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Occurrence of Rumination: Effects of Feedback Valence, Self-Disclosure, and Social Anxiety

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OCCURRENCE OF RUMINATION: EFFECTS OF FEEDBACK VALENCE, SELF-

DISCLOSURE, AND SOCIAL ANXIETY

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University of Nebraska, 2009

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Rumination, defined as repetitive and automatic thought reviewing of negative experiences, was the major object to explore. The research contemplated the mechanism facilitating the occurrence of ruminative thoughts. The hypothesis was that negative emotion from depreciated performance as well as the task requiring self-disclosure might instigate the intense discomfort within which rumination might occur. The researcher examined the potential interaction effect of Performance Feedback x Self-disclosure on rumination. In addition, stable individual characteristics of social anxiety might affect rumination. The statistical analysis explored the predictive effect of social anxiety on rumination. When the situation required one to disclose the self as well as receiving negative performance evaluation, one's current social anxiety might still play a role affecting the rumination. Therefore, the interaction of Social Anxiety x Performance Feedback x Self-disclosure was a concern as well. The research undertook a sham speech test with performance feedback and need to self-disclose varied. This 2x2 factorial experiment collected data from 52 undergraduate students, with each individual giving an impromptu speech alone in front of the researcher who declared himself as a judge for speech before the debriefing. The researcher delivered a misleading experimental purpose to the participants for the deception at the outset of the experiment. The researcher measured the participant's social anxiety with a questionnaire in the initial stage of the

experiment. The emotional valence of speech performance feedback (positive vs. negative) was manipulated, as was the need for self-disclosure during the speech. Leaving the experimental site for eight minutes and returning, the researcher assessed for the participants' ruminative thoughts which occurred during this interval. This paper used ANCOVA to perform the statistical estimations. However, the statistical analyses did not show significance to fit the research hypothesis except for the main effect of performance feedback on the ruminative thoughts. The experiment's perceived authenticity, the misunderstanding of self-disclosure mechanism and the construct validity of the adopted rumination questionnaire were the weak points and thus the lack of the significant findings was attributed to the experiment procedures and measurements, not the founding theory.

Table of Contents

Chapter 1

Introduction

Rumination is a possible cognitive coping mechanism adopted after intensive psychological trauma, such as a great earthquake (Nolen-Hoeksema & Morrow, 1991). The insufficiency of social support, stress from social relationships, and depressed mood are antecedent factors facilitating the occurrence of rumination, which is often accompanied by negative emotions (Nolen-Hoeksema, Parker, & Larson, 1994). As a cognitive response to the symptoms of depression, rumination's onset tends to co-occur with depression or anxiety (Harrington & Blankenship, 2000; Nolen-Hoeksema, 1991; Spasojevic & Alloy, 2001). Rumination, which refers to repetitive reflection on past negative experience without the subjective control to inhibit it, is different from the thoughts for normal problem solving, which are under conscious control and helps innovative intellectual production (Martin & Tesser, 1989). According to the reduced concreteness theory (Watkins & Moulds, 2007), the actual content of rumination can range from dipping oneself into an autobiographic scenario within the memory for a period to repeatedly thinking of some abstract thoughts which are excessively generalized to one's life and are stable descriptions of the self (e.g., I always fail my academic work). Compared to worry, which socially anxious people display, rumination means to recall the past events repeatedly, whereas anxious worry features the re-consideration of potential future events repeatedly. Social anxiety is thus future oriented, whereas rumination is past oriented (McLaughlin, Borkvec, & Sibrava, 2007). Additionally, rumination potentially tends to exacerbate existing depressive symptoms (Mclaughlin, Borkvec, & Sibrava, 2007). However, few researches have explored the non-clinical

sample's rumination behaviors until recent years. Thus, conducting new research about daily rumination is worthwhile.

Human cognition consists of certain proportions of conscious and unconscious components. From the research by Martin and Tesser (1989), during the onset of rumination people may modify the contents of memorial thoughts and contemplate alternative behaviors for guidance of future behavior. However, the long-lasting and daunting rumination, which the person feels difficulty taking control on, suggests an automatic process is directing the rumination process beyond people's conscious awareness. That is the reason why ruminators cannot stop the rumination consciously even though they are explicitly aware of the occurrence of ruminative thoughts (Martin & Tesser, 1989). When people ruminate, their common purpose often is to extract meaning from the past failure. Meanwhile they are often stuck in that thought process, which is difficult to stop by the conscious control (Martin & Tesser 1989; Nolen- Hoeksema, 1991).

This goal of this research was to find relevant social and personality factors facilitating the occurrence of short-term rumination measured within a psychological lab context. To discover the possible factors affecting the rumination, I have hypothesized several psychological mechanisms of rumination. Firstly, one possible explanatory mechanism for the occurrence of rumination is linked with failure to actualize certain individual goals (Martin & Tesser, 1989). When people fail to actualize their ideal goals, they tend to ruminate (Martin & Tesser, 1989). On the other hand, the motivational factors leading to the emotional behaviors are also worthwhile to consider. Frustration because of emotional behaviors may result in consecutive and automatic rumination. One

exemplary motive can be the desire to self-disclose, or the motive to express one-self. For some people holding the negative attitudes toward the daily socialization, this motive is to self-conceal, or the motive to avoid the expression of the self instead.

Therefore, the life episodes occurred within different social contexts may affect the onset of situational cognition or emotion because different motives may be instigated to cope with emotions brought by the implications or the consequences of different life situations, such as achieving one's goal, etc. This research suggested two situational factors and one personality factor for rumination, and the experimenter designed a simulated life event to test these factors. The two situational factors for the occurrence of the rumination were feedback valence and self-disclosure and the personality factor was social anxiety.

Influence from Performance Feedback

Interacting with people is always accompanied with various kinds of opinions and feedback for people's self, especially receiving some impressive feedback or opinions when their task performance is under review. The task feedback's valence (positive vs. negative) provided by others can affect people's corresponding reactions and cognitive processing. For example, one possible reaction is rejecting the negative feedback promptly compared to the acknowledgement of the positive feedback, or making external attributions for negative feedback which one receives, etc (Lundgren 2004). Thus, the influence of performance feedback is worthwhile to be considered. Moreover, the performance feedback's valence has the emotional implication for people and the emotion changes either negatively or positively according to the valence of the feedback (Ilies, Pater, & Judge, 2006). Ilies, Pater, and Judge (2006) derived more details from the

internet experiment. After completing a language game which reflected on the participants' ability for the smart wording, participants who received the positive feedback (which was manipulated and irrelevant to the actual ability), have showed more positive affective feelings in general, which was reflected in data from the *Positive and Negative Affect Schedule*. However, those participants receiving the negative feedback showed generally more negative feelings, although the self-esteem moderated the relationship between feedback and the emotional responses (Ilies, Pater, & Judge, 2006). What's more, Cane and Gotlib (1985) made an empirical study testing the emotional impact brought by the negative performance feedback. The valence of the emotion experienced can cause people to see the future events in either an optimistic or a pessimistic way. The participants in the Cane and Gotlib (1985) study made a set of speech responses for certain hypothetical social situations. In that experiment Cane and Gotlib (1985) provided the planned sham positive or negative feedback for their speech performances. The depressed participants and the non-depressed participants all displayed lower expectations for future success for the identical speech task when retested, after receiving negative performance feedbacks compared to those with positive feedbacks (Cane & Gotlib, 1985). Similarly, Chamberlain and Hagga (2001) report findings from a study about how the negative performances' feedback affects people's emotional health. In the study, some people had high indices of unconditional self-acceptance. They showed lower proneness to depression after receiving the negative performance feedback from a sham speech contest, but people with low unconditional self-acceptance were more vulnerable to depression after the acknowledgment of the negative performance feedback (Chamberlain & Hagga, 2001). Therefore, failing to

perform satisfactorily on some tasks can affect people's emotions. Because of failures, people may feel negative emotions or establish beliefs, which are passive and pessimistic for the future unless there is an effective emotional coping, such as acceptance, etc.

The negative emotion is hypothesized as the conceptual mediator between the negative task performance and the rumination. Failure to self-disclose, thought suppression, past traumatic life events and frustration because of the failure to achieve goals are four possible important factors for the occurrence of rumination (Gold & Wegner, 1995). When one of these above reasons causes the rumination, rumination is always automatic, uncontrollable and negative in the emotional nature. Thus, people tend to ruminate after frustrating events because these frustrations are unpleasant, and implying to disgrace of the personality. Moreover, the incomplete theory argues that setting goals and achieving these goals is one of the vital human needs (Gold & Wegner, 1995). In other words, stressful life experience, especially the failure to actualize the person's goal, has the potential of triggering rumination because the performance failure is accompanied with negative emotion or stress, and the motivation to succeed is thwarted. Rumination is a cognitive response accompanied with negative and irrational emotion. Noticing the nature of rumination helps the discovery of preceding thought process or experiences, which are the antecedents of rumination.

