence of Shame**

Count of Presence of Extraneous Negative Feelings During Interview



Last, all subjects were asked about humiliation. As indicated in Graph 3, most subjects (10 individuals) responded to not experiencing other negative emotions. Nevertheless, four individuals revealed that they

had felt some shame during the interview. Responses for their justifications included, “It felt like I was under pressure during the interview. When I was in the Nudge Groups and the number of times I stuttered was displayed, it felt like I had to stop stuttering and speak better...” Only the individuals who attributed the study design and their inability to expound their thoughts responded to having felt shame during the interview. When extraneous reasons stressed individuals, they professed not to have experienced humiliation during the interview.

## CONCLUSION

### Discussion

Therefore, the study's results suggest that the hypothesis was correct to a certain degree. The Hawthorne Effect has a positive and negative relationship between awareness and efficacy in ameliorating speech disfluencies. However, it is not necessarily negatively moderated by the magnitude of explicitness of their state of being monitored. Explicit- high magnitude of explicitness- means of disclosing the state of being monitored in the Experimental Group had a more significant impact on the rate of speech disfluencies (1.058% more compared to the Control Group) than when implicitly- low magnitude of explicitness- divulged in the Nudge Group (0.3824% less compared to Control Group). Hence, to answer the research question, awareness affects oral communication competency in youths aged 13 to 18 within X. The results validated that speech disfluencies were altered when awareness was introduced in the Experimental and Nudge groups. However, it is paramount to acknowledge from the qualitative research that the results from quantitative research could have been from superfluous factors in the investigation design, such as stress, humiliation, et cetera. After the significant number of individuals reporting feeling stressed or humiliated from the interview, it is hard to generalize that speech disfluencies are confidently altered purely due to awareness. Regardless, the fused result from this research and previous research regarding Hawthorne Effect and speech disfluency corroborate each other and have substantial implications in clinical practice, treatment of speech disfluencies, and diagnosis of cognitive ailments.

Analysis of the variance and standard deviation of Experimental and Nudge Group suggests some unequivocal adverse effects of explicit means of the Hawthorne Effect, as demonstrated by the low variance and standard deviation values. Hence, when the state of being monitored is explicitly revealed to individuals, it is expected to aggravate speech disfluencies. Initially, it was anticipated that such a result was due to pressure induced on the subjects upon awareness to speak more fluently, ultimately promoting stress and anxiety. However, this contradicts past literature by Bortfeld and fellow researchers. The authors previously asserted that individuals who endeavor to be more prudent with their speech could reduce mistakes in oral communication. Therefore, a more tenable explanation is that the corpora relevant to oral communication to human dialogue offered less stability when exposed to a situation where individuals were aware of their monitoring state. Nevertheless, the study maintains to buttress the efficacy of the Hawthorne Effect, aligning with other research such as the one by Kabiri et al. on Hawthorne Effect and eye blinking: "eye blinks are being counted exerts a modest but significant acute influence on blinking activity," (Kabiri et al. 1380).

Comparatively, the high variance and standard deviation values in the Nudge Group yield antithetical assertions. It illustrates that the effectiveness of the nudge theory needs to be more consistent by the individual, and universal generalization cannot be crafted. Although Graph 1 explicitly demonstrates a lower rate of speech disfluencies in the Nudge Group, Table 3 and Table 4 conjointly curtail the potency of the nudge theory. This is consistent with past research by Arno and Thomas published in BMC Public

Health. Like their results, although the nudge theory does have a moderate effect, its influence should not be magnified and is susceptible to not make premature, slippery slope assertions (Arno and Thomas 5). However, this generalization can not be ascertained due to the small sample size, making it vulnerable to Type II (false-negative) error. Such fluctuations in the Nudge Group can explain two types of stress experienced during the quantitative research: stress from the research design and the subject's inability to articulate speech adroitly. Although qualitative research was conducted to evaluate the presence of stress and abate the efficacy of awareness in altering oral communication competency due to the high correlation between stress and Nudge Groups, one plausible explanation is that awareness, when accompanied by nudging, induces stress and humiliation. In essence, stress is not an extraneous factor. In reality, it is the aftermath followed by awareness, justifying why all subjects in the Nudge Group reported experiencing negative feelings in the qualitative research. Because stress is not a factor inducing nudge nor speech disfluencies in the Nudge Group, the potential theory is that distractions caused when tallying speech disfluencies during interview thieve individual's concentration in corpora of speech, causing losing focus and consequently reduce the quality of oral communication competency. Therefore, application of the nudge theory in the represented environment should not be expected for engendering fruitful results. This study addresses the gap mentioned in the Literature Review above-delineated. Namely, this study addresses the previously unilluminated topic of the effect of awareness on speech abilities.

### **Implication**

As with any dependent measures, variability in speech is one concern as it may obscure potential differences or indicators due to speech disfluencies for other diseases. Because this study validated that the number of speech disfluencies one exhibits are moderately dependent on the state of awareness, such may be a problem depreciating the credibility of diagnosis of speech disfluencies or other relevant ailments. According to Mayo Clinic, a nonprofit American academic medical center, "A stroke, traumatic brain injury, or other brain disorders can cause speech that is slow or has pauses or repeated sounds" (Mayo Clinic). As such, when neurologists are to diagnose an individual with traumatic brain injury, misdiagnosis can occur due to varying rates of speech disfluencies. Therefore, these research results should be considered in clinical settings before making premature decisions. Apart from cognitive disease, diagnosis of stuttering and other relevant oral deficiencies must recognize unanticipated elements altering the results. Furthermore, because awareness is controllable, manipulating such factors can be exploited to treat speech disfluencies. However, further study is needed to scrutinize the plausibility of the implication.

### **Limitation**

As implied previously, the lack of population size of each group significantly challenges the generalizability of the results, resulting in increased vulnerability to type I and type II errors. Greater sample size could have not been achieved due to a lack of volunteers and parental consensus. Although the study's initial subjects included a younger demographic, the lack of parental consensus among fourth and fifth-grade students considerably lowered the sample size.

There were some areas for improvement in the data collection. Due to a lack of supply, an elementary program was utilized to transcribe the interview sessions. The confidence level plummeted to 34% for a few phrases due to limited audio qualities. Moreover, speech disfluencies were manually counted after the transcription based on definitions and explanations of maze-type disfluencies. The process of quantifying the qualitative information of the interview is especially prone to human and technological errors that

could not have been regulated.

Last but not least, the qualitative research of post-interview surveys is solely based on the subjective self-analysis of participants. Because there are no circumventions and universal guidelines for one's stress magnitude, different individuals can assign different magnitudes to the same event. Therefore, a massive emphasis on the qualitative section should be refrained and only considered eligible to substantiate the quantitative result further.

### Future Research

From a methodological aspect, to enhance this study, subsequent research should increase the number of participants to reduce the possibility of type I (false positive) and type II (false negative) errors and increase the credibility of the results. Furthermore, the demography of the group allocations should be augmented, including more male and non-Asian populations. Because this study is prone to human errors due to a lack of advanced technology (e.g., for transcriptions), applying enhanced mechanisms can significantly increase the accuracy of the data collected. In the result and facet, future studies should include another Experimental Group that directly orders the participants to try reducing their speech disfluency rate. The results of this new study will reveal the positive influence of explicit means of awareness regarding the Hawthorne effect. Alternatively, additional research to investigate the correlation between stress and speech disfluencies should be conducted to correctly justify the rate of speech disfluencies in the Experimental Group. Exploring this field will advance the contemporary understanding of speech disfluencies, the Hawthorne effect, and the nudge theory.

### Works Cited

1. "(PDF) Dialogue Moves and Disfluency Rates. (2001): R. J. Lickley: 22 Citations." SciSpace - Paper, 1 Jan. 2001, <https://typeset.io/papers/dialogue-moves-and-disfluency-rates-2v8dqxchjm>.
2. Arno, Anneliese, and Steve Thomas. "The Efficacy of Nudge Theory Strategies in Influencing Adult Dietary Behaviour: A Systematic Review and Meta-Analysis." *BMC Public Health*, vol. 16, no. 1, 2016, <https://doi.org/10.1186/s12889-016-3272-x>.
3. Bandsma, Koen, et al. "Optimising Nudges in Public Space: Identifying and Tackling Barriers to Design and Implementation." *Planning Theory & Practice*, vol. 22, no. 4, 2021, pp. 556–571., <https://doi.org/10.1080/14649357.2021.1962957>.
4. Bortfeld H, Leon SD, Bloom JE, Schober MF, Brennan SE. Disfluency rates in conversation: effects of age, relationship, topic, role, and gender. *Lang Speech*. 2001 Jun;44(Pt 2):123-47. doi: 10.1177/00238309010440020101. PMID: 11575901.
5. Brannigan, Augustine, and William Zwerman. "The Real 'Hawthorne Effect.'" *Society*, vol. 38, no. 2, 2001, pp. 55–60., <https://doi.org/10.1007/s12115-001-1041-6>.
6. Byrd, Courtney T et al. "The disfluent speech of bilingual spanish-english children: considerations for differential diagnosis of stuttering." *Language, speech, and hearing services in schools* vol. 46,1 (2015): 30-43. doi:10.1044/2014\_LSHSS-14-0010
7. Cooley, P Dean et al. "Peer champions responses to nudge-based strategies designed to reduce prolonged sitting behaviour: Lessons learnt and implications from lived experiences of non-compliant participants." *AIMS public health* vol. 9,3 574-588. 12 Jul. 2022, doi:10.3934/publichealth.2022040
8. The Effect of Speaking Self-Efficacy and Gender in Speaking Activities. [https://www.researchgate.net/publication/299601402\\_THE\\_EFFECT\\_OF\\_SPEAKING\\_SELF-](https://www.researchgate.net/publication/299601402_THE_EFFECT_OF_SPEAKING_SELF-)

## EFFICACY\_AND\_GENDER\_IN\_SPEAKING\_ACTIVITIES.

9. Erviona, Lussy, and Safnil Arsyad. "Gender Differences and Their Impacts on Students' Performance in Speaking Ability." *Journal of English for Specific Purposes in Indonesia*, vol. 1, no. 1, 2022, pp. 43–49., <https://doi.org/10.33369/espindonesia.v1i1.23646>.
10. Guest, Greg, et al. "How Many Interviews Are Enough?" *Field Methods*, vol. 18, no. 1, 2006, pp. 59–82., <https://doi.org/10.1177/1525822x05279903>.
11. Hansen, Pelle Guldborg, and Andreas Maaløe Jespersen. "Nudge and the Manipulation of Choice." *European Journal of Risk Regulation*, vol. 4, no. 1, 2013, pp. 3–28., <https://doi.org/10.1017/s1867299x00002762>.
12. Hartig, Terry & Staats, Henk. (2003). Guest Editors' introduction: Restorative environments. *Journal of Environmental Psychology - J ENVIRON PSYCHOL.* 23. 103-107. 10.1016/S0272-4944(02)00108-1.
13. Malina, Mary A. and Norreklit, Hanne and Selto, Frank H., *Lessons Learned: Advantages and Disadvantages of Mixed Methods Research* (December 13, 2010). *Qualitative Research in Accounting and Management*, Forthcoming, Available at SSRN: <https://ssrn.com/abstract=1826304>
14. Mariza Ajani, K. "They Who Hesitate: The Influencing Factors of Hesitation Phenomena in Students' Speaking at IAIN Langsa". *JADEs Journal of Academia in English Education*, Vol. 2, no. 2, Jan. 2022, pp. 110-34, doi:10.32505/jades.v2i2.3724.
15. Mayo E: *The human problems of an industrial civilization*. Volume 3. 2nd edition. New York, MacMillan; 1993:53-73.
16. McCarney, Rob, et al. "The Hawthorne Effect: A Randomised, Controlled Trial." *BMC Medical Research Methodology*, U.S. National Library of Medicine, 3 July 2007, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1936999/>.
17. Mikami, A., Akaishi, N., Hirayama, S., Yata, M., & Nagao, K. (2022). Development of a Climate Change Education Program Using Knowledge of Behavioral Science Such as Nudges and Verification of its Effects in Decreasing CO2 at Home. *International Journal of Home Economics*, 15(1), 157-170.
18. Shaafi Kabiri, Nina et al. "The Hawthorne Effect in Eye-blinking: Awareness that One's Blinks are Being Counted Alters Blink Behavior." *Current eye research* vol. 45,11 (2020): 1380-1384. doi:10.1080/02713683.2020.1752736
19. Sharif A, Moorlock G. Influencing relatives to respect donor autonomy: Should we nudge families to consent to organ donation? *Bioethics*. 2018;32:155–163. <https://doi.org/10.1111/bioe.12420>
20. Staróbole Juste, Fabiola, and Claudia Regina Furquim de Andrade. "Speech disfluency types of fluent and stuttering individuals: age effects. IALP Student Award." *Folia phoniatica et logopaedica : official organ of the International Association of Logopedics and Phoniatics (IALP)* vol. 63,2 (2011): 57-64. doi:10.1159/000319913
21. "Stuttering." Mayo Clinic, Mayo Foundation for Medical Education and Research, 5 June 2021, <https://www.mayoclinic.org/diseases-conditions/stuttering/symptoms-causes/syc-20353572#:~:text=A%20stroke%2C%20traumatic%20brain%20injury,are%20nervous%20or%20feeling%20pressured>.
22. Thaler, Richard H., and Cass R. Sunstein. "Nudge:" Amazon, Allen Lane, 2021, <https://www.amazon.com/Nudge-Improving-Decisions-Health-Happiness/dp/014311526X>.
23. Tritt, Holly. "How to Look at Art: 30 Mindful Questions to Ask Yourself." *B.R. Howard Art Conservation and Restoration*, B.R. Howard Art Conservation and Restoration, 6 Mar. 2019,

<https://www.brhoward.com/new-blog/how-to-look-at-art-30-mindful-questions-to-ask-yourself>.

24. Ulrich & Gilpin (2003) Healing Arts: Nutrition for the Soul - Researchgate. 2003, [https://www.researchgate.net/publication/343722590\\_Ulrich\\_Gilpin\\_2003\\_Healing\\_Arts\\_Nutrition\\_for\\_the\\_Soul](https://www.researchgate.net/publication/343722590_Ulrich_Gilpin_2003_Healing_Arts_Nutrition_for_the_Soul).
25. Voultsov, Polychronis. "The ethics of health-promoting nudges." "La ética de los impulsos ("nudges") que promueven la salud." Cuadernos de bioética : revista oficial de la Asociación Española de Bioética y Ética Médica vol. 32,106 (2021): 301-320. doi:10.30444/CB.104

## APPENDICES

### Appendix A: Interview Transcriptions

Subject's responses are bolded

Identified speech disfluencies are highlighted in yellow

Subject 1 Control Group

X Group two start. Okay. Provide me with your own interpretation with this.