People tend to experience emotional discomfort after receiving negative feedback, and the discomfort is indicated by the cardiovascular stress measure, especially when the participants have low self-esteem (Hughes, 2007). On the other hand, humans with habits of perfectionism, which is defined as being harshly demanding to make sure they always perform efficiently and succeed, tend to develop the habit of rumination in the long run

(Hewitt, Flett, & Besser, 2004; Hewitt, Madorsky, Flett, & Heisel, 2002). From above arguments, people may show more rumination when they highly anticipate success in some tasks, but actually fail to achieve instead. Negative feedback of task performance, provided right after the engagement may cause people to ruminate on the previous task performance or the relevant events.

From the peak and end effect, people always have episodic long-lasting memory for the timing during the peak period and the end of event because stronger emotion and affectation coexist with the memory for these two timings (Fredickson, 2000). That implies that at the end of the performance, if performance feedback is presented to the participants, participants may choose to recall this experience and reflect on it more radically. From the above arguments, the researcher hypothesizes that people are likely to ruminate once they get a negative performance feedback for a certain performance task which they have just accomplished.

Self-disclosure

The self image is a multi-dimensional construct. When different aspects of the self are being evaluated, the setting of the social context exerts a large effect on the re-construction of self-image. Either it reshapes self-image toward a more positive manner or a more negative manner. One key factor for self-esteem fluctuation is social acceptance because when the social others focus their attention on different personal abilities or personality dimensions, self-esteem fluctuates. One's self-esteem always adjusts according to the resulting appraisal of these dimensions of disposition or ability being evaluated (Anthony, Holmes & Wood, 2007; Leary, Cottrell & Phillips, 2001). From one experiment with pre-adolescents as the sample, peer rejection can result in the

participant's negative affect unless effective emotional regulation comes in (Leary et al., 2001). The experience of social exclusion is unpleasant because the brain mechanism of experiencing social pain requires some overlapping brain regions responsible for the feeling of physical pain (MacDonald & Leary, 2006). Social exclusion by imagination alone can result in more pain tolerance, dullness for one's own emotional feeling and less empathy with other's emotions (DeWall & Baumeister, 2007).

From the influence of evolutionary heritage, human mind tends to be socially anxious when socializing with human groups because social exclusion may occur at any time, which is detrimental to one's survival. Via the mediation of social anxiety, people tend to avoid self-disclosure because of the heavy anxious feeling within (Baumeister & Tice, 1990). As a social animal, humans need to present themselves in front of the evaluations of others. One way to differentiate the patterns of self-presentation responses is to measure the extent to which the person discloses about himself/herself, which is termed self-disclosure (Gibbs, Ellison & Heino, 2007; Kashdan & Roberts, 2007). People do not self-disclose in a consistent way. That is, sometimes people self-disclose as much as they want, while other times they become conservative, fearing to engage in too much self-disclosing. The content of self-disclosure depends on the different social contexts (Antaki, Barnes, & Leudar, 2005). The social environment's importance to rumination was unclear until the latest research findings come around. Social interaction has been hypothesized to result in rumination (Kashdan & Roberts, 2007). When people are aware of the situation where others are implicitly evaluating their attractiveness during social situations, e.g., getting along with friends, people tend to have ruminative thoughts.

People may especially rely on rumination to reflect on any mistake committed (Kashdan & Roberts, 2007).

Kashdan and Roberts (2007) tested the effect of self-disclosure on the facilitation of rumination. Their results did not significantly support the relationship between self-presentation and rumination. However, what Kashdan and Roberts (2007) did was to let the participants join a small talking group and what they did not do was to let the participant perform some tasks accompanied with the performance evaluations. Because performance evaluations may affect one's self-esteem, or self-image, a task requiring both self-disclosure and the perception of the performance evaluation may intensify one's social anxiety. The social experience with social anxiety instigated, in addition to the frustration brought by a negative performance feedback, may lead to the participants' rumination.

Individual Difference in Social Anxiety

Social anxiety, defined as the tendency to experience fear, stress, or difficulty when the social interaction is about to happen (Perini, Abbott, & Rapee, 2006), has evoked extensive research. From the existing research, social anxiety has much predictability for the occurrence of rumination (Fehm, Schneider, & Hoyer, 2007; Kashdan & Roberts, 2007). For the participants with social phobia, focusing on self can instigate intense social anxiety (Woody, 1996). Therefore, the social context with the need to self-present may arouse the social anxiety within participants who have the habit of being anxious. Consequently, social anxiety, as a personality dimension, may moderate the ruminations differently for the various groups categorized by the experimental design (Kashdan & Roberts, 2007). However, not all research results support the effect of social anxiety on

rumination. For example, one archival research study found that perception of negative performance fully mediated the relationship between social anxiety and rumination (Perini, Abbott, & Rapee, 2006). To test how valid the social anxiety is to predict the occurrence of rumination, this study tested social anxiety as a personality moderator affecting rumination.

Experiment Overview

The main theme of this paper was a sham speech test that required the interaction between the participant and the researcher who declared that the speech skill would be evaluated and monitored. This experiment manipulated two situational factors: performance feedback (positive vs. negative) and need to self-disclose which was based on the speech topic sent. Manipulation of feedback was set to result in two conditions: Either the participant received the positive feedback praising the speech skill or negative feedback with harsh criticism. The second manipulated dimension was the requirement to self-disclose. Experimental participants were asked to provide a speech, which is highly self-relevant, whereas the control group was given a speech about a friend or a colleague. After receiving the typed feedback and waiting for a while, the researcher measured level of rumination. Moreover, individual difference in social anxiety was statistically tested as a main effect variable and as a moderator. Besides, the qualitative measures enhanced the clarity of this inquiry. The researcher has analyzed open ended questions to examine the occurrence of the ruminative thoughts and the participant's potential mistrust during the experiment course.

Hypotheses

One research hypothesis was that individual difference in social anxiety generated a predictive effect on ruminative thoughts. That is, those participants with higher social anxiety traits tended to ruminate more in this experiment, while low anxiety participants did not ruminate so much compared to highly social anxious individuals.

Here was the foremost hypothesis for this current research. The researcher speculated that when the self-disclosure condition and the negative performance feedback were combined, the participants would show more rumination. The reason was that the participant experienced emotional anxiety during the self-disclosure and the frustration due to negative performance feedback might intensify the participant's negative emotion. Therefore, the researcher assumed that these two factors of disclosure and frustration could make a great emotional impact and facilitate the ruminative thoughts when both conditions were combined. In other words, the researcher assumed that the group given both negative performance feedback and requirement to self-disclose would show significantly more rumination than the other three groups. Moreover, the researcher hypothesized that social anxiety could be a moderator, affecting the relationship between the interactional experimental effect from self-disclosure and negative feedback to rumination. When the person had high ratings of social anxiety, he was more likely to ruminate when he was in the negative performance x self-disclosure condition, so the researcher predicted a significant three way interaction, anxiety x performance feedback x self -disclosure to occur. The followings are the summaries of this research's hypotheses.

Hypothesis 1. Subjects with high social anxiety tended to show more and stronger ruminative thoughts after this sham speech test, which potentially challenged the subject's personal worth, supposing all the two experimental factors: Feedback and Self-disclosure were statistically controlled.

Hypothesis 2. The experiment had four conditions to carry on, as divided by the valence of the performance feedback and the need to self-disclose during the speech. There would be a significant two-way interaction of Feedback x Self-disclosure. Specifically, the subjects in the Negative feedback x Need to Self-disclose condition, tended to ruminate more than all other three groups controlling for all other the single terms effects: Feedback, Self-disclosure and social anxiety.

Hypothesis 3. When Feedback, Self-disclosure and social anxiety were controlled, there would be a significant three-way interaction of Social Anxiety x Feedback x Self-disclosure. Specifically, subjects in the Negative Feedback x need to Self-disclose condition who were highly social anxious tended to show most ruminative thoughts compared with all other subjects, even than subjects in the Negative Feedback x Self-disclosure condition who were moderate or low socially anxious.

Chapter 2

Method

Participants

To determine the appropriate participant numbers for each experiment condition,

the researcher used a website by Friendly (2007) to compute by the program. Technically

supported by *Linux* and *SAS,* Friendly (2007) used Δ as the unit of effect size. According

to this website, Δ is the difference between the maximum group mean and the minimal

group mean among all conditions, divided by the square root of MS_e. In the field of social

science, 1.25 of Delta would be a large value for the effect size. From the result of power

analysis provided by *Linux and SAS Powered website*, expecting to detect a medium

effect size (Δ = .8, power = .8), with Type I error probability α = .05, the researcher used

the program to estimate the minimum number of participants. According to the power

calculation, 13 subjects were needed in each group for this experiment set. Through the

Internet system provided by the University of Nebraska at Omaha, 52 students taking any

of the university's psychology courses have participated in this experiment as the

research subject. Most of these subjects were females.

Measures

The researcher intended to find out the participant's thought contents, so the

method of thought-listing was adopted (Elliott & MacNair, 1991) in the measurement of

this research (please see Appendix A). For the measure of post-event rumination, some

questions from the *Rumination Questionnaire* (Mellings & Alden, 1999) and some

questions from the *Ruminative Response Scale* (Nolen-Hoeksema, Treynor & Gonzalzez,

2003) were combined with my original questions, e.g., self report of ruminating (see

Appendix B). For the measurement of social anxiety, the *Social Interaction Anxiety Scale* (Mattick & Clarke, 1998) was adopted. *Social Interaction Anxiety Scale* is for the probing of anxiety in the context involving getting along with other persons (Brown, Brown, Turovsky, Heimberg, Juster, & Barlow, 1997). See Appendix C for the *Social Interaction Anxiety Scale.* The researcher found that one item in the *Social Interaction Anxiety Scale* had some missed responses. The first item had eight missing responses out of 52 participants. The printing of item number one caused such a high missing response rate. Some participants overlooked this item because not only there was no numbering on this scale, but also this item was close to the introduction section. Some participants skimmed the introduction section of this scale, and mistreated item number one as part of the introduction. As a result, this high missing rate has occurred. The researcher should have checked this situation before the participant finished the answering this scale as well. Therefore, during the analyses, this single item in the *Social Interaction Anxiety Scale* was excluded for the statistical measurement.

Procedures

Participants came to the experiment lab individually and the author of this article served as the facilitator of this experiment as well. The researcher greeted the participant upon the participant's arrival. The first thing the researcher did was to describe the participant's rights to him or her and check whether the participant had the mental capacity to understand the legal and contractual implications of the informed consent form that was to be signed by the participant right away. Then the researcher announced to the participants the sham research purpose at this time; "*This experiment will test your speech performance according to the coming impromptu speaking task, and your emotion,*

personality and body rhythm will be measured as well.'' The researcher was ambiguous and reserved about the essence of this research's purpose at this time. When the participant agreed to join by signing the informed consent, the researcher passed out one questionnaire modified from Horne & Ostberg (1976) testing one's circadian rhythm (See Appendix D for the scale contents) to the participant. This procedure was to shift the participant's thinking focus and concealing the true research purpose and the authentic research hypothesis of this study. Afterwards, to measure the participant's social anxiety, the *Social Interaction Anxiety Scale* (Mattick, & Clark, 1998) was passed out to the subjects and they responded to this scale.

The researcher initiated a short introduction with the participant about the speech improvising task that the participant was going to perform. The participant was told that he/she would have only five minutes to prepare for that given speech topic. That speech topic was randomly drawn by the researcher from one stationary case, either implied for self-disclosure or non-self-disclosure with the participant unaware of this procedure. The speech topic given to the participants were as following by the two experimental conditions:

Self-disclosure Condition. Reflect on your experiences as an employee or as a student. Have you ever made a serious mistake at work or at school? Describe the situation, mistake, and the consequences, and what you learned from it.

Non-self-disclosure Condition. Reflect on your experiences as an employee or as a student. Have any one of your peers ever made a serious mistake at work or at school? Describe the situation, mistake, and the consequences, and what you believe that your co-worker or fellow student learned from it.

Before the participant began to write notes for the coming speech test, the researcher declared that he would evaluate the participant's performance on this impromptu speaking and let the participant preview the feedback-form's grading format. The researcher told the participant that the speech performance would be graded based on these three dimensions: Introduction, organization and presentation style. Then the researcher left the room and the participant could plan for the speech by making casual notes. After the participant kept preparing for the impromptu speech for five minutes, the researcher went back to the experiment lab and asked the participant to stand up (which made the participant look formal) and perform this speech. Once the participant finished the speech task, the researcher began to write his pre-set feedback as quickly as possible. To stimulate the emotional response with the valence (positive vs. negative) of the performance feedback, the researcher had already planned one commentating script for the positive-feedback condition and one script for the negative-feedback condition. Either all participants in positive or negative condition received the identical sentences in the feedback form's space of *Additional Comments.* To repeat this procedure with accuracy, the researcher brought a note instructing what to write in the space of *Additional Comments,* which was on the bottom of the feedback form. Either these feedback sheets were also marked distinguishingly to notify the researcher to write the positive feedback or the negative feedback .The researcher randomly drew one feedback form from the stationary case each time only. However, when the 41th subject finished the experiment, the positive-self-disclosure condition already had 13 subjects. From then on, the researcher refrained to run participants with these conditions already with full data. From then on, the kept turning the speech topic or the marked feedback form back to the

stationary cases if this topic or feedback form would result in the redundant experimental data. For the positive feedback condition, the researcher consistently gave six points for *introduction,* five points for *organization,* and five points for *presentation style.* Please see Appendix E for the feedback form. For the negative feedback condition, the researcher invariantly gave three points for *introduction,* two points for *organization,* and two points for *presentation style.* Besides that, there was what the researcher wrote in the section of the *additional comments,* according to the assignment of the experimental manipulations.

Positive-feedback Condition. You did a wonderful job. You told a meaningful story and made an impressive presentation.

Negative-feedback Condition. You did not describe your story well and did not explain the meaning of your story. You did not look relaxed; you need to be at ease.

Despite that these feedbacks described their performance ambiguously, it was to misguide the participant on the surface because these general comments could match the routine situations.

After the experimenter handed in the written feedback to the participant, the researcher pretended searching for his own belongings, turned his body back and faced toward the participant, telling the participant that he had to go downstairs to prepare for more questionnaires and the participant had to wait for a few minutes. The researcher also told the participant not to engage in personal affairs, too, such as talking on the cell-phone, etc. Consistently waiting for eight minutes, the researcher came back to the participant and let the participant respond to the scale for the rumination occurrence and questions about the perceived authenticity of this speech task.

Carrying out all these procedures, the researcher debriefed to the participant before the entire experiment finished. The major concentration of the debriefing was on the valence of the speech feedback. No matter whether the feedback was positive or negative, the researcher explained to the participant that the presentation of the speech feedback was part of the experiment plot. Moreover, the participants heard that these scores and comments given for the speech were fictional, and were irrelevant of the authentic speech performance that the participant just had brought. After the participants agreed that the researcher could save all the experiment data and analyze, the researcher ended the experiment and let the participant leave the lab.

Chapter 3

Results

Scaling

To represent the index of social anxiety, the researcher used a composite scale, which is the arithmetic mean of all items for each person. In the beginning, there were totally 18 items from the *Social Interaction Anxiety Scale* (Mattick & Clarke, 1998) which were being adopted in the survey process. However, one item had eight missing values out of the total sample size of 52, and thus this item was excluded. With one item deleted, the *Social Interaction Anxiety Scale* (Mattick & Clarke, 1998) had an internal consistency of .85, in terms of Cronbach's alpha.

Probing the rumination, the researcher used two forms of measurement for rumination, and combined both for the statistical analysis. There were four multiple choice questions modified from the extant literatures (Mellings & Alden, 1999; Nolen-Hoeksema, Treynor & Gonzalzez, 2003). In addition, another open-ended question let the participant fill out a time in the unit of minutes, which they used to ruminate over the bygone speech task process and the performance evaluation for the speech. This item referred to a subjective measuring of the time passed because most participants did not bring their watches nor paid attention to the physical time. The researcher chose to combine these multiple choice items of ruminative thoughts and this single item probing the minutes spent for ruminating. In order to have the equal weights in the scaling, the researcher standardized each item into Z scores and added these scores into a total for each participant. In the initial reliability analysis, this integrated Cronbach's alpha was .60. In the initial reliability analysis, the researcher found that one multiple choice

item, "*To what extent did you think that the speech feedback you received was justified?*" lowered the overall internal consistency in terms of Cronbach's alpha. This item did not correlate well with other ruminative thought questions. To improve reliability, the researcher excluded this item. After excluding this item, the alpha reliability of internal consistency rose to .80.