**Um**, it's about people from various background and **like** ethnicity. **Um**, you united in **like** one place and living in harmony.

All right. So what do you think like each colors represent?

**Um**, **like** different personalities.

Different

Personalities. All right. In that scope, what do you think of this painting? Is meaning is what? Attri What attribution would you give?

**Um**, even with difference, try to live in harmony with, all

Right. Yeah. All right.

And feel **like**, be color and with people that are different from you.

When you look at this painting, how do you feel?

**Um**,

It's

Kind of creepy. Very creepy, But **like**, the hugging is weird. Yeah.

How, how would you elaborate on your ness?

**Uh**, on my what?

On your ness? Creepiness. The reason why you are clean out?



I think because of the different positions. **like** it's usually hit on top, but this one is **like** scattered around.

What do you think the meaning is behind that?

**Um**, everyone get to be the **hit, either the hit or like** everyone have of a role in the society. **Somewhere like** the head, somewhere, the hands, and somewhere **like** the Feet.

All right. Interesting. What do you think the opera was feeling when thinking this?

**Um**, **he, he** envisioned a world where people of different backgrounds and different, **like different** peop different personality can work together.

Mm-hmm. <affirmative>. All right. And if there's expressions here. Yes. What do you think the expressions represent?

**Uh**, the **expressions here are very, there's no expressions. like** there's no smiles and there's no anger. I think **they're, they're** just used to it.

Mm-hmm.

<affirmative>. All right. So why do you think there's a reason for choosing no expressions?

**Um**, cuz I think that's the way it should be. It's not a thing that we should, yeah. We should celebrate it, but it's not **like** a thing that is too special and it's not a sad thing that we should frown upon.

Alright. That'd be interesting. And how has your opinion changed for the first time you saw this painting until now?

**Uh**, at first the painting was kind of random in my opinion, but as I observed through it, it has **like a, like a** more in-depth meaning to It.

Mm-hmm. <affirmative> interesting. And just the peace frame to mind. Any other online events or memories?

**Um**, you know, the picture where **like** hands of different, **different** colors. combined and **like**, yeah. Work together.

All right. Interesting. Thank you. Now this painting provide me with your own expectations on this painting.

**Um**, it's **like** people probably **like** near the Middle East where it's dry, taking care of their cattle. cow.

Right. How do you feel when you look at this painting?

It's calm yet. **It's, it's** dark. Yeah. Yeah. So it's **like** the feel of loneliness.

Oh, isolation.

**Isolation.**

All right. And what elements has contributed to the feeling of isolation?

**Um**, the choice of color for sure, and also the setting where it's only **like** grasses and there's a person and a gavel right there.

All right. What's going by color?

**Uh**, the color. The color choice here is unnatural.

Mm-hmm.

<affirmative>.

It's being **like** darkened and being made **like** vintage kind of way? Yeah.

All right. And how has your opinion changed from the first time you saw until now?

**Um**, it hasn't, it has not changed, to be honest.

The, does it spring tonight? Any of her own life experience or memories?

**Um**, probably when my maid talks about, **uh**, her taking care of cattles in villages, probably that's the way they live in **like** small settlements, **like** villages.

All right. Yeah. Thank you. How about this painting?

**Um**, it's **like** a person **that, that** express herself through her works, which is gardening.

How about look closely? Do you notice something?

The what?

Do

You

Notice something the clothing Look closely? Do you

Notice something?

**Yeah, there's a person right there. Right. And the person is trying like to hide and not through, like over, she wants the flower to dominate the picture.**

Oh, all right. And what do you think the meaning behind that is?

**I think the way some people express their confidence or their personality is through their works and not their self.**

Oh, all right. And so what would you, what symbolize this flower?

**Um,**

**It's**

**The, like when you take pride of doing something Yeah, it's like the flower,**

uhhuh,

<affirmative>. All

Right.

**You try to not overshadow the flower, but the works will, will, will show who you are.**

All right. And how do you feel when you look up this artwork?

**Um, the flower is shining and gorgeous, but the person is like shy and lack of Confidence.**

Mm-hmm. <affirmative>. All right. And does the painting bring to mind any of your own live experience or memories?

**Um, no, actually.**

All right. How about this painting?

**Uh, it's a painting of a person appreciating the scent for flower.**

Mm-hmm. <affirmative>. Alright. Yeah. And how do you feel when you look at this?

It's **like** dreamy and calming.

What do you think her expressions are presenting?

**Um, Um, like** appreciation through nature. Right? She looks **like** really paying attention through every bit of the scent and yeah, she's just enjoying with the nature. She's enjoying this.

What do you think the meaning behind this is?

**Um, to appreciate what's around you, to appreciate the environment.**

Great appreciation. Yes.

**Um,** how does this friend's mind any of your own life event memories?

**Um, like I, I** went to gardens and I tried **to to to** smell the flowers, but some of it just doesn't give it a grip of any stem, so.

All right. Thank you. How about this painting? How does this make you feel?

**Um,** it's **like,**

It **Makes me feel, it makes** me imagine **when, where** I'm in that setting. **like** it's very hot and you still have to work. It's **like,** even if the day is not good, you still have to do your responsibility.

Mm-hmm. <affirmative>. Yeah.

All right. Then what do you think the colors represent?

The colors it represent, **like** the **colors** are also unnatural. So even when things are weird, you still have to go through it. And this person who was still working on the field.

Interesting. And what do you think the author was feeling

When he this?

**Um,** I think **the author, the author** was, I don't know, inspired by the abstract of nature.

Mm-hmm.

<affirmative>. Alright. Do you think any, is there any like special meanings or techniques of the drawing?

**Um,** the way **they, they like** make the person small and make his surrounding big show. **like,** it's more on **like** the nature than the person.

Oh.

All right. Thank you.

Yay. That's it.

Subject 2 Control Group

Group two start. Okay. First, provide me with your interpretation of this painting.

**Uh**, it seems to be very busy. There are people, different colors. I assume there's some type of event going on and the photo seems to take place in the lower cast of society.

Okay. How do you feel when you look at this artwork?

**Uh**, I feel **like** this is, **I feel** old. **Uh**, I think **it, it** also feels very homey based on the, **Uh**, toning of the colors and I can see a lot of people cooperating with one another.

Mm-hmm. <affirmative>, what do you think the author was feeling?

I think the author was probably feeling **like, probably** relax and happy, I say relaxed because **like** I mentioned, the color tone seems very on the mellow side and there's a lot of warm colors used and happy because **like**, there's **like** a big emphasis on **like** the sunset, I think so, yeah.

Um, what do you think, um, what meanings would you attribute to this things?

**Uh**, in terms of meanings? Maybe **like** unison or **like** working as one. Just because there seems to be people of different ages, **Uh**, in groups together, working on **like** maybe their jobs.

Okay. And how has your opinion changed about this piece from the first time you started looking at this until now?

**Uh**, I've noticed that the piece has more attention to detail cuz in the top left and right corners, they show **like** more distance between the town and different environments.

Okay. And does the piece bring to mind any of your own life experience or memories?

**Uh**, **I**, the top left corner, which has **like** a lake reminds me of **like** going to the park when I was a kid and visiting the lake and seeing **like**, the ducks and stuff.

Interesting. Okay. Next painting. Provide me with your own interpretation of this painting.

**At**, at first I thought it was **like** a church or a school. There's also not many people going around and the tone of the sky is very great. So perhaps it's more of **like, like** a depressed type of painting.

And what do you think the author was feeling?

**Uh**, probably **like** sad or **like** moody.

All right. And what emotions are captured here?

**Uh, I think probably like some type of loneliness or isolation, given that there's not much people going on in the photo. There's just a lot of like space and because like the sky seems a bit cloudy, so maybe like having like sand and stuff.**

What is the opera trying to convey? What is like the universal theme?

**Uh, perhaps like, like peace in being alone. I don't know. <laugh>.**

All right. And does the piece bring to mind any younger own life events or memories?

**Uh, like it sort of looks like a school, so it reminds me like sometimes like after school when everyone's left, Uh, and you're like alone.**

All right. Thank you. And here provide me with your own interpretation of this painting intake.

**Uh, so it looks like there's three people. One of them seems to be asleep and it seems that like there's a lot of farm line around. So perhaps they're farming or they're traveling on foot.**

Mm-hmm. <affirmative>. All right. And what meaning would you attribute to these womens on the side?

**Uh, for the womens on the side, maybe like some type of responsibility as they seem to be the ones like still standing while the other one lays down.**

And how do you feel when you look at this artwork?

**Uh, I feel lazy cuz the guy is sleeping.**

And how do you think, um, the Okta was feeling?

**Uh, again, like the piece seems to be pretty like simple and calm, so maybe he was feeling like a bit calm and lethargic.**

Um, has your opinion change about this piece from the first time you saw him until now?

**Not really.**

All right. And does this piece frame to mind any of your own life defense memories?

**Uh, it reminds me of when I used to live in the country, in the States, so yeah.**

All right. How do you feel when you look at this hour artwork?

**Uh**, depressing.

**Uh**, could you elaborate on your feelings?

**Uh**, so because it's a very dark picture, it seems that probably the mood isn't so, **Uh**, happy. There's a lot of shadows, especially around the guy's face **and, and** also the cow. You can't really, **Uh, like** identify the face, so perhaps they're **like** hiding from something and there's nothing else in the background as well as the environment seems to be quite flat and plain.

Okay. Um, what do you think the author was part feeling?

**I think the author was probably feeling some type of isolation or loneliness during the time and it seems that the guy is in search of something, so probably something to do with that. Maybe.**

What emotions are, I mean, what meanings are allocated for this meeting?

**Uh, I think like, being like lonely but also like calm and I think that like, like like darkness and stuff.**

Um, this, this is spring to mind. Any your of your own life experience or memories?

**Mm.**

**It reminds me of like the sunsets when I used to live in Ohio in the country and cuz there was, there was a lot of farms there and also cows. So that's what it reminds me of.**

What do you think like the colors represent?

**Mm, because the colors are a warmer tone and there's a lot of like darker shades. Probably an emphasis on a more depressive mood perhaps. Uh, something regarding introspection, Uh, as such.**

What, why do you think the author decided to draw a cow?

**Mm, it seems to fit with the background in terms of the farm line and perhaps it has something to do with the culture. The guy, Uh, accompanying the cow seems to be in some sort of get up, perhaps a like religious cultural get up. So perhaps the cow has some type of connection.**

All right, thank you. Provide you with your own interpretation on this painting.

**Uh, it seems like a woman wearing a very fancy dress. Uh, she seems to be alone, so maybe not at a party, maybe just like by herself in her, Uh, house, maybe taking a portrait.**

And how do you feel when you look at this artwork?

**Uh**, it makes me think of, **Uh**, perhaps **like**, maybe **like** marriage or something because it seems **like** the girl is trying to make herself look good.

All right. And, Uh, if there are people on this piece, what are their expressions? What emotions are captured here?

The woman seems to have a pretty flat expression. She seems to be pretty serious. **Uh**, perhaps that's her mood. Perhaps. **like** I said, it might be a portrait, so perhaps that's the face she was trying to go for.

And has your opinion changed about this piece from the first time you start looking at it until now?

I noticed how in on the right side there's flowers, but on the left side there's purely darkness. So maybe just some sort of contrast between good and bad

Mm-hmm. <affirmative>. And how would she elaborate on that?

**Uh**, so when I first saw the image, so the woman herself is wearing a very **like**, nice white poofy dress, so showing sort of maybe something **like** very presentable royalty, but at the same time in the very background there's a darkness. So perhaps it's conveying a message that there's always two sides of a coin, right? Something might seem good but bad at the same time.

All right, this is friend of mine. Any of your own live events or memories?

**Uh**, it reminds me of picture day with the plain background and look trying to look nice, both being serious at the same time.

Okay. What do you think about this painting?

**Uh**, it seems **like** a very nice bouquet of flowers.

Right. And how do you feel when you look at this artwork?

**Uh**, it feels **like** there's **like** a sense of, **Uh**, beauty to the artwork and as I'm looking closer, it seems to be **like** a, **like** a chubby troll guy in the background. And also the background is very different from the actual **like** flowers. It's very old and rustic.

What do you think the meaning is?

Maybe it's **like** contrasting beauty and normality. I say that purely cuz **like** the setting and there's that guy in the background. So maybe behind, maybe it's **like** talking about beauty on the outside, but then **like** on the inside, yeah,



<laugh>. All right. And what do you think this kaha represents?

**Um**, <laugh>. He seems to be **like** lurking in the shadows, so perhaps, **Uh**, but he doesn't seem to have any **like**, **Uh**, bad, **like** he **like** seems to be **like** smiling or happy. So maybe it's showing that **like**, don't judge a book by its cover.

All right. And, um, how's your opinion changed about this piece from its time you start looking at it until now?

**Uh**, as I look at it more, I can see the guy more, so **it's, it is a** bit creepy, but I think the overall idea of **like** contrast between beauty maybe is, **Uh**, still relevant.

All right. Does the piece bring to mind any, your, your own life events or memories?

**Uh**, not so much.

All right. Okay. Let's see. How do you feel when you look at this Artwork?

**I feel quite happy. Okay. Because of the emphasis on yellow and stuff.**

All right. And what do you think the AOR was feeling?

**I assume he was also feeling some sort of sense of joy as there's a huge, Uh, emphasis on the color yellow and the sun seems to be quite bright as well.**

Mm-hmm. <affirmative>. And, um, how could you elaborate on the feeling of happiness?

**Well, the photo's quite simple. There isn't too much detail on the landscape, but it seems that a guy is farming, but the entire field is very yellow. So yellow as a color, I think psychologically gives you some sort of sense of joy or happiness and yeah.**

Thank you. And how can you relate to this? How can you personally relate.

Subject 3 Control Group

Group two start. Provide me with your own interpretation on this painting.