However, during the data collection process, one participant clearly told the researcher that he did not know how many minutes he used to think about the bygone speech and the relevant happening. The researcher allowed him to leave the item of how many minutes spent for the rumination blank, and the resulted in one missing value for his rumination score. The researcher estimated this reliability with a missing value of rumination score integrated not considered. For the validity of ANCOVA in the following steps, the researcher decided to replace this one missing value in terms of the minutes used for rumination because when all the data groups had the equal sizes, the assumption of variances' homogeneity was more likely to stand firmly. For this participant's data with one missing value of rumination, three other items showed the clear response. Therefore, the researcher used the average of the other three rumination Z scores, which were just the three multiple choice questions, to substitute the missing blank in that data of ruminative minutes for that one participant.

Descriptive Statistics

Table 1 includes the descriptive statistics of this experiment including the mean rumination for each experimental condition. The social anxiety had a Likert scale with the 5-point range; rumination consisted of the average of four Z scores. First, the researcher examined each group's average rumination. The Negative Feedback x Non

Self-disclosure group had the highest index of rumination ($M = .13$, $SD = .70$), followed

by the Negative x Self-disclosure condition ($M = .02$, $SD = .82$). The pattern shown in the

descriptive statistics supported with the theoretical inference, which predicted the

participants should have ruminated more when the feedback was negative although this

pattern did not conform to the theoretical effect of self-disclosure. That is to say, this

pattern contradicted with the theoretical speculation in the point of the self- disclosure's

influence but supported the research speculation about the frustrating effect of the

negative performance feedback. The line plot in Figure 1 could present the same pattern.

Please refer to Figure 2 for the scatter dotting pattern between social anxiety and

rumination.

Hypothesis Tests

A multiple-choice question tested whether the participants believed that the

experiment was to test the relationship between body's daily rhythm and the speech

performance, which the experimenter had implicitly implied at the arrival of the

participants (The question hidden in the rumination scale, see the sixth question of

Appendix B). This question consisted of five numerical alternatives; the higher the

number, the participants believed into the sham research goal more. In general, the

participants kept a neutral attitude toward this faked experimental purpose ($M = 2.92$, SD

$= 1.14$). This means this question did not generate a great valid measurement for the

suspicion.

To test *Hypothesis 1* about the relationship between social anxiety and ruminative

thoughts, this thesis calculated the zero-order correlation between social anxiety and

rumination in the forms of numerical correlation. Social anxiety correlated positively

with rumination ($r = .17$, $df = 50$, $p = .22$). To explore the fact thoroughly, the researcher

tested the effect of social anxiety with ANCOVA controlling for Disclosure and

Feedback (See Table 2). The effect of social anxiety failed to be predictive of rumination

(F (1, 44) = .51, $\eta^2 = .01$, $p = .48$). Both the two insignificant statistical numbers did not

support the prediction that the social anxiety positively affected the rumination specified

in *Hypothesis 1*.

      Hypothesis 2 was about the experimental design's effect on rumination. First, this

research used ANCOVA to examine how the main effects of performance feedback and

need to self-disclose affected rumination, represented by ANCOVA model (Table 2).

Controlling for all the three main effects (Feedback, Disclosure and social anxiety), Self-

disclosure x Performance Feedback as the interaction term entered the model. The

significance of this interaction was the foremost concern for *Hypothesis 2*. The main

effect of Self-disclosure (F (1, 44) = .16, $\eta^2 = .00$, $p = .69$) and Performance Feedback (F

(1, 44) = .68, $\eta^2 = .02$, $p = .41$) was not significant. The two-way interaction between

Self-disclosure and Performance Feedback was non-significant (F (1, 44) = .02, $\eta^2 = .00$,

$p = .89$). The statistical result failed to support *Hypothesis 2*.

      In addition, the researcher predicted that social anxiety might intensify the extent

of rumination while both the experiment conditions jointly facilitated the negative

emotion for the ruminative thoughts. Testing *Hypothesis 3* with ANCOVA could

examine this question. Social anxiety was centered which meant each value minus the

mean. By centering the social anxiety, its entire value set became relatively meaningful

for the corresponding effect size and *F* because even the zero value meant exactly the

average of social anxiety. After entering the main effect terms for social anxiety,

performance feedback and the need to self-disclose, the researcher added all the possible

two way interaction terms. For *Hypothesis 3*, the three way interaction, Social Anxiety x

Self-disclosure x Performance Feedback entered the model and its explaining utility was

this hypothesis testing's objective. All the three main effects (Feedback, Disclosure and

social anxiety) and all the possible two-way interactions from the main effects were

controlled. As shown in Table 2, when all the main effects and the two way interactions

were not significant in this model, there showed no three way interaction among the

performance feedback, self-disclosure and social anxiety (F (1, 44) = .81, η^2 = .02, p

= .37).

Qualitative Results

For the qualitative analyses, the participants responded to various open-ended

questions, which were subject to the subjective coded ANCOVA and content analysis. By

reading the textual responses, the researcher coded according to his judgment and ran the

statistical analyses to test the three research hypotheses and suspicion for the experiment.

By suspicion, the researcher means that the participant either mistrusted the authenticity

of the speech feedback or doubted the statement about the research purpose provided

from the researcher in the start of the experiment.

Presented in Appendix A, this thought listing question was to let the participant

record all the thoughts passing their conscious minds when they were waiting for the

researcher to come back with more questionnaires. The questionnaire of the thought-

listing had eight blank sections and the participants could choose to write about the

occurred thoughts at least in one blank section or at most the participants could fill in all

the eight blank sections with the thoughts. When the researcher identified that one blank

section of thought was about the speech content, the feedback of the speech, or how the

participants regarded their speech ability, the researcher counted this thought as one

ruminative thought fitting this paper's construct setting. Therefore, for every single

participant, at least he had zero ruminative thought identified or at most he could have

had eight ruminative thoughts. In the practical data, the minimal ruminative frequency

was zero and the maximal ruminative frequency was six. One psychology graduate

student who did not know the research hypotheses and experimental design coded these

identical data for the reliability test. By taking the simple correlation between the

researcher's evaluative scores and those of this graduate student, the researcher estimated

the inter-rater reliability of these thought-listing scores for rumination. The inter-rater

reliability was .89, which was a high-quality index. Therefore, by this construct of

rumination, the researcher again tested all the three hypotheses with statistical ANCOVA

method.

After the researcher coded the frequency of rumination for each participant, he

compared the general rumination patterns in dimensions of the two experiment conditions:

Performance Feedback and Self-disclosure. From the descriptive statistics in Table 4, the

Negative Feedback X Self-disclosure condition had the highest mean among all the four

groups (M =2.77, SD = 1.30) and this supported *Hypothesis 2*'s prediction that the

combined effect of self-disclosure and negative feedback resulted in intense ruminative

thoughts. With the rumination coded from the thought-listing, the researcher again tested

all the hypotheses via ANCOVA (Table 4). For *Hypothesis 1*, the result contradicted the

theoretical deduction to a great extent, suggesting social anxiety was not related to

rumination when all the experimental conditions controlled (F (1, 44) = .00, η^2 = .00, *p*

= .98). For the second hypothesis, despite the expected two-way interaction between disclosure and feedback did not emerge (F (1, 44) = .35, η^2 = .01, p = .56), the researcher found the significant main effect from Performance Feedback (F (1, 44) = 5.41, η^2 = .11, p = .03). This has been the only significant statistics of this entire paper. However, the finding supported the theory that negative feedback could facilitate the occurrence of rumination. This qualitative analysis failed to support *Hypothesis 3*. Controlling for all other main effects and two-way interactions, the three way interaction among social anxiety, Disclosure and Feedback had a effect size close to zero (F (1, 44) =.20, η^2 = .00, p = .66).

Next comes four content analyses regarding the effect of positive vs. negative feedback. From most suspicious questions' results (Table 5), nearly half of the participants had doubt with the authentic experimental purpose or the validity of the speech feedback. Of these suspicion measures, the first open-ended question in Appendix B was to quest the thought passed in minds when the participants were waiting for the return of the researcher, especially for their feeling toward the speech feedback and the possible implication of the speech feedback. The researcher used the method of content analysis to compare the suspicion occurring in Positive vs. Negative Feedback conditions. If the participant was in the positive feedback condition, and he talked about the feedback and the speech with any pleasant words or the participant with negative feedback condition wrote his feeling about the speech and the feedback with uncomfortable words, then their emotion matched the experimental setting. In this situation, their responses were coded as trust, otherwise not. The researcher rated their responses, giving value of one to those responses regarded as mistrusting to the authenticity of the speech feedback;

assigning value of zero to the responses as with trust to the feedback. There was no difference between the positive feedback condition's suspicion occurrence and that of the negative condition ($\chi^2(1) = 1.30$, $p = .25$, see Table 6, Emotional Correspondence). Moreover, the three open-ended questions in Appendix F were for the participant's suspicion test: whether they seriously went through the procedure or not. The researcher's interpretation suggested that a few participants held their own version of understanding about the experiment design's real intention. By reading all these responses, the researcher hypothesized that feedback might influence the participant's suspicion. The first question in Appendix F asked the participant about what they thought of the true research intention. Equally Positive and Negative Feedback conditions had some participants doubting the research was mainly about the speech skill ($\chi^2(1) = .69$, $p = .41$). See Purpose Suspicion in Table 6. The participants also answered another two open-ended questions for the suspicion; one probed the strangeness of the experimental procedures and another quested about suspicion from the participants' additional comments. The results were similar; the Feedback Valence did not affect the suspicion to the experiment. Please see the results of content analysis in Table 6. On the other hand, as shown in Table 5, most cells had around half of participants displaying mistrust and suspicion toward the alleged experimental plan. In general, the pattern of suspicion was worth noting when the research validity was under consideration.