**Um**, I can see that there is bunch of lemon, which is colored yellow and it has some sense of orange. There are three objects in the table. There are **a** playful with lemons basket filled with lemons, but then the lemons have leaves on top of them. The third one, I cannot recognize what option is that, but I'm pretty sure it is a cup of tea that people, **Um**, drink from there are shadows and I expect that to be the reason because the light is probably showing from the left side of the painting.

How do you feel when you look at this artwork?

**Um**, it is not that much creative. It can be a really easily drawn painting from the 21st century students as well.

Okay. Um, what emotions are captured here?

**Um**, I would say there are **uh**, darkness because since the background of painting is dark, the bottom of the table is also dark and **the** generally only the lemons are a bright object.

What meaning could you allocate for this painting?

**Um**, I would say the meaning is actually, I have no idea. It's just a lemon with in basket and play L tea. So maybe they were hungry.

What do you think the contrast of colors represent?

**Mm**, I think, well, in my understanding, **I think** the lemons might provide an aspect of sourness in human life and the tea, maybe a type of sweetness and darkness, a type of loneliness.

Okay. So has your opinion changed about this artwork from the first time you saw until now?

**Yeah**, because at first I thought it was just a painting with lemons, but later on I think that there is a deeper meaning into it regarding life.

Mm-hmm. <affirmative>. All right. That's interesting. Thank you. Next we have this painting. Provide me with interpretations first.

**Um**, maybe the painter was looking at a girl with a cat. She has blue ribbons on and clothes that doesn't seem like that show fit her age. So I expect her to be living in the Renaissance period.

Mm-hmm. <affirmative>. Okay. What emotions do you think she's feeling?

**Um**, I think she's feeling kind of awkward as seen in her posture of holding her cat. However, I think she is slightly happy about this photograph because she has blush in her face and slightly lips that are, **that are** told upward.

Okay. And what emotions do you feel?

**I feel warm because I like the human interaction with an animal.**

Mm-hmm <affirmative>. Okay. What meanings would you attribute to this cat?

**I will attribute to this cat the poor and then the girl as a rich because I believe in the 19th century, the richer people obviously as for now too, they have greater abilities. So the cat seems way smaller and then the girls seems way bigger than it should be.**

Then what meanings would you attribute to this entire painting as a whole?

**Um, I would just say it's the society because the cat is also not like white, it's not pure, it's dark, but then the girl is dressed really fancy. She has even flowers on her hair. So yeah.**

Thank you. Let's see, what meanings, give me your interpretation on this painting.

**It's just a bunch of people squashed in an area.**

Um, how do you feel?

**I feel disoriented because everything is squashed in one area and I cannot identify which one is which.**

What meanings do you think the colors represent?

**I think it represents different feelings because as seen in the movie inside out the yellow probably represents happiness. Red probably anger, green, probably jealousy or something blue. Sadness and black, probably just darkness, loneliness.**

How about the um, posture of these people? What do you think they represent?

**Um, I cannot really define what post po posture they're doing because it's all crumpled in one piece of drawing, but I think it's just showing the most often showed actions by people these days.**

Okay. So what beanie do you think this painting has?

**The messed up society with people cuz we cannot really identify which one is which. So everybody is just crumbled up together, not knowing what to do.**

Does this painting bring to mind any of your own life experience or memories?

**No.**

Okay, thank you. Next painting. What do you think about this painting?

**It's just a winter day in a casual area. I'll say casual place. Casual market? Yeah.**

What emotions do you

Feel

**cold but warm.**

How do you think about the author? Um, what emotions would the author feel while painting this?

**I think he would feel warm as well because the people are wearing warm outfits. There's not a really side, there's not a really clear sight of the snow. It's all falling into the ground nicely neatly. So I would say the author enjoys the snowing painting. Yeah.**

Um, how does this painting bring to mind any of your own life experience or memories?

**Um, I would say when I was a child, when I was walking to a store in a rainy, I mean, not a rainy day, but a snowy day with my parents because I can see there is two young women walking into a area. I don't know where it is, but yeah.**

Nice. Let's see. Um, what do you think about this painter?

**Um, horses but blue.**

What do you think that contradiction represents?

**Um, I don't know, but I think the painter just wanted to use different types of colors to represent a horse.**

Mm-hmm.

<affirmative>, is there a specific reason for a blue?

**Maybe because there, the oth the painter thought, why aren't they, why aren't there any blue horses? Cause usually typical horses are just brown, white, black.**

What emotions do you feel when looking at this artwork?

**Sad.**

Can you elaborate on your sadness?

**Because blue typically represents sadness and paintings background is not that bright either, so I think it represents sadness.**

Okay. Um, what do you think the author was trying to say?

**Um**, I think the author was trying to say that even though you might be together with your friends or families, as the three horses are, there can be still awkwardness. As you see two horses are turning their faces around from each other, so.

Okay. That's nice. What do you think about this painting?

**Warm?**

Mm-hmm. <affirmative>

**Intrusion?**

Yeah. Okay. So what emotions do you feel?

**Um**, sad, angry? Yeah.

How about the author? What englishes do you think the author was feeling?

**I think he was also feeling angry because he represented all kinds of violence Acts in this painting.**

Okay. Uh, how has your opinion changed at the first time you saw until now?

**At first I thought it was just a normal village, but now as I see it more clearly there are intrusions, so I would say it's, yeah.**

Oh, thank you.

Subject 4 Control Group

Group two interview start. So how do you feel about this painting?

**Um**, it's nice. It's pretty, I think it's a little dark, a little gloomy. She looks a little sad.

When you look at this, do you like have any emotions or?

**Personally, I don't have that connection with paintings, I know some people would, but no, not really for Me.**

Then what would you guess that the author was like, kind of feeling?

**I'd say that the author was probably feeling, uh, dark, mostly because of the dark background, but, and also the woman's expression is not very happy either. It's kind of neutral, but I think the dark**

background and the dark tones overall kind of show that it's not a happy scene. So it's probably sad.

Yeah. All right. Does the print, does the painting bring to mind any of your own life events or memories?

Not really. And not this painting in particular, and not this **like** expression in particular.

All right. Thank you. Mm-hmm. <affirmative>, how about this painting? What interpretation would you give?

Oh, I think it's cute. I think it's **a** good, I think it's just **like** a still life paint. I don't think there's much emotion to it, but I think it does capture **like** serenity, **like** peacefulness, you know what I mean? And that **like**, **um**, I don't know. **I think it's, I don't think** it's, **well, the** colors are dark, but I don't think it's as sad as the last one.

Mm-hmm. <affirmative>?

**Um**, I think it's fine. I'll feel a certain way.

All right. How do you think the author is feeling? Maybe

The author is probably **just, just** putting a drawing, I don't know, just painting probably. I'm not sure. Cuz it **doesn't, again**, the man's expression doesn't **really, it's not really** visible on this **like** card. But I'd say that it's also still in theme with the last painting as **like** a little bit dark, but I think it's calm actually.

Mm-hmm.

<affirmative> then how has your opinion changed about this piece from the first time you saw until now?

**Uh**, hasn't really changed, actually. It did kind of change. Yeah. **It doesn't, it doesn't** look as happy, I think, because you showed me the last one. This one looks a lot more happy, but it's not happy. It's calm. Maybe a little bit **like** there, **like**, you know, you get the feeling that it's in **like, uh**, a farm where it's everything's empty and it's **like**, you know, **like** alone, but it's kind of peaceful. Yeah.

And does this place bring to mind any of your own life events or memories?

Other than my horses, not really.

All right.

No, bro.

How about this painting?

**Uh, I**

Feel okay about it. I think **it's actually, it's** really different than the last two.

Mm-hmm. <affirmative>?

**Um**, what if I say something wrong? Okay. **Um**, I think it's more, **um, the** vibe is better. They're not **like** super smiley **or, or** anything. But **the, the** girl on the **right Right**. Is **like**, she's smiling  
And **they're, he's, they're** giving him flower, a book and a sword. He's probably a knight. So I think  
it's pretty like, I don't know.

**He's giving, they're** giving a knight

Some stuff. **He's tired probably from battle or maybe just napping.**

Um, what interpretations would you give to like these two women?

I think they are nurturing for a guy. He's probably **like** their master or something, cuz knights are  
rich, I think, or something **like** that. **Okay.**

**Okay.** I don't know. Overall

You're not wrong.

**Okay. Okay.**

This is spring to mind. Any of your own life events or memories?

<laugh>. What if I say **like, yeah**, when I wake up **and then like** my mom's **like** cooking and **like**  
ready to give me food and my maids are **like** making my bed. I feel **like** it's serving me in a certain  
way, not in a bad connotation. I'm just **like**, they're serving me.

Yeah. Okay. Makes

Sense. How about

This, what interpretations

Would

You give to this painting?

**Um**, ooh, I like it. I like it. **I think it's, I think it's** nice. I think it's, again, **it's just like** another  
painting. I don't think it has **like** a significant meaning. Doesn't look like it does. **Uh**, I like the pop  
of colors and the windows. I think that's cool. And also the trees. It's definitely depicting winter.  
You can definitely tell I think by **like** the white ground and the right white, **um**, rooftops and yeah,  
it's calm, I guess.

How do you feel when you look at this

Great. I don't feel

Different Association, but yeah, **I feel I like** this better than the last one that you showed me. I think this is more of my vibe.

Mm-hmm. <affirmative>,

**It Resonates with me a little more.**

Mm-hmm. <affirmative>,

you know. Okay.

Yeah.

Uhhuh. <affirmative>. What emotions do you feel?

I dunno, it feels calming. It feels **like**, you know, **like** you're in a town where **it looks, it looks like**, you know, you're in a small town where you can trust everybody. Everybody knows everyone. It looks **like**, you know, **it's** cold, it's winter. Everyone's wearing **like**, warm clothing. So **it's, it's** nice. Yeah.

What

Significance would you give to this?

What

Do you mean?

Like, for example, like maybe this woman or any, the colors ambience. Do you think it represents anything?

I Think so. I think they're tryna, **like the author, the painter**, maybe trying to show that **like**, you know, it's winter, but I feel **like** home is cozy. You know, it's giving, **like**, this is a shop where, you know, there's two women coming out of there. So I feel like it's a shop where women would go, maybe it's **like** a clothing store. who knows. You know what I mean? And I think it's, yeah, **I think it's** calming. I think it's comforting.

Does this remind you of anything? Like in your own life experience?

Yeah, I mean, it reminds me of going to school, **like**, you know, **like** walking in through **like** colorful doors, having **like** your friends there. It does remind me of school. School or like, for me, my stables **like**, you know, it reminds me of that. And I think **the, the, like**, the fact that all of the people in the picture are women, it looks **like** is pretty nice too. **Like**, there's no men



How about this painting?

Um,

It's fine. I don't like it. I know, I don't, I don't really think it means anything. I mean, maybe it does. There's lemons, oranges, and a cup of tea or g I don't know. I don't, I don't feel anything towards it.

If you can imagine this as a setting, like in this picture, how would you feel or why would you be doing?

Oh, I'd definitely be like with my family or with my friends and like, discussing something probably important cuz I don't think we'd sit at a table if it wasn't important. This is on a table. So, I feel like we'd be like on a couch or like in a, in a room, you know? This feels like a dining table, decoration type type vibe. it's like we're talking about something serious. It gives off serious vibes. Maybe that's why I don't like it.

Mm. All right. Okay.

<laugh>

Let see. How has your opinion changed about this piece from the first time you started looking at it and until now?

Yeah,

I guess it changed. I thought I just didn't like it cuz I don't genuine, I don't, I don't, I don't know, it just looks dark. It looks like sad because the background like black, right? And like the pop-up colors are also not very like bright yellow. It's kind of just like how lemons would look. Yeah. But I guess now it does kind of like, make sense cuz I wouldn't wanna be in a situation where this was real, you know what I mean?

How about this painting?

Oh, she's pretty, she's cute. I feel like this gives off like, um, you know those paintings in KK Kkv or something like that, you know those like paintings that they have on the walls, that's, this is what the, yeah, this is cute. I don't have certain feelings about it.

What

Do you think she's feeling?

I think she's just sitting for a photo <laugh>. Cause no like having like history, knowledge, like a year, world history knowledge. It's kind of like, you know how people of wealth would have portraits of themselves drawn exactly like it was. I don't think she's feeling a certain way, honestly.

How would you describe her life?

I think she's wealthy, bro. I mean **like**, she has **like** a nice dress on, she has a cat, **like** she's well ebra and usually paint portraits of people's selves. **Like** during, **like** this era would probably be wealth, you know what I mean? Mm-hmm. <affirmative>. Yeah.

Okay, nice. Thanks.

**I Know I'm so insightful.**

<laugh>, how about this?

Oh, That's actually kind of cute. Wait, it looks **like** this in **like** Italy. **Um**, the people with the hats at the bottom, that's definitely giving Milan, Italy, **um**, Venice and the flags and the buildings and the small **like** walkway, it kind of looks like Italy. Oh, this looks happy, this looks like, you know.

How do you feel when you look at this?

**Good. I mean, like, it's, it's nice. Like, not like the lemon painting**

<laugh>. And how would you feel if you were inside the setting?

I think I'd be happy. **Um**, I think I'd feel **like** I was on vacation. **Uh**, even if I lived there, I think I'd be happy because **I mean**, it looks **like** friendly. It looks, you know, again, it looks **like** pretty comforting to be in that situation. You can see **like** this woman is kind of reaching her hand out as in **like** saying hi or something. And I feel **like** that's kind of the area where ev you, you know, **everybody**, everybody knows you. Everyone knows everyone. And I think **like** that's really comforting to know and to **like**, you know, have,

How do you think the author was feeling?

I think he was feeling happy. **Uh**, or I think maybe he saw a scene, **um**, in his own life and he was **like**, yeah, this is, you know, **I**, I love this place. Or maybe this **like** represents a special place to him. Cuz that's what it seems like.

Do you attribute any meaning to this painting?

**Yeah, again, I think it just means like, you know, this place is probably meaningful to him or maybe, uh, something special happened to him there.**

Subject 5 Control Group

X group two interview Start. First provide me with your own interpretation on this painting.

**Mm. It feels very calm.**

Calm.

**I think the girl and the boy is dating or close to dating and I can see that because their body are towards each other.**

All right. And how do you feel when you look at this painting?

**I feel good but also kind of depressing because the color is dark and it's at night. So there are some atmospheres that are calm but also contrastingly depressed.**

Okay. So what do you think the author was feeling?

**I think the author was feeling the same feeling as that girl in the photo. Because like the photos, was it because the photo is shown as a girl's perspective since, since the girl is towards the photo and the boy is showing the back.**

Okay. So does this piece bring mind any of your own life events or memories?

**It reminds me of when I was watching K drama and there were similar scenes like that.**

Oh, okay. So moving on this, provide me with your own interpretations.

**Uh, the girl is worrying something like a Chinese cloth, but her face is very westernized.**

So what do you think this means?

**I think it's kind of showing two different culture uniting since like the clothes is more like an Asian style, traditional clothes, but she looks very western so it kind of shows a collaboration between the two culture.**

All right. And what emotions are captured in this piece?

**She seems happy.**

Okay. And how do you feel when you look at this?

**I feel happy as well.**

And does this spring to mind any of your own life events or memories?

**Not really because I did not wear any of those kind of clothes in my life.**

Or does it remind you of anything?

**It reminds me of the twins who perform a Chinese opera.**

Okay. Provide me with your interpretation on this painting.

**There's no human, it's just a, a room with all supplies included, but it's not very clean. Like the chairs are not in a proper position and I think it's at night and raining.**

Raining. Okay. So how do you feel when you look at this?

**I feel empty because like there's no major painting there. There's only like bad chairs like photos, but like not a main character.**

Mm-hmm <affirmative>. What does that mean?

**I think it's kind of showing that he also feel lonely cuz he does not have like someone ne next to him.**

How has your opinion changed about this piece from the first time you saw it until now?

**I think at the first time I didn't really feel that much**

**Since**

**It was just a drawing, but now I think I can see the emptiness and the loneliness.**

All right. Does this bring to mind any of your own life events or memories?

**When I was left home alone when I was young.**

All right. Me with your own interpretation on this painting.

**Oh, it's really pretty, but the girl behind is really scary. Yeah.**

All right. And how do you feel when you look at this?

**At first it was really pretty, like the flowers were really realistic, but when I look closely, there's a girl behind staring, which kind of looks scary.**

Mm-hmm.

<affirmative>. Okay. So do you think that means anything?

**I think it's like showing that there are pretty things and their first idea was to draw a flower within a band, but like the girl was behind and I think it's kind of showing that there are consequences.**

All right. So how has your opinion changed about this piece from the first time you saw until now?

I think at first as I **told, I saw** the flower part only, I was **like**, oh, it's really beautiful. And I thought that it wasn't home inside the house, but **like** when I look closely, I think it may be the balcony and I can see that since the girl is staring behind the window.

All right then this is bringing to mind any of her own life events or memories?

**Not really.**

All right. Me with your own interpretation on this painting?

I see. I think **it's kinda, I don't, I don't** know what this image is trying to show, but **like** when I, **when I** first looked at it, I thought that it was **a ass** of a gorilla, but after looking at the title, I realized that it was a horse.

All right. So how do you feel when you look at this artwork?

**“I felt very uncomfortable at first, but I think I got used to it.  
But I don't see why the author tried to do this for paint.**

All right. And how do you think the author was feeling when he was painting this?

**I think he's kind of very pervert, huh? Kind of guy because like the lights and the shadowing in the painting, it really resembles a as a, but.**

All right. And how, um, what emotions are insight in this painting?

**As I look at the colors, it's used in a blue black color to the gorilla, but the background is like warm colors. I think it's kind of showing contrast between the two emotions.**

Mm-hmm. <affirmative>. And does this bring any memories or?

**Mm, I think this kind of reminds me of like a video from af like a video of document documentary from Africa of like animals walking through the field.**

All right. How, uh,

**That's really realistic.**

What do you feel when you look at this?

**Uh, I think I feel emptiness here as well because there are foods, plenty of foods in the table, but no one's touching it.**

And what do you think the author was feeling?

**I think the author was feeling emptiness as well. Well since the color as well is dark, which kind of shows that it's, the lights are turned off.**

All right. And how has your opinion changed from the beginning until now?

**From the beginning I thought that it was just a drawing of lemon and like teas. But now I think the color kind of shows a big difference since the background color is dark, kind of showing that the lights are turned off, but only the dishes like the tea and the lemon are, are bright, showing that the, that part is shining with lights, but the others are not.**

And what emotions are inside this picture?

**I think there are happiness and sadness together. Okay.**

And what do you think the author one's feeling?

**I think the author was feeling emptiness.**

Subject 1 Experimental Group

X group one start. Okay. Provide me with your own interpretation on this painting.

**So there's like a woman and she is smelling a whiteish flower, and she is grabbing onto the wall with a bunch of vents, and then it's in like a village. And then she has a dress that looks like a peacock. And then she has tight up hair and she looks very depressed. Oh. Or deep in thought.**

All right. How does it make you feel when looking at this painting?

**I think she, she looks kind of s..sad or she, she's like lost in the world. Um, when I see her, I, I have no emotion.**

<laugh>. Okay.

**I just like how it's, everything is drawn well, so,**

All right. How would you elaborate on her expressions?

**She's kind of smelling the flower and she is like, I don't know how to say this, but she is thinking about the smell. Maybe it's nostalgic. She heard like she smelled this when she was a child or something, and then,**

Okay. Interesting. And what do you think the author was feeling when painting this?

**Probably nostalgic because they came across something like a flower or a house, and they were like, ah, this is so nostalgic.**

I, I'll draw It,

**I'll draw it. <laugh>. Yeah.**

All right. And how has your opinion changed about this piece for the first time you saw until now?

**When I first saw it, I thought she was picking her nose, Now. Uh, I saw it closer and I'm like, oh, she's smelling about**

<laugh>. Oh, <laugh>. All right. Interesting. And this bring to mind. Any of your own live experience or Memories?

**Um, I, I'm not sure about that because I don't relate to anything as she's doing.**

Mm-hmm. <affirmative>. All right. Thank you. Moving on. How about this painting?

**Oh, describe it.**

Yeah.

**There's a person thing looking at Daisy's. Wait, are those daisies? I think so. On a blue base on this windowsill thing and a red, I think that's a pin cushion. I don't know. And a wood is on is what? The material and it, the behind the daisies is really dark, so I think the daisies were the main focus.**

Mm-hmm.

<affirmative>. All right. And how do you feel when you look at this artwork?

**When I saw the daisies, I was like, wow, this is such a bright painting. And then I saw the person, I was like, nevermind. This is scary.**

<laugh>. All right. And why do you think it's the purpose of the man behind the daisies?

**Maybe there's a, always a darkness to the light.**

<laugh>. All right. And what do you think his expressions represent?

**Loneliness.**

Loneliness. All right.

**Yeah, just loneliness.**

<laugh>. All right. And what do you think the author was trying to convey?

**I think he was trying to convey that where, where there is like light, let's say a popular figure, there's or a good person that you admire, there's always like a bad side to them it's like the Daisy's a good, but then behind them is a scary man.**

<laugh>. All right. Okay. Interesting. Um, how has your opinion changed from the first time you saw this painting until now?

**I only saw the Daisy, so I was like, wow, this is kind of a boring thing. It's only Daisy. And then I saw the man and I'm scared.**

All right. And this is friend of mind. Any of your own life events or memories?

**Um, not necessarily, but the, the daisies reminds me of when I was searching. I Google search daisies one <laugh>. So**

Interesting. That's faint. How do you feel when looking at this artwork?

**Depressed? It looks like, um, there's a farmer or something, but they're kind of like probably low on money because it just, the atmosphere kind of looks like that.**

Mm-hmm. <affirmative>, how would you elaborate on the atmosphere?

**It's kinda like everything is gray and quite orangey, which makes it look old, but also makes it look like depressing and quite sad and pitiful.**

All right. And let's see. What do you think the author was Feeling?

**He was probably, he probably saw a farmer do this, and then he was like, so moved. So he drew This.**

Right. And what do you think is the thematic purpose Of this?

**Um, thematic purpose. So like moral?**



Yeah.

So that, **um, uh**, appreciate people who do hard work and give them money, please. <laugh>.

All right. And how has your opinion change for the first time you saw this painting until now?

I didn't really see it clearly before. I thought it was just a photograph, kind of, **but then, and I** thought it was one of those old movie, you know, type looking thing **And then** now I think it's sadder. **I, I feel like** when I first see **like** paintings, I don't think much of it. **And then** when I think more, I **like** seeing more feeling, I guess.

Mm-hmm. <affirmative>. All right. And what new feelings did you see?

When **I, what, what** do I feel like?

Yeah.

When I see it, **um**, I feel sad. Sorry, I **don't, I don't** know how to describe it. It's **like** sad, but also, **um**, kind of, **I feel, I feel, uh**, sorrow or,

All right. And

This look, this <laugh> a piece print to mind. Any of your own life events or memories?

**Um**, not necessarily from me, but my grandfather, he always told me about his cow, and I think that's a cow. He always told me about his attachment to his cow. And then his cow cried or something. <laugh>, I don't know. <laugh>.

Interesting. Okay. How about this painting?

Oh, I think it's brighter, more colorful, and the hands and the feet are very messily kind of drawn. And I think each color represents different personality, maybe.

All

Right. And what, um, personality would you attribute to these colors?

**Um**, red is for **the, maybe the** models, I don't know, the good looking, **and then** also probably actors **and then like** also maybe easily angry ones or people with a lot of passion. **And then** the yellow **one, the**, I think carefree and very bubbly people. **And then, um**, the blue people I think are very calm people and green one.

**And then** I think, **uh**, they're very, **um, kind of, they** like nature and they like gardens. And they're very organized people. And then the black colored people, not racist. <laugh>, please don't take this outta context. **Um**, I think, **uh**, they feel **like** calm, also calm individuals who are a balance, but another way of thinking. They could also be balanced, but sometimes they could be **like** depressed.

But also I feel like the blue ones can also be depressed. So I think they're kind of similar, but, **uh**, I feel like the black ones **like** stand out the most because **uh**, every outline of them is Dr. Drawn white and they stand up.

Okay. Alright. Interesting. And how do you think the kind of the structure, like how they're tangled altogether represents?

I think if **like society, every, like society** has many kinds of people with different personalities. And then sometimes there's people who are depressed and we don't know it, so everyone's just tangled up and it's hard to see clearly people **who, that's un untangled.**  
Yeah.

Yay. Thank you.

Subject 2 Experimental Group

Group one X start. Can you gimme your own interpretation on this artwork?

**Um**, it looks like an animal. I think <laugh>, **uh**, it's blue and, **uh**, it, it looks depressing.

Depressing?

**Yeah. Yeah.**

Okay. So, um, what do you think the author was feeling when he was drawing this

**Depressed. I just let that, the art looks depressing.**

Um, does the peace bring it to mind? Any of your own life events or memories?

**Blueberry,**

Okay.

**Oh yeah.**

Okay. This one. Can you gimme your own interpretation on this artwork?

Someone's **dead, dead** or hurt? **Um, uh**, maybe the girls, the females are, **uh**, pregnant. **I, I'm** not sure. **Um**, but I think they're pregnant, but yeah. But they're wearing, I mean, one person is wearing fantasy and, **uh**, the other is wearing very, I don't know, less stylish. And like the other one is just her.

So maybe **like**, it's **like** a love triangle, you know? I don't know. Yeah.

Yeah. How do you feel when you look at this artwork?

**I have no feelings. Um, yeah.**

What do you think the author was feeling?

**Maybe like the author was in a love triangle or something, you know, like Yeah.**

Um, does this bring any moment in your life?

**No, you know, I don't know. Oh yeah,  
Copies.**

Okay. This one,

**There's lots of people. people are good. Oh. Oh, they're young. They're small. Yeah.**

Okay. What do you feel when you look at this artwork?

**It looks boring.**

Boring? <laugh>. Okay.

As we look at

This one,

**oh, I like this one.**

Give

Me your own interpretation of this artwork.

**It's colorful.**

Colorful?

**Yeah.**

Can you elaborate on me?

**It's very colorful. It reminds me of a variety show in Korea. It's <laugh>. Oh yeah. Yeah. But yeah.**

How do you feel when you look at this artwork?

**Um**, am I supposed to feel something? **Um**, maybe, you know, **like**, **uh**, life is, you know, tangled up and yeah, sometimes you have to get stepped on and sometimes you'll step on people and sometimes maybe you have to **like** hold on to someone. I don't know. Yeah. Oh yeah.

What

Do you think the author was thinking?

I'm not sure if the author was thinking of anything. Maybe **like**, the author was a little bit bored and he was **like**, oh, why not Just **like**, tangle people up and **like**, represented as **like**, you know, **uh**, life, you know. Yeah.

How has your, um, opinion changed about this piece from the time you first saw it and until now?

**Um**, I'm not sure if it changed or anything, but it's **like**, **uh**, at first I didn't recognize that there were faces of people, but now I do recognize that, **uh**, I think there's like four people in there, so, yeah. That's cool.

Okay,

Next one. Give me your own interpretation of this.

Wow. Oh, there's a cat. **Um**, the girl looks pretty, I think she looks like a person who would do **like** the ballet, you know, for example. And **like**, maybe that's her home own pet. **But then** at the same time y'all, she looks very still, **um**, I think she was from **like** a wealthy family, maybe **like** aristocratic, **um**, status. Cause **like**, yeah, her outfit looks very friendly and yeah, during that time, maybe **like** only the rich could **like**, take photos and **like**, you know, you know. Yeah.

Um, by looking at her expression, what do you think? Um, she's feeling?

She gives me **like**, young teenager, actually younger than that vibes, but I'm not sure if she's happy or anything cuz **um**, her face doesn't really have any emotions. But, **uh**, I heard that people back in the age, **um**, didn't really smile when they, **uh**, when they took photos. So like, **uh**, yeah. So maybe she's happy but she's just pretending not to smile cuz I was like a quote unquote, like a hidden rule at that time.

Okay.

Provide me your interpretation on this artwork.

There's lemon, orange and girls in the photo and it's very yellow, but **uh**, dark. **Um**, I like lemons, I like orange.

Do you think there's a reason why the author choose to do lemons in orange?

I think, **um**, it's related to colors cuz both of them are very yellow, orangeish and bright. Because even the rose there is **like** yellow, I think yellowish, at least I think, **uh**, the author is trying to give contrast between bright and dark colors. Yeah.

Okay.

Give your own interpretation on this painting.