Chapter 4

Discussion

This research was to find out the potential relations among ruminative thoughts and its antecedents. The situation of negative performance evaluation and the requirement to disclose the self might trigger the rumination for one's uneasy emotion. One's stable social anxiety might play a role for the facilitation of the rumination as well. Therefore, it was hypothesized that the research participants with high social anxiety might ruminate more and with the combination of the negative performance evaluation and the experience of self-disclosure publicly might make the participants feel more ruminative thoughts. In addition to testing these hypotheses with the quantitative ANCOVA, the researcher also qualitative coded the participants' ruminative thoughts and the suspicion for the experiment and used the content analysis to derive the results. Statistically, the research found no significant relationship among rumination and these proposed antecedents. However, the content analysis with the participants' thought-listing found the main effect of speech feedback which heightened the rumination when the valence was negative. This has been a corroborative indication supporting the research theory.

Some extant research supports the theory that the higher one's social anxiety, the more likely one ruminates, whereas some conclude that no relation between social anxiety and rumination exist. This paper found no significant relationship between social anxiety and rumination. The extent literature can strongly verify that negative performance feedback brings people the negative emotion and the frustrating feeling potentially prompts the ruminative thoughts. However, this paper has only a weak evidence showing how negative performance practically increased rumination by

instigating negative mood despite the researcher found the significant effect from the thought-listing which was a subjective measure. Likewise, the importance of self-disclosure has been under the intensive research focus and people treat the self-disclosure as a key component for their identity as social beings. Despite every person using self-disclosure as an important socialization tool may feel the stress about self-disclosing because it is important, the current paper did not find the statistical relationship between need to self-disclose and rumination.

The participants who had doubt toward the true intention behind the proceeding experiment were equally widespread in both positive feedback condition and negative feedback condition, but the overall suspicion rate has been high. Moreover, these qualitative content analyses except for the suspicion lack the examination of the inter-rater reliability, which is worth noting for the analysis' credibility despite the fact that the inter-rater reliability of ruminative thoughts was estimated. However, most important of all, the statistical effect of social anxiety on rumination did not emerge nor did the interactive effect Self-disclosure x Performance Feedback. Here are the researcher's speculations about the possible factors leading to the failure of the experiment.

The primary source causing this experiment result may be attributed to the perceived authenticity of this experiment setting. First of all, these participating students already acknowledged that the entire process was a psychology research even before they came to the experimental lab. Additionally, these college students as the participants had the background knowledge about general psychology methods. The credit offered by the undergoing psychology courses was the motive they volunteered to join as a subject. By taking psychology courses, these participants were prone to the suspicion about the true

hypothesis behind the experiment even before the experiment debriefing. Especially, the researcher's self- presentation did not correspond to the stereotypical English speaker because of his Asian English accent. This may have strengthened the participants' mistrust to this speech test's authenticity and made participants distracted in the thought process. Therefore, the effect of negative or positive speech feedback has been compromised. Next time, the priming of a memory about the negative performance in the past may be a plausible choice for the following experiment. In conclusion, this experimental process decreased its internal validity and external validity because the participants did not perceive the atmosphere of the entire experiment as authentic or real. Therefore, the negative emotion from the negative job result, may still be important for the occurrence of the rumination. Future studies can improve the setting of the experimental procedures to collect the data and re-run the similar analyses.

Another aspect to improve may be the definition of the rumination. The index of the rumination in the research was adopted from questionnaires (Mellings & Alden, 1999; Nolen-Hoeksema, Treynor & Gonzalzez, 2003) probing the habit of long term rumination. The internal consistency of the rumination scale used in this research was .80, but the measurement of the rumination in this research was still far from perfection. Instead of measuring the long-term ruminative habit, these questions were modified to measure the short-term rumination occurred in this experiment, these questions might have been looked to be serious and inappropriate to the corresponding situation. Moreover, these ruminative thought questions implicated a lot to the speech process, which may have misguided the participant to recall and comment on the speech task, not on the ruminative thoughts, which may have occurred.

Some existing research has discussed about negative affect (NA), which treated NA as one personality negative emotional characteristics (Archer, Von Schedvin, & Norlander, 2005). Some other researchers probed the relation between social anxiety and state NA, with social anxiety as a long term characteristics and state NA as an activated affective feeling (Kashdan & Roberts, 2004). Kashdan and Roberts (2004) found that when combined with stressful social interaction, social anxiety tended to boost the occurrence of state NA. Moreover, quite a lot researches think that rumination tend to co-occur with depression (Hewitt et al., 2002; Nolen-Hoeksema, 1991; Spasojevic & Alloy, 2001). NA can be treated as a personality construct or state emotional construct, whereas rumination refers more to a maladaptive symptom shown in the thinking process. There may be a relation with personality and relevant symptom; people high in NA may ruminate more. However, since rumination refers to a malfunction in the thinking process and NA refers to general feeling regardless of the content of thoughts, these two may be still worth of being separate constructs. However, like what mentioned in the previous paragraph, the short-term rumination still requires much contemplation in both theory and experiment.

In the speech task for the experiment, the participant had a great freedom to present their speech contents, and this may give them the chance not to disclose the self fully in the experimental condition even assigned to the self-disclosure condition. This loose experimental control inspired the researcher's understanding. In the future, the experiment should manipulate the participant's stress to self-disclosure, not self-disclosure alone. According to the introduction of this research, the actual factor mattering should be a sense of stress during the process of socialization. Only the action

of self-disclosure was not enough to make people ruminate. The participants were mostly

college students who had similar life experience. However, the self-disclosure did not

result in negative emotion or stress in a experiment-controlled pattern. The future

experiment needs a situation or priming that consistently arouses the participants social

stress which may not definitely linked to the action of self-disclosure. Overall, when all

these are considered, the future research still has a good scope on this emotional subject

and is hopeful to derive better findings.

      For more research on this topic in the future, here is the summary. Despite this

paper clearly mentioned the concept of self-disclosure and performance feedback, the

practice of this research experiment might not present an atmosphere that was close to the

authentic life. One possible way to advance next time may be let the participants think

about a positive or negative performance in their minds, so the artificial experiment's

simulation can be saved in order not to let the participants feel they are playing. Like the

performance evaluation, the self-disclosure may still be a potential factor for rumination.

However, the current paper may have ignored some kind of mediating variable which

implicitly affected the relationship between self-disclosure and rumination. For example,

when one really has acquired a serious traumatic experience in the past, maybe in this

case self-disclosure can bring an intense stress on the minds and then it can greatly make

the participant ruminate. Therefore, self-disclosure may be a broad concept, which the

researchers can contemplate more about the possible mechanism and the relevant

psychological phenomena associated with it. The social anxiety scale had a valid

construct representation in this research according to the implication of these text

sentences in it. Probably the setting of the entire experiment atmosphere will be the important aspect needing progress if subsequent researches are being made.

The measurement of rumination may not have presented its best in the current paper. The main reason is the existing research focuses on measuring the long term rumination. To fit the research plan, this paper took the extant long-term rumination questions and modified them into rumination questions for the short-term ruminative thinking. To extend the psychology further, the researchers needed to contemplate the issue that whether short-term rumination and long-term rumination are under the same category. This distinction not only impacts the plan to making scales to probe the rumination, but also the related theoretical mechanisms will vary depending on the perspective that rumination includes both short-term and long term or not.

Overall, there are some experiment manipulations and some theoretical speculation need the researchers' elaboration and revision. This research only derived minor statistical support from the content analysis for its theoretical assumptions. However, social anxiety, self-disclosure and valence of performance feedback remain as likely factors affecting the occurrence of rumination.