Oh my god, that's so scary. There's a person behind that, you know. **Um**, it's a flower. It's a pretty flower, but, **um**, I think it psychologically gives you a contrast because one flowers are **like**, meant to be pretty, **like** treated carefully and represents **like** beauty and things like that. But, **uh**, someone's staring in the back, which kind of gives a sense of **like**, you know, poor, but, **um**, I don't know. Maybe that person is like the seller of the flower, for example, **like** the recipient. But **from the photo, from like a third point of view, third person point of view**, it looks scary.

What do you think this person will do in the next five

Seconds? **Um**, in the next five seconds, I feel **like** that person is going to cut all the flowers. <laugh>.

All right. Yeah. Um, does this piece bring to mind any of your own live events or experience?

**Um**, I'm drawing flowers right now in AP art cuz I'm an AP art student. But, **um**, yeah, I think that's it. I like flowers.

Okay. Now provide me with your own interpretation of this painting.

I think a beautiful woman is trying to, **um**, smell growth. She's wearing very fancy yet, **um**, colors, **uh**, similar to **like** the green leaves on the wall. And I think the focus of this painting is just, **um**, mainly two colors. Blue greenish. Yeah.

What do you think the author was feeling when he was painting this?

I think the author might have thought of, **um**, someone that, **um**, he or she, **um**, likes, **um**, cause you know, I think the painting is very bright in some sense, so, yeah. **Uh**, maybe **like**, **uh**, he was thinking of someone who he likes.

Is there any message do you think is embedded in beauty?

**I think it repre, I think it represents beauty.**

Beauty, right.

Give me your own interpretation of this thing today.

I think **there are actually, there is** one main theme spring cuz you know, like spray the flowers give you the sense of spring, but I think it's like late in the evening. And um, I'm not sure if it's a couple, but it looks like a couple and they're just doing a picnic that evening, for example. The colors were pretty.

How do you think, how do you feel when you look at this painting?

I feel **like** it's **pretty, pretty**. What do you think the author was feeling? **Um**, I think the author was feeling somewhat nostalgic because it gives a sense of happiness, but at the same time it also has the value of isolation in the work because of the fact that it's **like** evening. Cause if the author really wanted to, **um**, give you a sense of brightness and a **like** a couple loving thing, then the author would've shown them morning.

Subject 3 Experimental Group

All right. begin. So this is your first picture? Yeah. How do you feel looking at this artwork?

**Uh**, this art artwork, **like** overall is **like** beautiful I guess, the flowers and the woman, **and I feel, and** the color uses **like** bright color, so it gives me **like** bright mood.

Okay. What do you think the author was feeling when drawing this painting?

**Oh, the, oh, I think the author, author is feeling, maybe** he look at the woman depicted that.

What emotion Yeah. Okay. What emotions are captured in this piece? If there are people in the piece, what are their expressions?

**Pardon?**

So what are, what emotions are inside in this picture? So what is the expression of this woman?

**Hmm.**

What emotion?

**Uh**, maybe **like** happiness. It is kind of loneliness as well.

Loneliness.

Maybe she's missing someone with smelling with, **uh**, I guess it's rose. Yeah. Love.

All right. And this is peace bring to mind. Any of your own life events or memories?

**Mm,**

Not that much. I haven't seen **like, like** this type of woman in life, so there's no one.

All right. So this doesn't resonate with you?

**Yeah.**

Next, drawing, same questions. How do you feel looking at this artwork?

**Oh, this artwork **like**, kind of scares me cause the woman is looking at me directly <laugh> and with the background of dark color. Yeah, it scared me. Yeah.**

What do you think the author was feeling?

**The author? Probably author, **like, like** the lower rank for with, **uh**, **lower rank** of this woman. And maybe she is commanding him or like uses him, **like** whatever she wants.**

Mm-hmm. That's interesting. What emotions are captured in this piece? If there are people, what are their expressions?

**Oh, so this woman, **uh**, I guess from this picture, I think the woman is not **like** happy. She's **like**, kind of not emotion to anger.**

**Yeah.**

How has your opinion changed about this piece from the time you started looking and until now? <laugh>. Does this piece bring to mind any of your own live events or memories?

**No.**

Next painting.

**Oh, nice problem.**

How do you feel looking at the artwork?

**Oh, it's kind of nice story, but looking at the background, there's **like** a creepy man or woman or the person. So this brings me **like a**, yeah. Scary.**

Scary, scary.

**Scary. Very scary.**

What do you think the author was feeling?

**The author. Maybe the author **feeling about this feature**?**

<affirmative>

Feeling towards the drawing of this feature?

Or like when he was drawing this, what do you think he was feeling?

**Oh, so what he want to present?**

Yeah.

**Oh, okay. So he want to maybe he want to present, like there's a maybe by putting the focus on the flower, he wanted to illustrate that. Mm. Uh,**

<laugh>. Okay.

**Maybe there's a, maybe the author wants to learn us that we should, I look around and I wear around surroundings. Mm.**

Okay.

**Yeah.**

How has your opinion changed about this piece from the time you started looking at it until now?

**Okay. So the time I started looking at it, I just focused on the flower as yeah, the light, the bright color. Well, as I deeply looking at it, I see a person behind. Mm. And yeah, that changed me to the like, nice picture to like kind of dark.**

Does of piece bring to mind any of your life events or memories?

**No.**

<laugh>. Um, what emotions are captured in this piece?

**I'm scariness.**

Scariness, moving on.

**Okay.**

How do you feel looking at this artwork?

**Um,**



This artwork is **like**, okay, **uh**, overall, **this artwork like** kind of dark. yes. So maybe it's **like** morning or before rain or night, and there's only one man and one cow. So this person, **uh**, individual, but those two are kind of born together maybe. So I see **like** strong connection between those two.

Okay. Thank you.

**You're welcome.**

What do you think the author was feeling?

**The author was feeling?**

Yeah.

**Mm.**

Like the color, the ambience. What is he trying to convey?

**So he was trying to convey the strong relationship between, uh, the two. Even if those two are like different creatures, human and animal, by placing them in the, like the center of field with nothing surround**

mm-hmm.  
<affirmative>.

**Yeah.**

How has your opinion changed about this piece from the time you started looking at it until now?

**The time I started looking at it, this, uh, brings me the darkness because due to the color, but as I keep examining, I think this means a different from the dark, but more like the, what do you call?**

**Mm,**

**To connection inside dark.**

All right. Yeah. So does the piece frame, Mike, any of your own live events or memories?

**No,**

this will probably be our last image.

**Alright.**

How do you feel looking at this artwork?

**Hmm. Kind of nice  
Fruit. Fruits.**

Fruits?

**Yeah.**

What do you think the author was feeling?

**Maybe author was like hungry.**

Hungry,

**maybe a hungry.**

What emotions are captured in this piece?

**So the author, author was using the kind of bright color to illustrate the fruits, I guess. I don't know if this is fruit or not. And yeah,  
Light, Light, light, light.**

How has your opinion changed about this piece from the time you started looking at it until now?

**No, it hasn't changed at all. Changed.**

Does the piece bring up to mind any of your online events or memories?

**Yeah, because there's grape. I reminded like the time I eat grape, maybe this is apple. So apple, every day I eat apple. So that brings me that.**

All right. Okay. We have one more minute. One more minute. Let's do 52 seconds quick. How do you feel about looking at this artwork?

**Nice. Oh, this is a nice picture. Like the day.**

What do you think the author was feeling?

**Maybe he was on the gold or, uh, looking from the opposite. What is it? I dunno what it's called. The side of the River.**

Hover.

**Yeah, hover.**

What emotions are captured in this piece?

**Um, from the, like, no movement of water and, uh, bright sound, bright sky. I catch like the peacefulness.**

All right. We have five seconds. I think that is sufficient. Thank you.

**You're welcome.**

Subject 4 Experimental Group

X, time starts now. So starting with this, how do you feel about looking at this artwork?

**I think it's like, uh, relaxing.**

Relaxing?

**Mm-hmm. <affirmative>.**

Okay. What do you think the author was feeling when throwing this?

**Uh, he was feeling very relaxed.**

Relaxed. All right. What emotions are captured in this piece?

**Possibly, possibly Possibly, uh, a bit of melancholy, I guess.**

So has your opinions changed about this piece from the time I first show you and now after looking at it more?

**Uh, not really. It's like, it's just like a normal, normal piece. I don't really see the, like, expression to it, so yeah.**

Does the piece spring to mind any of your own land events or memories?

**No.**

<laugh>. So next painting is this woman. Yeah. So how do you feel looking at this artwork?

**I think the author just desires our, like, enjoys to look at beauty and like, uh, the author, um, the author is inspired by her beauty, basically just that**

<laugh>. Mm-hmm.

<affirmative>. And how do you think the author was feeling when painting this?

**In Love.**

In love?

**Yeah. Right.**

What emotions are captured in this piece? If there are any piece people in the piece?

**Yeah.**

What are their expressions?

**She looks like she is like loving nature and I think the emotion captured is romantic or basically just appreciating her beauty and like, yeah. And her, her her physical attributes.**

Mm-hmm. <affirmative>.

How, um, how this is, um, this is peace free mind of your own life events or memories?

**No.** <laugh>.

So again, how do you feel about this artwork?

**It feels very intimidating.**

Intimidating?

**Personally. Yeah. Intimidating. And it's very, um, like royalty and, yeah, very modern. Modern. Mm-hmm.**

<affirmative>. How do you think the author was feeling when, when making this painting?

**I think she was feeling also like, appreciative of beauty. And it has like, the expression is very, the expression is very on point, like <laugh>. Um, it captures how the person in front is like feeling. We can see that she's, uh, she pro it looks like she's like a bit trapped. I don't know, in her, in her feelings of modesty, I guess.**

**Like in possibly her, her, her duties as looks like she is Oh, as a woman in something and like, it kind of captures the struggles.**

Mm-hmm. <affirmative>

of a woman.

And does the peace bring to mind any of your own life events or memories? <laugh>.

Okay. Moving on. We have this face. So how do you feel when you look at this artwork?

**I think, oh, I didn't** realize there was a person.

Oh yeah. **Um**, it's **very, the** daily kind of for me represent, **um**, peace. **And then** there's a person behind which kinda **like, uh**, it's **like** the darkness kind of ready to, looks **like a, uh**, he's ready to physically ruin it, I guess. I don't know

How. Oh, what do you think that the author was feeling like painting this?

**I think he has a, or she has a very unique mind.**

Mm-hmm.

Because we can see **like** there's a person behind, **like, it, it** kind of in, **uh**, depicts a very specific feeling that he's feeling.

So what emotions are captured in this piece? If you look at the face, what do you think the facial expressions represent?

**I think mischievous.**

Mischievous?

**Yeah.**

Right, right. Next question. How do you feel looking at this artwork?

It feels very, very touching, inspiring. **Um**, we can see how the person lives a daily life and **like** how his life is as a person. And sometimes we can feel a bit sad for them. Kind of looks **like** that he's looking for resources and **he's, he** has to live this way as possibly a farmer or a refugee kind of looks like it and it's not the best condition he's living in.

And what do you think the author was feeling and what do you think like he's trying to convey here?

**I think the author's trying to convey, it's** either his own experiences in this type of condition or basically to, **uh**, to show people that this is happening in the world and **like** how this is **like** happening everywhere else. **Like to, to** show them awareness.

Mm-hmm. <affirmative>.

What emotions are captured in this piece?

If they're people, what do you think their expressions are?

**He looks very, he looks He looks like he's having a hard time, I guess. Yeah, <laugh>.**

And how has your opinion changed about this piece from the time you started looking at it until now?

**I think I feel more, um, more touched and more empathetic to how the person's feeling. Yeah.**

And does the piece free to mind any of your life event or memories?

**No.**

Okay.

So this is probably one of the last questions.

**Okay.**

And how do you feel about looking at this artwork?

**Hungry.**

Hungry <laugh>? What do you think that the author was feeling?

**Usually these have a paintings. Uh, I would think that the author is feeling appreciative nature or to describe like, feelings through the fruits, through different colors, through the art style. So I think in this one he's feeling more expressive, uh, because of the different colors and yeah.**

Do you think like the painting techniques represent anything?

**I think so. The techniques show how the author possibly conveys these feelings to others the, the, the light strokes and dark strokes, they all mean something that the author is feeling and there's a reason why he chose those strokes. The light, the, the strokes are possibly to express his very, his enthusiastic feelings or his very bright and like jumpy feelings.**

Mm-hmm.

All right. So what emotions are encountered in this piece?

**I think the emotions captured are like joyful. Joyful. Yeah. <laugh>. I know one else.**

And

Does the piece spring to mind any of your own life events or memories?

**Mm, I think mostly just enjoying, like eating fruits, that's all. Yeah.**

All right. We have some time meetings, so for 40 seconds. Last, last painting. Okay. How do you feel looking at this artwork?

**I feel at peace. It looks very peaceful and a nice country or, uh, the place that I would like to be in. Like very peaceful basically. Yeah.**

What do you think that the author was thinking?

**Like how he was feeling when people this, Because he's trying to convey a peaceful message. I think he was also peaceful at peace and appreciative of his, of the environment that he was living in or the place that he desires to live in. Yeah.**

Subject 5 Experimental Group

Group one start. Okay. Provide me with some of your own interpretation of this painting.

**So what I think it looks**

**Like?**

Yeah.

**Town.**

Town,  
All right.

**To build. uh, it's like kind of like a, a shopping area, you know? But not, definitely not in this time. More like the time of Ola Homes, whenever year that was <laugh>.**

What emotions do you feel?

**uh, like a till vibe, you know, maybe, uh, you might get a little crowded feeling cause it's a town figure, some town vibes, but it's pretty chill.**

What do you think the author was feeling?

**uh, maybe just painting a view. Okay. Something special to him or her.**

Has your opinion changed the first time you saw an film now about this painting?

**No, but it does give off the vibe that it's in France,**

<laugh>,

<laugh>.

And this is straight to mind. Any other own life experience or memories?

**Um, my grandmother has a similar-ish painting to this. Oh. And she, uh, paint to herself.**

Well, that's interesting.

And

How about this painting? What do you feel about this?

**Like, I should make lemon juice. <laugh>.**

What is your emotions been looking at this?

<laugh>.

**It gives a, uh, emotion. Like, um,**

Does it make you happy or like sad or like nostalgic, hungry

<laugh>?

**Yeah. It does make me a little hungry.**

Right, okay.

**And**

**A little hungry, a little thirsty.**

Mm-hmm. <affirmative>,

What do you think the yellows represent?

**The lemons.**

The lemons?

All right.

**Or the sunlight.**

What are the deeper meanings of this painting?

And



How can you relate to this painting to your own Life?

**um,**

Remind me of a lemon tree. **That's a, it's** also in my girl's backyard, <laugh> house. **But, but** yeah, it reminds me of **like** the lemon tree.

All right. How about this painting? How does this continue make you feel?

**uh,** it makes me feel very **like, uh,** calm. You like calm, very calm, quiet. **Like,**

Um, what are some emotions captured here?

**uh,**

Looks like it's a hot day and you have to work really, really hard.

All right.

Tired.

What do you think the opera was feeling?

**uh,** I think maybe to give up a message of that century, maybe to show what it would maybe **like how, probably how** he thinks or she thinks it looks like back then, or now. I can't tell when it was, but it looks like there was more older days. <laugh>.

All right. And what, oh, already said that. How has your opinion changed about this painting? For the first time we saw, until now,

I know there's a

House.

It's a house.

It's a house.

**uh,** it looks **like** it's on, **uh,** it's really, **uh,** cut off from **the, you know,** modern places and modern times. It looks **like** it's, **uh,** what do you call it in a field? **And, and** you have **like, no, like, no, uh uh.** What is it called? What the

**It has a It has a no** connection to, **uh,** the modern, **uh,** or maybe **like** the, oh my God, there's a word for it. You know, it has no connection to, **uh,** everyday life and everyday people in a modern town. We're gonna stick with that.

How about this painting?

**It gives us a girl who's been cursed by witch.**

Oh, what do you think? So,

**Oh, I mean, she looks very desperate to sniff a flower.**

**I mean,**

**In my video, say she haven't smelled a flower ages, it kind of reminds me of Herzel, you know, when she first came out of the tower and she was so shocked about all the green and all the flowers and all stuff**

**Of that.**

Oh, that makes sense. Makes sense. What stories would she elaborate on this painting?

**uh, repeat the question.**

Like, formulate a story that kind of goes along with the painting.

**Oh,**

**It's giving off, uh, a, a, a mix of like, Rapunzel and sleeping beauty. in one because it, it's a rose and it's, it the starting, if I ever had to create a story about it, the starting pattern. Remind me of the beginning of Herzel. The girl who's in the tower who can't come out. And then when she's out of the tower, desperate to sniff a flower for some reason. Like really so desperate to get that rose. Why?**

What do you think her expressions for present?

**Desperate She's desperate.**

What

Do you think her desperation is for?

**uh, human life. She's wants to be part of the social life because she's been locked away for her life clearly. Cause she's never seen a rose.**

Is that spirit, what do you think like the rose represent?

**um,**

Do you think it symbolizes for anything else?

**uh, salvation. That she know. She kind of finally made it from wherever she came from.**

Mm-hmm. <affirmative>.

All right. All right.

And

Does this bring to mind any of your old life events or, um, experience?

**uh, I got pricked by a rose <laugh>. I got, I walked into a rose plant, like without scratch on my forehead. I wouldn't even know, like, yeah, it was also in front of my grandma's house.**

What is everyth? This house.

**But yeah.**

How has your opinion change about this piece? Or the first thing is saw until now?

**uh, I realize it close. It kind of looks like a, like a, a robe. Like a, which is built.**

How about this painting?

How

Do you feel about looking at this artwork?

**Happy.**

Happy? All right.

**Now I'm scared. What is that? It's a background. What do you think does, does it look like a clown? It looks like something that will haunt you. You're looking at this nice thing and then it's boom.**

What do you think that represents?

**It represents me going through a haunted house, you know, all happy. And then you see the little thing on the side and it pops out of you and you're scared to death. why ?**

What do you think his

Facial expressions represent?

**Like, he's gonna scare you. like a happy clown that's gonna scare you.**

Why do you think the author drew

Him there?

**Hmm. To draw it? Maybe it's to, well, if people recognize it, it's try to get people to focus kind of so that, because if people recognize it, it's so they see the whole thing. I don't know.**

Alright. And how, how do you think this can relate to like, the real life? Like what morals or what? Um, I guess what learnings is conveyed here.

**So never go into a daisy field ever again.**

That's very interesting. Okay. How about this king take, how do you feel looking at this artwork?

**Like, this person's stretched enough and no more stretching.**

So what do you think the different colors represent?

**An abstract Artwork? Someone who's very, um, happy. Someone like a, who would dress in a colorful outfit every single day.**

What

**Do close it don't match.**

<laugh>. What do you think? What emotions do you feel looking at this picture?

**uh,**

**It kind of gives off with all the, with all the colors. It kind of gives off. Like something you would, uh, spray paint on a wall now with all the colors.**

What do you think the author was? Um, feeling, enjoying this?

**Definitely very, very happy. You know?**

Happy. Why would you think so?

**Cause**

**It's colorful. Colorful. I don't know anyone who, if they're happy, they would draw something colorful.**

Let's,

**Or maybe someone who's pretending to be happy and isn't. Cuz there's also blacks with a lot of, lot of black**

In that sense. What do you think this painting Kala represents?

**Hmm, yeah.**

**A sad, a sad person who's pretending to be happy.**

All right. Thank you. You're welcome.

Subject 1 Nudge Group

0:01

So then group three start.

0:04

Okay. Provide me with your own interpretation on this painting.

**There are fruits on a table and it seems like there's like a golden hour.**

Mm-hmm. <affirmative>. And what do you feel when you look at this painting?

**It's warm.**

Warm. What do you think the author was feeling when painting this?

**I think he was just like trying to, uh, portray warm drawings.**

All right. And how does this remind you of like your own life experience or memories?

0:35

**Like, there's a lot of sunsets in Indonesia, so like, maybe like it correlates back to like, memories you make in the sunset. I don't know.**

Right. What meanings would you attribute to this painting?

**Like maybe, uh, I don't know. It looks very nostalgic. Like the author is going back on his memories of groups.**

Mm-hmm. <affirmative>. Okay. What universal theme can apply here?

1:08

**Um, love <laugh>.**

1:18

Can you elaborate?

**So like, it's warm, right? So like, maybe they're like, maybe the author ate the fruits with his love. So maybe that's why like, he's like going back on his memories and thinking about, oh my God, I really miss her, and stuff like that.**

Very interesting. Provide me with your own interpretation on this painting.

**Um, it's very realistic.**

1:49

Mm-hmm. <affirmative>. And what do you think her emotions are?

**I think she's just like admiring the flowers.**

Right. And what do you feel like the flowers represent?

2:02

**like, love.**

2:08

Can you elaborate on your love?

**Maybe like, maybe she's in love <laugh>, so she like, cause like how love enhances life. So she is like smelling the flowers that her past love can <laugh> and she's like day, like the, like my lover used to give me the flowers and stuff like that.**

Okay. And what emotions do you feel like <laugh>?

2:41

**like, like she's, she's just happy. Mm, she's happy she's calm.**

Right. And this is remind you of your, like your own experience or memories? I'm just kidding.

3:19

**Um, she is a no because I feel like, um, even though like there's a lot of nature around me, I would never like stop by and like purposely smell rules. <laugh>.**

All right. Interesting. Thank you. And, um, what interpretation would you give to this painting?

**um, like there's a lot of grapes. Oh, there's a lot of horses?**

3:33

**Yeah. And it's like, uh, very like, um, colorful atmosphere. like, it seems very like colorful. So I'm guessing it's supposed to be like abstract a little.**

Okay. And what emotions do you feel?

**um, like refreshed.**

What do you think like the color represent?

I don't think it has **like** a meaning <laugh>.

And how can this relate to like your own life experience or memories?

4:08

**um**, well I live in Indonesia, which is **like** a very tropical place. So **like** maybe high emphasis on nature.

All right, thank you. Um, what interpretations would you give to this painting?

**It's kind of dark.**

All right. Why is it dark?

**like** there's **like** a lot of dark colors behind the lady and she doesn't really have any **like**, warm facial expression.

What do you think this dark dis represent?

4:36

**I don't think it represents anything.**

All right.

What do you think her feelings are? What emotions is she feeling?

**I think that it's like** more of **like** a portrait. So I think she was just **like** posing. I don't think there's **like** a general **like** meaning behind her pose.

All right. Um, how has her opinion changed from the first time you saw this painting until now?

**um**, at first I thought it was eerie and creepy, but now it's more of, **um**, a casual portrait of **like** probably a noble woman.

All right.

5:07

Thank you. And what interpretations would you give for this painting?

**It's very bright.**

Okay. Um, what do you think like the person behind represent?

**Huh? When you say,**

what do you think the person behind our,

**oh, I didn't see that. Wait. Oh my god, wait. um, it was kind of scary.**

Can you elaborate on your scariness?

**Because the flower is so brightly printed that it kind of distracts you from the face that's behind the flower.**

5:42

What do you think this um, means in your life?

**Maybe like, if you're too focused on the good things, then you're gonna like put it be put into a bad position.**

Right. Um, what emotions

Do you feel when you look at this painting?

**like** uneasiness.

Right.

6:02

Um, how has your opinion changed for the first time you saw this painting until

Now?

**At first I was like really happy with how pretty the flowers are, but um, the man behind the flowers kind of throws it off.**

All right. And, um, how can you relate to your own life experience or memories?

**um, I think that this kind of means like, even though like there are good things, like you can't always be too faceted on the good things because there are other bad stuff that may happen around You.**

Interesting. Yeah. How do you think about this painting?

**It's really bright, right?**

Why do you think like, people represent

**Society.**



Society? How would you elaborate on  
That?

**like**, maybe **it's cuz it's** different colors. So it's **like** there are different people in society and **like** they form together **like**, as **like** a big bunch.

7:00

What do you think this the meaning of this painting is then?

**um**, maybe **like** they're just swimming.

What do you think like different colors represent?

**like** I feel **like** a different, **like** represents **like** different people.

All right.

Different people and or anything **like** the positions of them represent  
Maybe **like**, it's just more emphasis that they're different people.

All right. What do you think their expressions represent?

**I don't think they represent anything.**

Thank you. All right. How about this painting? Can you provide me with your own interpretation?

**It seems very like sad.**

Like sad. How would you elaborate on your sadness?

I guess **like** the colors are really bland and I don't know if it's **like** a personal thing, but I would just never wanna be put in that position with a cattle and **like** a farm.

8:01

**So maybe like**, it seems **like** very desolated.

Um, what do you think about the colors?

**It's very like**, washed down.

Mm-hmm. <affirmative>. And what do you think that kind of represents?

**That it has like**, not really a lot of meaning to this life, whatever is going on, the painting.

All right. And how do you think the author was feeling when painting this?

Maybe he didn't, **he he's** a part of the life and he didn't want to be a part of it anymore.  
Yeah.

All right. And how can you relate to this with your own life experience?

**um**, maybe it represents **like** wanting, **like** feeling desolated in **like**, the place that you are right now.

All right. And, okay, that's it. Can you provide me with your own interpretation of this painting?

**um**, there's a lot of fruits and **like** tea.

Mm-hmm.

<affirmative>. What do you think

Like the fruits represent like long

9:05

<laugh>?

Well, for what?

Maybe

**like**, cuz it's dark, right? So maybe **like** the first I wasn't **like** in **like** darkness and **like** hardships in life you will find love **like** within people and stuff like that.

Do you think there's specific reason for choosing to call yellow?

Oh, maybe it means **like** happiness.

Oh,

All right. And why would you, um, associate yellow with happiness?

Because I feel **like** it's commonly used as a happy color. **like**, **like** a really, **like** suns, **like** the sun is yellow and **like** sun is associated with happiness. And this is **like** the word of happiness in itself. It's just **like** associated with warm colors.

Uhhuh <affirmative>.

Okay. And what do you think the back the Represent?

I think it's to emphasize the yellow.

9:58

Oh, all right. That's about the time. Thank you.

Subject 2 Nudge Group

X group three start. Okay. Provided with your own interpretation of this painting,

It's a man, **um**, herding his lonely cow. **um**, the cow's brownish, and it looks like, **um**, it's in the 20th century where **agriculture, agriculture** is, **um**, very major in this, **um**, economic system.

All right. And how do you feel when you look at this painting?

**I feel lonely.**

Lonely.

**um**,

**I feel empty inside. um**, I wish there were more cows in the picture. **um**, and I wish the man could smile, **um**, while, **uh**, hurting the Cow.

Okay. How would you elaborate on your feelings?

**What,**

Like, elaborate on your loneliness?

**um**, today I'm feeling very gloomy because of the fact that I looked at this photo. **um**, the photo depicts a very serious state of manner. Mm-hmm. <affirmative>, **um**, on the, **uh**, farm. And I feel very, **um**, conscious of what it was like to live in the 20th century in probably medieval Europe or something like That.

All right. And how would you, uh, describe the author's emotions while painting this?

**I think the author was feeling the same way as I did lonely and depressed.**

Mm-hmm. <affirmative>,

**uh**, specifically because of the color contrast that the **author, I mean, not the author, uh**, the painter used.

All right.

**um**, and I think that he wanted to depict or show that, **um**, what a daily life in the manner look like.

All right.

**In twentie century.**

And what is the meaning behind this painting? What is the thematic purpose?

**Depression.**

Depression.

**Depression. And traditional economic systems.**

So what do you think the author was trying to convey to the public of painting?

**The author was trying to convey that, uh, some systems that just did not work in, uh, video, not many Europe, uh, Europe. and that economic reforms were needed to industrialize states.**

Mm-hmm.

<affirmative>. All right. Interesting. And how has your opinion changed for the first time you saw this painting until now?

**When the, the first time I saw this painting, I felt it was more of a, uh, emotional painting, but now I feel like it's a more economic view of what life looked like in 20th century.**

And, oh, how can you relate to this? What does this bring to mind of your own personal experience or memories?

**This, uh, brings back lonely memories that I had in my past. I mean, not past life, uh, in my life, uh, I feel that I have a very deep connection with depression, national cleans. Therefore, I somehow sympathize with the painter.**

All right. Interesting. Next painting. How do you feel when you look at this painting?

**I feel shivers down my mind.**

Uhhuh <affirmative> elaborate

On it

**because of, uh, the random guy that's just appearing behind the background of the painting, which is pretty creepy. He looks like he's like five, which makes it even more creepier.**

Mm-hmm. <affirmative>.