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Table 1

Descriptive Statistics by Experimental Conditions

		Rumination (Z Score)	Social Anxiety
Positive			
Non Self-disclosure	*M*	-.02	2.60
	SD	.98	.64
Self-disclosure	*M*	-.13	2.35
	SD	.72	.58
Negative			
Non Self-disclosure	*M*	.13	2.66
	SD	.70	.54
Self-disclosure	*M*	.02	2.39
	SD	.82	.47
All Conditions	*M*	.00	2.50
	SD	.79	.56

Table 2

ANCOVA Quantitative Model

	SS	df	MS	F	p	η^2
Disclosure (D)	.10	1	.10	.16	.69	.00
Feedback (F)	.42	1	.42	.68	.41	.02
Social Anxiety(S)	.32	1	.32	.51	.48	.01
D*F	.01	1	.01	.02	.89	.00
F*S	.60	1	.60	.96	.33	.02
D* S	1.65	1	1.65	2.64	.11	.06
D*F*S	.50	1	.50	.81	.37	.02
SS_{within}	27.43	44	.62			
SS_{total}	32.01	51				

Note. Dependent Variable = Rumination.

Table 3

Ruminative Thought Statistics by Condition

		Rumination in Thought Listing
Positive		
Non Self-disclosure	*M*	2.00
	SD	1.47
Self-disclosure	*M*	1.31
	SD	1.75
Negative		
Non Self-disclosure	*M*	2.46
	SD	1.61
Self-disclosure	*M*	2.77
	SD	1.30
All Conditions	*M*	2.13
	SD	1.60

Table 4

ANCOVA for Coded Rumination in Thought-listing

	SS	*df*	*MS*	*F*	*p*	η^2
Disclosure (D)	2.28	1	2.28	.98	.33	.02
Feedback (F)	12.63	1	12.63	5.41	.03	.11
Social Anxiety(S)	.00	1	.00	.00	.98	.00
D*F	.82	1	.82	.35	.56	.01
F*S	8.60	1	8.60	3.69	.06	.07
D* S	2.83	1	2.83	1.22	.28	.03
D*F*S	.46	1	.46	.20	.66	.00
SS$_{within}$	102.69	44	2.33			
SS$_{total}$	130.06	51				

Note. Dependent Variable = Frequency of Thought-Listing Rumination.

Table 5

Frequency of Suspicion by Conditions

	Positive Feedback	Negative Feedback
Emotional Correspondence	12 (46%)	8 (31%)
Purpose Suspicion	11 (42%)	14 (54%)
Procedure Suspicion	11 (42%)	16 (62%)
Suspicious Comment	4 (15%)	8 (31%)

Note. Each condition (Positive vs. Negative Feedback), had totally 26 values; inside the

parentheses in the Table above is the percentage of the suspicion frequency to the total.

Table 6

Content Analysis by Chi-square Statistics

	χ^2	p
Feedback (Positive vs. Negative)		
Emotional Correspondence	1.30	.25
Purpose Suspicion	.69	.41
Procedure Suspicion	1.93	.17
Suspicious Comment	1.73	.19

Note. Dependent Variable = Frequency.

Figure 1

Line Plot

The Rumination Trend across Experiment Conditions.
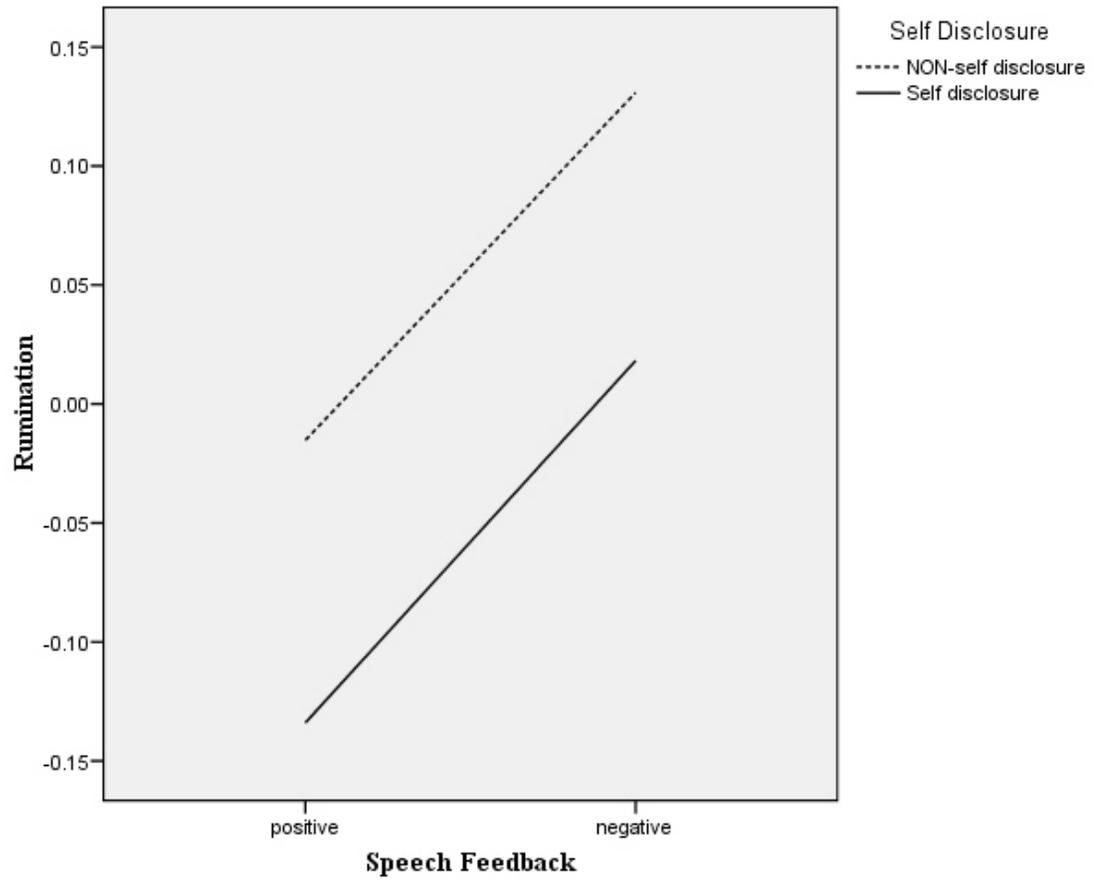
Figure 2

Scatter Plot ---Rumination with Social Anxiety
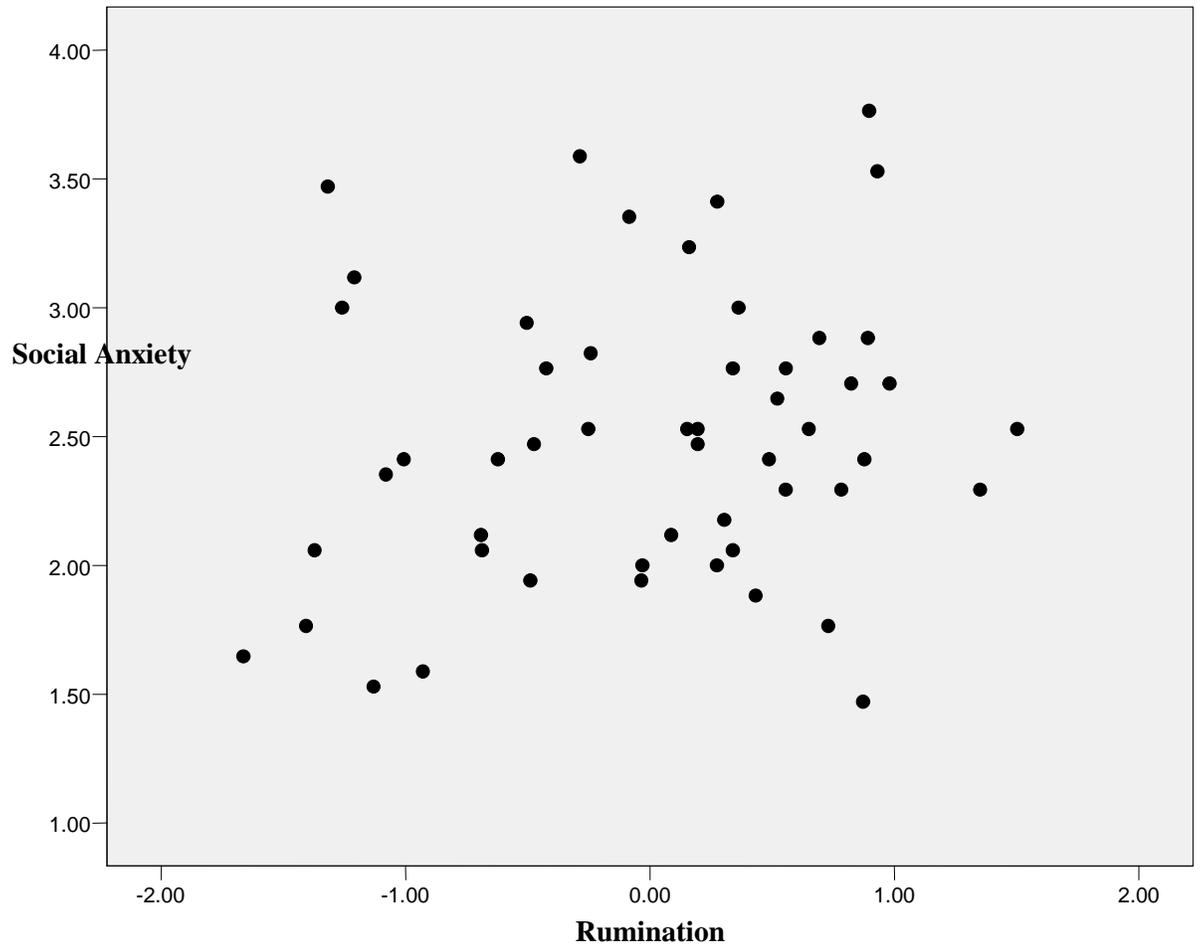
Appendix

Appendix A

Thought Listing

Please try to recall and list ALL your thoughts that came across your mind during the

waiting period you just experienced.