**Cause what kid would do that at the age of five.**

Okay. And what expressions is he showing?

**He looks like he's a bit happy of the situation. which is creepy once again.**

What do you think the, um, presence of his, um, you know, the presence of him represent?

**It represents, um, disrespect towards the painter because of the fact that, uh, the painter was trying to paint a beautiful drawing of Daisy's, um, in a beautiful blue pot. But then this guy comes in, the painter has to draw this guy for some specific, specific reason. I feel that it's very disturbing,**

<laugh>. Interesting. And let's see. What do you think is the submitted purpose of this? The moral or the things author, the author is trying to convey?

**I believe that the author was trying to say that although some things may look beautiful when you look at it when you look into it, it may not be that beautiful as this, not, uh, this kid.**

Mm-hmm. <affirmative>. All right. And let's see. How do you, oh, how do you think the author was feeling including this?

**I believe the author was feeling remorse towards the fact that he drew this painting because I believe most painters would like to draw a more cherry Mary, full, uh, painting rather than, um, a depressing paint of this.**

All right. And how has your opinion changed from the first time you saw this painting until now?

**The first time I saw this painting, I thought it was a beautiful painting because of the fact that the daisies were full of light. But then I looked at the kid and then I realized how disgusting it was.**

Okay. Thank you. How about this painting?

**This painting is, uh, very beautiful, um, because of the fact that, uh, this is a beautiful woman, obviously with beautiful flowers, with a beautiful background. um, I love the fact that she's, um, communicating, socializing with nature, being one with nature, if you know what I mean. This is very rare to see in the 21st century where kids are just, you know, on their phones every single day.**

All right. And what do you think her expressions represent?

**Her expressions represent peacefulness.**

All right. What do you think the author was trying to convey?

**The author was obviously trying to convey how nature is beautiful. human life is also beautiful, and therefore they are one with each other.**

All right then. Sure. How to relate to your personal experience or memories. What, how would you relate to your personal experience or memories?

**In my early days of my life, I was very, uh, I was very connected to my, to my surroundings, especially in nature. I wasn't that into electronics because I was a very cool kid. And I believe that this woman shares the same values that I have right now.**

Okay. How about this painting?

**This painting is this really 20th century.**

I searched

It.

**This painting is very interesting because of the fact that it uses kind of like modern art instead of like, uh, cliché traditional art, which uses like oil paintings and stuff like that. So that, yeah. That's pretty interesting.**

How do you feel when you look at this painting?

**I feel disturbed. That's right. Because of the fact that people are lying on each other in a very weird manner.**

What do you think that different colors represent?

**I think the colors represent diversity, um, especially in our day and age where people are like pretty much discriminating other people against each other.**

What do you think the structure of this painting represent?

**I think it represents unity and diversity. Uh, it shows that although we have many differences, we are all still one. You know, we're clumped up together, so we must live through it.**

So what is the kinetic purpose in that line?

**What.**

What is the thematic purpose?

**The thematic purpose of this is unity.**

Right. Okay.

**It's to stop discrimination, to live with what you have value other people, and yeah, stop discrimination. Pass.**

All right. And, um, how has your opinion changed for the first time you saw this painting until now?

**The first time I saw this painting, I thought it was just like modern art. That doesn't really mean anything. But, uh, now I think there's an important message underlying in this photo. Not photo painting.**

How can you relate to this in your real life?

**The fact that I'm Asian. um, sometimes I get, uh, sometimes differentiated by other people. Uh, especially when I'm talking to people from other races, I feel like sometimes I kind of keep up with them, but in the end, eventually, uh, they always welcome me and yeah, it's a very nice community.**

All right. How about this painting?

**This painting shows a farmer, uh, farming his land, being very enthusiastic about this very shiny day by day of harvesting his crops.**

How does this make you  
Feel?

**It makes me feel at ease. Peaceful. because of the bright colors, bright, but still calm colors. It's not too bright to the, to the point where I'm like, wow.**

Mm-hmm. <affirmative>.

Okay.

Thank you.

Subject 3 Nudge Group

X group three start. Okay. Can you provide me with your own interpretation on this painting?

**um, I see like a farmer trying to get like, meat, I guess, from this area with like mountains and stuff.**

All right. um, what emotions do you feel when you look at this painting?

I feel more **like** peaceful and just **like**, not too stressed about anything. It's just more **like, like** tn, I guess. That's, if that's the right Word.

All right. And, um, what do you think the yellow represent?

Wait, what do you mean by represent? Like what does it symbolize?  
Or like

Yeah, like symbolize,

Maybe it symbolizes **like**, I dunno, wait for me, I think it's just the color of **we, I don't** really see it as a symbolization of something.

All right. And what do you think the author was feeling while painting this?

Well, hopefully **he feels, they feel like**, okay, **like**, you know, **like** peaceful while drawing it, as I said before. because this does seem **like** a very, **like**, peaceful scenery and scenario. So I hope he feeling **like** good feelings, I guess. I don't know.

All Right. And, **um**, does this piece bring to mind any of your own life experience or memories?

Pardon?

Does this bring to mind any of your own life experience or memories?

Honestly, not really, but it does remind me of **like**, things that I've seen during my childhood. **Like** when we're going out to somewhere **like** Indonesia, we see **like** farmers, **like**, you know, and even when we went to **like**, we got walls, we see farmers **like** getting their rice and stuff like that.

Mm-hmm.

<affirmative>. Okay. How about this? Can you provide me with your own interpretation on this painting?

I see **like** a couple, **like** holding hands and **like** going around, looking around, **like** the city.

Mm-hmm.

<affirmative>. And what emotions are captured here?

**I, oh wait, I** also see, okay, I see **like**, people relaxing and just taking in the view and enjoying their life right now. **Like**, not thinking about anything too negative, just enjoying **their, the view**.

All right. And what, um, let's see, how do you feel when you look at this painting?



I feel **like** actually really happy cuz **like**, I love seeing people, **like**, oh, enjoying their lives, not thinking, not taking life too seriously, just, I'm just **like**, all together, just relaxing.

Mm-hmm.

<affirmative>. And what do you think the author was feeling while painting this?

Maybe **the, I don't know** about how he was feeling, but **like**, maybe he was thinking about his own life and what he wants in life and just **like, not taking it too, not taking** life too seriously and just **like** relaxing and enjoying his time with people he loves.

And

What do you think is the moral of this painting?

As I said before, I think the morals just, you know, life is too short. **We can, you know, we just** have to enjoy life as much as we can cuz we don't have much time to enjoy **It.**

All right, thank you. How about this, what do you feel about this painting?

I

Don't know why, but I think it looks like they're **like** cleaning up after or something. So I feel **more like, it's more like** hectic than the ones before because **like**, everyone is in **like**, different places, so it's a little bit hectic.

How would you elaborate on your feelings?

It makes you feel more stressed and **like**, confused as **like, uh**, so **like**, oh, did **like** a war happened? What happened that **like**, that many people have to clean up or **like**, have to **like** separate and stuff **like** that.

And what emotions will the author feel like?

Mm,

I'm not sure. I don't know. **Like**, wait, lemme See.

I don't know, maybe he was feeling a little bit **like** stressed maybe. And **like**, the tasks that he has to do that's incorporated into this painting.

All right. What are your emotions when looking at this meeting?

Honestly, after looking at that, this makes me feel more **like** relaxed and **like** chilled. Because it's **less, there's like less** going on than the one before.

All right. And what do you think the author was feeling?

I think he was feeling nostalgic. Maybe this is **like** what he's, he used to live with, I mean, used to see during his childhood. Yeah. And **like** how he misses looking at things like that because it makes me, makes him feel peaceful, relaxed and stuff like that.

Mm-hmm. <affirmative>, um, what, um, meanings would you attribute to this painting?

Mm,

Maybe that **like**, although life can be a little bit hectic sometimes there are some aspects of life that helps us stay, **like** grounded and more relaxed and peaceful. So we can't re we shouldn't take that also for grounding.

Mm-hmm. <affirmative>. Okay. And what do you think like the ambience in the general, um, mood of this, um, represent, symbolize?

So basically the ambience? Yeah. **um**, maybe **like** quiet, relax. I keep using the word relaxing, but like it is, I don't know another word, but **like**, relaxing.

Okay. And how does this bring to mind? Any of your own life experience or memories?

Maybe **like** from trips that I've been to from overseas, sometimes I see views like this and it makes me feel, you know, grateful that I have the privilege to be able to go around the world and see new things that I've never saw

Before.

how do you feel when you look at this painting?

Yeah, she's really pretty. I don't know if,

**I don't know.**

**I don't know** how to say how I feel. Let

Me see.

Hmm.

I don't know why I feel more **like** romantic, **like**, oh my gosh, **like**, **like** she's enjoying life. She's finding the beauty and everything, and **like** loving every single thing. Oh my god, I

Love her

<laugh>. Okay. How would you elaborate on your feelings?

**um**,

**What do you mean by elaborate?**

Like,

Like,

Like, I guess which aspect make you feel in that way?

I don't know. The way that she's smelling the flower. I, um, I feel like she's really taking it in. She really like,

You know,

Wants to smell it really bad. I guess that sounds really bad, but like, yeah,

That's Okay. What do you think the Rose symbolize?

Hmm.

I think it symbolizes maybe like her lover. like maybe she's thinking about her lover and like, you know, wants to get, get to it. I

Don't know.

What do you think the meaning of the thing is?

<laugh>? I think the meaning is like, um, I think the meanings that maybe it's about like imagination. I don't know. Like you love your lover so

<laugh>

To imagine him and like everything, like you start to see him and every, everything reminds you of him basically

Of experience. Okay.

uh, I just see fruits like apples, grapes.

How do you feel when you look at this painting?

um,

Is it a head? No. Wait, what is that?

An

Apple. Okay. Now that's kind of, that threw me off. That's a kind of like a baby face.

If it was a baby face, how would this change the painting?

I mean, it would change the ambience of the painting, I guess. like it's a little bit disturbing, you know? Yeah.

Okay. And what emotions are captured here?

I think the way that the fruit is placed, I feel like the ambience is just like messy and like things are like not really taken into consideration. And so

How would you call this painting to like the theme of nature or like theme of like the universe?

**Hmm. I mean, how can I say nature is that it is like fruits are for nature and maybe how it's places like, I don't know, like how it's, how it came**

<laugh>. Do you think there are like specific meanings allocated for each? Um, fruits.

**I mean, how the apples are like that those two apples are like secluded. Maybe that's a meeting about nature and like human nature and feeling alienated and stuff like that.**

Subject 4 Nudge Group

X group three start. So can you provide me with your own interpretation on this painting?

**So I can see that they're horses. So maybe it's something related to how people used to travel.**

Mm-hmm <affirmative>. Um, how do you feel when you look at this?

**I like it cuz there's a lot of different colors and I see blue is like the main one. So it, I think it's very nice.**

And how do you think the author was feeling when he was painting this?

**I think he wasn't really feeling much. I think he was just trying to interpret how people used to travel.**

All

Right, thank you. How about this?

**So I know this is Ven Gogh and I don't know much about it, but I know that this is would be his room. So I like it a lot. I can see that he took a lot of time in making it and yeah.**

How do you feel when you look at this?

**I feel that his room is very tidy and I can see that a lot of people copy this art.**

And

Do you think the author was feeling in some way when he was painting this?

**I think he was trying to recreate his room as good as possible since he isn't even really realistic and stuff.**

Yeah. Um, and how do you think, um, I guess this would remind me of anything in your life or your personal experience?

**It reminds me of different times. I went to the Van Gogh museum and I saw it, so I remember when I was a child, when I used to see it.**

How about this painting?

**This painting reminds me of France since I used to live there. It reminds me of like the city and how it was set out as,**

Do you think there's any meanings to this painting?

**There probably is, but I don't know. But I think it's to show the different type of French culture that there is. Could also be Dutch, but I don't know.**

Um, does this kind of make you feel a certain way?

**Not really. I think it's just very pretty. I like how they added the characters and the people on the bottom.**

What would you say that emotions, what emotions are captured in this painting?

**I think that just daily life is captured. So calmness and maybe busyness too. So contradicting on how people used to live and get money from themselves?**

Mm-hmm.

<affirmative>. All right. Thank you. How about this painting?

**This painting was very detailed. I like the cat a lot and I think it represents the Victorian era, probably something like that for their dress. I don't know. <laugh>.**

And then how does this color make you feel?

**It makes me feel that I **would, should** be more sophisticated because this child who's younger than me seems very posh and sophisticated.**

Um, how, what do you think the author was feeling when he was painting this?

**I probably think he was paid to make this, so I think he was trying to make it as good as possible. So it looks good for the girl and their family.**

What do you think her expressions represents?

**I think it just represents, as I said before, how sophisticated as she is and her family's status. How **she's very, she's** not happy but she's not sad. She's very calm too.**

Mm-hmm. <affirmative>. All right. How about this painting?

**This painting is very realistic and I would just say that there's a lot of fruit and it would be still life. So very simple.**

Do you think the lines or like the darkness represent anything?

**Maybe. Possibly.**

What interpretations would you give?

**Honestly, I have no idea. I think basically it would just be a normal play. It probably does as I said for the other one, but I don't really see anything that that could possibly mean.**

Does this remind you of your own experience or any personal memories?

**Well, in Italy you usually have a lot of stuff in the table before you eat, so it could possibly, it reminds me of when I would be in Italy and I'd have a lot of stuff on the table before I got to eat dinner with my whole family.**

Alright. How about this painting?

**This painting is very different from the others since it has like a calendar I think on top. And this represents well life, I think in the medieval ages I maybe would say so I think it's more detailed than the other ones.**

Um, what would you say um, those people are feeling or what emotions are captured in this painting?

**I think that they're living their life and they're probably feeling probably wondering what they must do next. And they're probably sad because they can see the castle right next door. How people there are probably living way better than they are.**

Um, what interpretations would you give to this?

**I would just say it's as I been before how life was and maybe it would represent the future too on how they may think that it'll be like this or it won't.**

Mm-hmm.

<affirmative>, how about this painting?

**This painting reminds me of Finland since there's snow. So it captures different memories I had there. But it's very nice and I think it's French cuz of the words there, but I don't know.**

Um, how do you feel when you look at this?

**I feel it. Like I feel very cozy in the sense that I can imagine myself in one of these buildings with all the snow out and you just came back and you get to relax.**

And how do you think the author was also feeling?

**I think the author was maybe feeling the same way. I was trying to capture the coziness and the warmth that you can feel. Although it's very cold outside**

**This painting,**

**This painting is completely different from the others since it's more surreal I would say. Because people aren't really like that. But I think the colors have a lot of contrast, especially the black ones that are just put in the middle randomly maybe so.**

Mm-hmm <affirmative>. And how do you feel when you look at this?

**I feel nothing really. I think the **auth like the painter** was just like representing what he feels. I don't know what he specifically feels, but I can see that the colors do represent certain things that I don't know. <laugh>.**

Then um, if you are the painter mm-hmm. <affirmative>, then what kind of things would you um, allocate meanings for those

Paintings, those colors?

**Um, I would allocate them according to my feelings and my memories. I'd probably allocate the red to anger or sometimes I felt anger. The black is when I felt sad and when I would believe that I can trust anyone or something like that. And then the other colors, other feelings that I felt through my 15 years of living.**

If those are the feelings then do you think like this painting as a whole has some meanings?

**I think so. I think it could probably mean the brain of the artist and how the artist feels. Mm-hmm.**

<affirmative>. Thank you. How about this painting?

**I think this painting is very sad. Maybe. I think that the two women, I think, I don't know if they're all women, but I think the women that are standing up feel sad for the one that's on the floor. I don't know if he's dead or not, but I think they're trying to do something with the person on The bottom.**

<laugh>, what would you say they were doing?

**I think something related to christianism. I probably, probably doing something funeral related but also it could be completely different.**

Um, this is kind of remind you of anything, anyone or,

**Um, not anyone but in Europe when I used to live there I used to go to museums a lot. So I think the type of drawing and the colors re represent the way that other paintings were made in, um, the museums I went to.**

All

Right, sounds good. How about this painting?

**I think this is very sad probably because of the shades that are only brown and yellow and a bit of gray. So I think the person, not the person, but I think the character inside there is thinking a lot thoroughly and about maybe his life.**

Can you elaborate on  
The emotions you felt?

**So when I feel this, I feel sadness as I said before. And I would probably say it's because of the colors. I would feel like if I was in that situation, I'd be thinking about the decisions I've made before and how maybe I got into that situation and yeah.**

What do you think the author was feeling?

**I think that they were feeling the same emotion the person inside is feeling or maybe just trying to capture how this person used to live and how the animal is useful to the human in this case**

Mm-hmm.

<affirmative>. All right. Thank you. Probably our last painting. How do you feel about this painting?

**I like this painting a lot. I like the fact that there's a lot of black in the background, but then you can see a bit of flowers where the lady is. I feel very calm when I see this because it reminds me of something I like to paint, so it reminds me of stuff that relax me a lot.**

#### **Appendix B: Post Interview Survey Questionnaire**

1. How are you feeling right now regarding all your daily environments, antecedent events, and current situation? (You may select more than one that is applicable)
  - a. Relaxed
  - b. Stressed
  - c. Happy
  - d. Sad



- e. Angry
  - f. Uncomfortable
  - g. Sleepy
  - h. Active
  - i. Excited
  - j. If other emotions apply, specify:
2. Do you have other plans after this interview? (This question is to evaluate if the individual is under urgent situations, feeling pressure)
- a. No
  - b. Yes
    - i. Plans in less than one hour
    - ii. Plans in 1-3 hours
    - iii. Plans in 3+ hours
    - iv. I have important plans now
3. Are you currently expressing stress?
- a. Yes
    - i. Briefly specify why.
  - b. No
4. Have you felt any shame during the experiment?
- a. Yes
    - i. Briefly describe why.
  - b. No

**Appendix C: Justification Responses to Post Interview Survey**

<b>What is your name?</b>	<b>If you answered "yes" in the previous question, please briefly explain why.</b>	<b>If you answered "yes" in the previous question, please briefly explain why.</b>
Subject 3 Experimental Group	MUN, AP Tests	inability to explain my thoughts
Subject 4 Experimental Group		
Subject 4 Control Group		
Subject 3 Control Group	My knowledge in 19th century artwork was very lacking.	
Subject 3 Nudge Group	The reason why I felt stressed was because I found it hard to find words that helped me elaborate my feelings	
Subject 2 Control Group	Although not to a high amount, I am under some levels of stress mainly due to upcoming exams, university admissions,	

		and some simple social difficulties. However, none of this stress is to the extreme, rather it is just something always on my mind.	
Subject 5 Control Group			
Subject 2 Nudge Group		The amount of hesitations or stutters I had stressed me and gave me anxiety.	
Subject 1 Control Group		AP History test block 3	
Subject 1 Experimental Group		I had a humanities test after that period so I was feeling a bit stressed.	
Subject 2 Experimental Group			
Subject 5 Experimental Group		AP tests, finals, homework	
Subject 1 Nudge Group		AP tests	It felt like I was under pressure during interview. When I was in the nudge groups and the number of times I stuttered was displayed, it felt like I had to stop stuttering and speak better. But the more I tried to speak better, it made me speak even worse.
Subject 4 Nudge Group		It was awkward to explain paintings.	When I had to see how many times I stuttered, it was moderately humiliating.

**Appendix D: Student Consent Form**

Participation for AP Research (STUDENT CONSENT FORM)

The leading researcher conducting this study is X, an AP Research student at X. I am asking for your participation in a research study titled "**The Correlation between Age and their Interpretation on 19th Century Artworks**". The study aims to evaluate the effect of cognitive maturity on an individual's ability to formulate advanced interpretations of artworks during the 19th century. Subjects will be allocated to different divisions based on age groups. Regardless of the divisions, everyone will be interviewed for 10 minutes. At the end of the 10-minute interview, participants must complete a survey regarding their stress and shame levels.

NOTICE:

- You will be excused from classes for 10 minutes
- Your interview will be recorded
- I do not anticipate any risks from participating in this research.

- The participants will NOT receive any incentives, compensations, or extra credit for participating in this study.
- Upon completion of the research, all recordings will be destroyed immediately.
- Participants' privacy and confidentiality will be protected through data de-identifying.
- The participant's involvement is voluntary; the participant may refuse to participate before the study begins, discontinue at any time, or skip any questions/procedures that may make them feel uncomfortable, with no penalty to them and no effect on the compensation earned before withdrawing, or their academic standing, record, or relationship with the university or other organization or service that may be involved with the research. Participants may ask questions by contacting X.
  - a. Name
  - b. Is your parent informed about this research?
    - i. Yes
    - ii. No
  - c. Age (10-18)
  - d. Nationality
  - e. Are you multilingual (able to speak more than one language fluently)?
    - i. Yes
    - ii. No
  - f. What is your sex?
    - i. Female
    - ii. Male
    - iii. Other:
  - g. Are you willing to participate in the 10 minute interview?
    - i. Yes
    - ii. No

**!! IMPORTANT !! Please inform you parents about your participation and request to check email for parental consent form.**

#### **Appendix E: Parental Consent Form**

Principal Investigator: X

Faculty Advisor: X

Study Title: The Correlation Between Awareness and Oral Communication Competency in Students of X  
10 to 18

Dear Parents and Guardians,

I am a High School X

I am conducting a research study of students from 10 to 18 to assess how human psychology can influence one's oral communication competencies. X is familiar with and has given me permission to conduct this research at the school, and is facilitating this communication to you to tell you about the study and give you an opportunity to decide that you do not want your child to participate, if that is your preference.

In the beginning of March, a consent form was given to your child's class regarding the purpose of my study. Since it is a complex research project and it is difficult for them to understand it at their age, I am sending you this to discuss more thoroughly.

If you will allow your child to participate you may sign the consent form given to your child or the attached file.

If you allow your child to participate, we will ask them to participate in a 10 minutes long interview March 13 to March 24. Every interview contains identical questions about your child's interpretation of prominent art works. Each interview will take no more than 10 minutes, and students will not miss any instruction time in order to participate. If a child indicates at any time that they do not want to participate, they will be thanked and will return to their classwork.

There are no known risks to your child from participating in this study. Their grades and class standing will not be affected in any way if they do, or do not, participate. Your child will not directly benefit from this research, however their participation may benefit others by informing development of studying habitual speaking disfluencies.

This research is anonymous. No names or other identifying information will be collected. If a report of this study is published or presented at a professional conference, only group results will be communicated and not individual responses.

Each interview will be recorded to avoid mistakes in counting the number of ineffective verbal expressions such as stuttering. Recording is not optional for participation. Upon signing for the consent form, the subjects and their guardians are agreeing to be recorded. After the interview is over, the video will be repeated to ascertain the tallies and other information will not be included in the research (for example subject's responses for the questions asked during interviews, student's name). Upon completion of the research, all recordings will be destroyed immediately. Upon signing the consent form, the guardians and childrens are agreeing to being recorded.

I am happy to answer any questions you have about the study. Please contact X at X If you wish to share a concern or complaint, please contact X

If you do want your child to participate, no further action is necessary. If you do not wish your child to participate, please fill out and sign the form below and return it to your child's homeroom teacher or to X. Alternatively, you can send an email to the researchers with the subject line "Opt Out", and include your name and your child's name in the message. Please return the attached form below or reply via email by March 10, 2023. Thank you for your consideration.

## Appendix F: Recruitment Letter

Dear X,

Greetings from X Advanced Placement Research student. My name is X in 11th grade, and currently working on a research project for Advanced Placement Research. The Faculty Advisor for this study is X of X. I am asking your school to participate in a research study titled “The Correlation Between Awareness and Oral Communication Competency in Students of X from Ages 10 to 18”. I will describe this study to you and answer any of your questions.

The research aims to scrutinize if human psychology has any significant influence on how humans communicate orally. In essence, through your participation, the research will gather quantitative data on how their oral communication competency changed once the children were informed that their speech was being monitored. Maze linguistic disfluencies such as filled pauses, repetition, phonological revisions, lexical revisions, grammatical revisions, and connectors will be the primary focus of the study.

To test the relevance of human psychology and speaking ability, I will seek volunteers from X (75 in total) and allocate them into three groups: control group, dummy group, and experimental group. Each group would not be arranged randomly; instead, they would be separated equally based on their sex, grade, and nationality. This equal distribution avoids any random, unequal distribution of inherent varieties of language proficiency levels (for example, to avoid most of the younger subjects being concentrated in a group).

**Control group:** For 10 minutes, they would be motivated to discuss their analysis of famous paintings freely. The participants will be told that the research objective is to garner qualitative information regarding how individuals analyze famous paintings. However, in reality, their oral communication competency will be secretly measured. Every time a subject exhibits any of the previously mentioned maze types, they will be tallied accordingly.

**Experimental group:** From the beginning of the study, they will be told the real intention of the study, which is to measure the amount of speech disfluencies they exhibit. Everytime they express speech disfluency, a big screen will tally it, making it explicit and obvious for the subject. This will make them aware of their speaking abilities, triggering metacognition.

**Nudge group:** Individuals allocated to this group will also be interviewed for 10 minutes. In the beginning, they will be asked a nudge question. It will imply that their communication competency is being measured. However, they won't be explicitly told about the intention of the study. Applying the nudge theory, they will be informed of the average amount of speech disfluencies one person exhibits. This group exists to validate if awareness is the only variable that will cause the difference in speaking abilities. This group eliminates the variables such as stress and shame that may be present in the experimental group.

At the end of the 10-minute interview, every participant will be required to fill out a survey regarding their stress level and shame level. While other variables (age, sex, and nationality) were controlled, the stress level can act as an uncontrollable variable and alter the results.

Regardless of the divisions, everyone will be interviewed for 10 minutes. They will be asked about reflections on a famous painting. This is merely to motivate spontaneous talking and avoid prepared speech. What they respond to will not have any significance in my research. However, I will monitor the number of times the subject had speaking disfluencies to evaluate their oral communication competency. Types of speaking disfluencies that will be measured are considered to be mazes. Description of maze disfluencies is mentioned above. At the end of the 10-minute interview, every participant will be required to fill out a survey regarding their stress level. While other variables (age, sex, and nationality) were controlled, the stress level can act as an uncontrollable variable and alter the results. By collecting as much personal information as possible, it will further validate the results of the experiment.

I do not anticipate any risks from participating in this research.

If there is any statistically significant difference between human psychology and oral communication competency. In that case, this information from this study may benefit other people now or in the future by modifying the current methods of treating habitual speech disfluencies.

The participants will NOT receive any incentives, compensations, or extra credit for participating in this study.

As aforementioned, each interview will be recorded to avoid mistakes in counting the number of maze speech disfluencies. The recording is not optional for participation, and the subjects and their guardians agree to be recorded upon signing the consent form. After the interview, the video will be repeated to ascertain the tallies, and other information will not be included in the research (for example the subject's responses to the questions asked during the interview). Upon completion of the research, all recordings will be destroyed immediately.

Participants' privacy and/or confidentiality will be protected through data de-identifying. The signed consent forms will be kept separate from the interview data, and the two will not be connected. The participant's name will not be revealed in the Research Report. When individual data is mentioned, they will be addressed in fake names. If this study report is published or presented at a professional conference, only group results will be communicated and not individual responses. The raw recorded files will be protected and will not be shared with other participants except the advisor, X De-identified data from this study may be shared with the research advisor. Despite these measures, we cannot guarantee the anonymity of your data, and their information will not be used or distributed for future research studies.

The participant's involvement is voluntary; the participant may refuse to participate before the study begins, discontinue at any time, or skip any questions/procedures that may make him/her feel uncomfortable, with no penalty to him/her and no effect on the compensation earned before withdrawing, or their academic standing, record, or relationship with the university or other organization or service that may be involved with the research. If a participant is not comfortable verbally communicating with an unacquainted person, they may choose not to participate.

The leading researcher conducting this study is X, an AP Research student at X. Participants may ask

questions by contacting X.

If you have any questions or concerns regarding your rights as a subject in this study, contact the Institutional Review Board (IRB) for Human Participants at 607-255-5138 or access their website at <https://researchservices.cornell.edu/offices/IRB>. If you wish to share a concern or complaint, please contact X.

Participants and guardians will be given a copy of this form and a separate consent form. For guardians, a signature is not required for this recruitment letter. I would appreciate your reply within a few days. Thank you so much for your involvement.