Appendix B

Scale for Rumination (adapted and modified from Mellings & Alden, 2000 & Nolen-Hoeksema, Treynor & Gonzalzez, 2003)

This questionnaire concerns your thoughts during the waiting period you just experienced. Please answer the following questions as fully and honestly as you can. Thanks!

1. Please write down your feelings about the speech appraisal. How do you feel about your speech and the feedback provided from the judge?

For the following questions, please circle a response for each question

1) To what extent did you think about the feedback from the speech judge?

Not at all   A great deal

1   2   3   4   5

2) About many minutes did you spend thinking about your speech and the feedback you received during the waiting period that just ended? _____ minutes

 3) To what extent did you think that the speech feedback you received was justified?

 Not at all   Very Justified

1   2   3   4   5

4) To what extent did you criticize yourself over the quality of your speech?

Not at all   A great deal

1   2   3   4   5

5) To what extent did you think that "Why can't I handle that speech better"?

Not at all   A great deal

1   2   3   4   5

6) Did you treat the feedback from the speech judge as a valuable suggestion for your

speech?

Not at all   A great deal

1   2   3   4   5

Thank you for your participation.

Appendix C

Social Interaction Scale (Mattick & Clark, 1998)

For the following questions, please circle a response indicating your agreement or disagreement with each statement.

Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

SD   D   N   A   SA

SD D N A SA-- I get nervous if I have to speak with someone in authority (teacher, boss, etc.)

 SD D N A SA-- I have difficulty making eye-contact with others.

 SD D N A SA-- I become tense if I have to talk about myself or my feelings.

 SD D N A SA-- I find difficulty mixing comfortably with the people I work with.

 SD D N A SA-- I tense-up if I meet an acquaintance in the street.

SD D N A SA-- When mixing socially I am uncomfortable.

 SD D N A SA-- I feel tense if I am alone with just one other person.

 SD D N A SA-- I am at ease meeting people at parties, etc.

 SD D N A SA-- I have difficulty talking with other people.

 SD D N A SA-- I find it easy to think of things to talk about.

 SD D N A SA-- I worry about expressing myself in case I appear awkward.

 SD D N A SA-- I find it difficult to disagree with another's point of view.

 SD D N A SA-- I have difficulty to disagree with another's point of view.

 SD D N A SA-- I find myself worrying that I won't know what to say in social situations.

 SD D N A SA-- I am nervous mixing with people I don't know well.

 SD D N A SA-- I feel I'll say something embarrassing when talking.

SD D N A SA-- When mixing in a group I find myself worrying I will be ignored.

 SD D N A SA-- I am tense mixing in a group.

 SD D N A SA-- I am unsure whether to greet someone I know only slightly.

Appendix D

Morningness--Eveningness Scale

(Adapted and Modified from an article: A Self Assessment Questionaire to Determine Morningness-Eveningness in Human Circadian Rhythms. by J.A. Horne and O. Ostberg, International Journal of Chronobiology, 1976, Vol. 4, 97- 110).

Select the most appropriate answer by circling one response for each question.

1. You have to do 2 hours physically hard work. If you were entirely free to plan your day, in which of the following periods would you choose to do the work?

    a) 8:00a.m. – 10:00a.m.

    b) 10:00a.m. – 12:00p.m.

    c) 12:00p.m. – 2:00p.m.

    d) 2:00p.m. – 4:00p.m.

    e) 4:00p.m. – 6:00p.m.

    f) 6:00p.m. – 8:00p.m.

    g) later than 8:00p.m.

2. For some reason you have gone to bed several hours later than normal, but there is no need to get up at a particular time the next morning. Which of the following is most likely to occur?

    a) Will wake up at the usual time and not fall asleep again

    b) Will wake up at the usual time and doze thereafter

c) Will wake up at the usual time but will fall asleep again

d) Will not wake up until later than usual

3. If you had no commitments the next day and were entirely free to plan your own day, what time would you get up?

        a) 5:00a.m. -6:30a.m.

        b) 6:30a.m. – 8:00a.m.

        c) 8:00a.m. – 9:30a.m.

        d) 9:30a.m. – 11:00a.m.

        e) 1100a.m. - later

4. A friend has asked you to join him twice a week for a work-out in the gym. The best time for him is between 10pm - 11pm. Being nothing else in mind other than how you normally feel in the evening, how do you think you would perform?

        a) Very well

        b) Reasonably well

        c) Poorly

        d) Very poorly

5. One hears about 'morning' and 'evening' types of people. Which of these types do you consider yourself to be?

        a) Definitely morning type

        b) More a morning than an evening type

c) More an evening than a morning type

d) Definitely an evening type

Appendix E

Feedback Form

SPEECH FEEDBACK FORM

INDIVIDUAL SPEECH GRADED EVALUATION

Student _____

Subject _____

Scale

Poor---------------------------------------Fair-----------------------------------Excellent

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Each score for the individual item ranges from 1 to 7.

INTRODUCTION

__Established importance and motivated audience to listen

ORGANIZATION & DEVELOPMENT

__Described the story with appropriate organization, clarity, and detail

PRESENTATION & DELIVERY

__Effective use of vocal rate, variety, pauses, projection, & pronunciation

Additional Comments:

Appendix F

Suspicion Test

1. The following questions concern your experiences as a participant in this experiment. Please answer these questions honestly. There are no right or wrong answers; we simply want to understand how you perceived this experiment and your participation in it.

1. In your own words, what do you think the purpose of this study is?

2. Did any of the experimental procedures seem strange or unexpected to you? If so, please describe.

3. Finally, please write down any additional comments or questions you have about this research study.

For the following questions, please circle a response indicating your agreement or disagreement with each statement.

SD	D	N	A	SA
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

SD   D   N   A   SA   1. The primary purpose of this experiment was to test the

relationship between a person's body clock and speech performance.

Appendix G

Responses—Thought Listing Sorted by Condition

<u>Thought-Listing</u>

<u>Positive Non-self disclosure</u>

<u>No.10</u>

1. I was curious as to what the speaking would reveal.

2. Calm.

3. I felt prepared.

4. I worried the speech would be short and insufficient.

5. I wanted to be sure and whatever everything.

6. I aimed to try and capture the audience-hoping it was interesting.

<u>No.20</u>

1. when I work next week.

2. if I have any tests

3. microbiology mid-term.

4. vacation to Denver on Halloween.

5. football game tomorrow night.

<u>No.21</u>

1. My introduction seems okay, but I don't know about the rest.

2. Why am I stuttering?

3. I'm probably going to get a low score?

4. Why is this so hard? There is only one person watching me ?

5. I don't think I can breathe well right now.

6. I'm losing my train of thought. I should have wrote neater.

7. I wish I could stand comfortably. I keep shaking?

8. I wonder if what I am saying is making any sense.

No.39

1. Thought my speech was a little too fast.

2. Felt I should spoken louder and carefully communicated each word.

3. Wondered if somebody was watching me though the window of my right.

4. Wondered who's office this was.

5. Thought about previous speech given.

6. Thought my scores on evaluation were too high.

7. Wondered where the researcher went.

8. Thought about how I was more comfortable than usual.

No.44

1. How long is this going to take.

2. When am I going to make it to the gym.

3. Dinner

4. The test I just took.

5. My friend (who I just talked about).

No.46

1. I read my grade + thought about what I got.

2. Got a text from a friend.

3. If the book itself were to fall on me.

4. The golf set he has.

5. The "women" bumper sticker.

6. If I'll get more candy for being smoke free.

7. What order do all the sheets go in.

8. The DSM-4 book to my right.

No.50

1. It's likely this study isn't just about my speaking ability so I wonder what he is actually researching.

2. I have a lot of stray hair on my jacket.

3. It should not take that long to get papers.

No.51

1. I was pleased that I did well on the speech.

2. I checked my phone to see who called because I heard it buzz.

3. I looked around the room because I was bored and read a DSM.

4. I thought about some of the diagnoses in the DSM.

5. I thought that I felt some of the diagnoses.

6. I wondered what my girl friend was doing.

7. I looked at the Native American photos in the room and wondered about the people.

8. I wondered if there was a hidden camera in the room.

No.17

1. I attempted to clear my mind or emotional investment, I did not want my performance (or rater, my perception thereof) ruining my near task.

2. I wondered how much of this was math, and how much of this was reaction guarding.

3. I wondered whether or not the choice of "making a mistake" was deliberate.

4. I was wondering why me heart is racing. My conclusion: Caffiene.

5. I recalled that I am emotionally detached.

6. I wondered if the clocks in here are broken on purpose.

7. I focused on preparation for my next task.

8. I decided to hold all questions off until me end.

No.18

1. I did better than I thought I did on the evaluation.

2. I wouldn't have graded myself that well.

3. I hope that I have enough change in my back pack to take the bus home.

4. I wonder what kind of specialized psychology lesbians have.

5. I'm pretty sure he told me NOT to do something when he left but I don't know what he said.

6. clock is out of batteries.

7. I didn't even talk for very long how did I get graded so well.

8. There's he way he gave me 5 mins to prepare for the speech.

No.25

1. I tried to decide where I could have improved.

2. I gave the speech over with better detail.

3. I gave the speech in a German accent wondering if that would spice it up.

4. I thought about how much having a runny nose ruins my day.

No.31

1. At first it was hard to think of a situation.

2. Once I did I thought about it in detail and tried to pull out the big details.

3. After 2 mins of note writing I thought this would be easy.

No.49

1. I tried to critique the way I spoke.

2. Looked for ways to improve if asked to it again.

3. Looked around the room to see if I recognized any books.

4. Wondering about dinner plan.

5. This room needs more things on wall.

6. Wondering who made the crafts.

Negative Nonself-disclosure

No.6

1. I didn't do as good as I hoped.

2. Relaxing will help improve all of those areas, and I will perform a better speech.

3. I did ok with my notes but could have done better.

4. Done reading, now what.

5. I'll look over the feedback again.

6. Sat for a little longer reading the titles of some of the books on the book shelf.

7. Wondered when the test giver would come back.

8. Played with hair a little.

No.8

1. It is cold in here.

2. I thought my speech was not as bad as the rating I got.

3. This is boring.

4. I'm hungry.

5. This is probably part of the experiment.

6. Is someone observing in the room next door?

No.13

1. I wonder what floor he had to go to. Why did he give me such a low score? I hate IMPROMPTU.

2. How long does it take to get a questionnaire? I wonder what he meant by relaxed…I'm totally relaxed. I wish I would have said more.

3. Four flights of stairs take a long.

4. This is probably part of the study…making me wait.

5. I wonder why I can see and hear people in the other room. The psychological studies meant to freak people out by watching them through a two way mirror?

6. This office is messy, I wonder if it is a woman's because there is a bumper sticker talking about women in the House.

7. Why are there so many books with meaningless titles?

8. Has anyone ever read these books cover to career?

No.24

1. What does this study relate to + how do you make what kind of conclusion.

2. What is the experimenter trying to get at.

3. I could have been more precise in my speech.

4. More organized, a bit rambling.

5. What kind of books does this guy read.

6. Will I get to do it over + improve?

7. I would have rather been standing.

No.26

1. Wow low scores.

2. Watched the class next door and thought about what the teacher was saying.

3. Why all the clocks are not working.

4. Not worried about getting peoples attention on speech if they want to listen that is up to them.

5. It is cold in this office.

6. This lady has interesting pictures.

7. I have to go home and pack.

No.28

1. That I should of tried to put more experiences into the speech I just gave.

2. Also how I should have tried to explain why the effects me.

3. Thought about how I did not have enough material to fill the five min speech.

4. Also thought about the comments you wrote on the page.

No.33

1. Experienced doubt in my mind about my speech giving ability.

2. I wondered if I should have done something different in the speech.

3. When any (?) possible way to improve my speech in my need.

4. Began to think about things, I am supposed to do tonight.

No.35

1. Reasoning through the speech process.

2. Thinking it got a little cold in here.

3. Knowing that I am not good at speeches.

4. Wondering about the conductor himself a little.

No.36

1. How I was supposed to explain the story better?

2. Those scores were low.

3. I thought I did a little better than that.

4. That was challenging.

5. That was scary.

6. I'm usually not that nervous to talk to someone I don't know.

7. That would have been harder if I wouldn't have done a personal experience.

8. Why did I do this?

No.38

1. I was thinking about the interesting books I saw on the shelf.

2. I was thinking about how cold it is in here and outside.

3. I was thinking about how I could have done my speech differently better.

4. I was thinking about what ingredients I need to buy to make chex mix with my sister after this.

5. Thinking about my bad Anatomy grade + how I should be studying it right now.

6. Wondering how many research projects those people have to do + why.

7. Thinking what I should eat for supper.

8. Wondering if those two guys are still in our dorm room playing video games with my roommates.

No.40

1. Review about the speech.

2. Things that I have to do at work.

3. Time I will go home.

4. Exams I have to study for.

No.47

1. Man, I forgot I have to bring some materials for my next research participant.

2. I didn't have work tonight, and I did my grocery shopping yesterday. All is left is laundry, cook, and call a few friends.

3. I have a test in an hour. I need to be studying for.

4. I need a new printer.

5. Bad feedback.

No.15

1. I looked at the question's topic and tried to remember if I had answered properly or not.

2. I thought about why the instructor didn't got ready every materials needed before my appointment.

3. I thought about the time period the instructor took to go downstairs and come up again.

Positive Feedback –Self-Disclosure

No.5

1. Other mistakes I have made throughout my life and what I learned from them.

2. Why didn't I get a higher mark for the organization on the feedback sheet.

3. How long was it going to take you to return.

4. Why was I so stupid to make some of the mistakes I made.

5. The food I was going home after the research to eat.

6. The amount of time I have spent in the resource centre (athlete).

7. Why am I no suppose to listen to music, use the cell-phone or read.

No.7

1. What I was going to do after training today.

2. How long is he going to take before he returns.

3. What am I going to eat for dinner today.

4. I need to go home and study for my maths test.

No.9

1. Interesting books.

2. Class is interesting among pages(?)

3. Would like to write down name of some of the books.

4. Room is chilly.

5. Where and what is the researcher doing.

6. Am I being observed while I'm sitting here alone.

7. Ms. Anderson has two offices.

8. Room is family friendly.

No.11

1. scared

2. wondering

3. thinking

4. wow long it will take me.

5. I don't like to stay alone.

6. think I did good on the speech.

No.14

1. What the heck should I say?

2. Do I have any serious mistakes I have made at work?

3. How will he respond to my presentation.

4. I know this story will work ex. Spilling beer.

5. I am glad he is not that intimidating to me.

6. I wonder why he chose this room.

7. How do I make my strange story flow.

8. My opening. 1. He is dumb but I am gunna go with it.

No.16

1. I wonder what time it is.

2. there are a lot of psychology books in here.

3. I'm glad I did well on my speech that makes me feel good to get positive feedback.

4. I have always wanted to be in an old time photo like the ones on the windowsill.

5. I need to quit biting my fingernails.

6. I need to bring clean workout clothes to school so I can run with he.

7. I need a nap.

No.27

1. Relieved that you thought I had done well.

2. Wondering what was going to happen next.

3. Felt more at peace with my mistake that I had talked aobut.

4. Began working on my work from another class.

No.32

1. The titles of books.

2. Is that a one-way mirror.

3. What time is it?

No.34

1. I didn't think I did that well on my speech.

2. Thought about what else I would have said.

3. Wonder what the next questions were going to be.

4. Thought about something that happened last night.

5. Wondered if I had money to help out a friend today.

6. Was curious about a voice mail I was receiving.

7. Curious as to where the researcher was.

8. Wondered if he was next door watching me.

No.37

1. I tried to amuse myself, thought about music and dancing back in high school.

2. I wonder where the researcher went.

3. It was very quiet.

4. I kind of got tired.

5. When he said to do nothing, I did nothing but think.

6. I tried to listen and figure/identify/sounds.

7. I was bored so to entertain myself, I figure I would rock my seat and stare at things throughout the room.

No.41

1. I was not nervous. I felt underlaid.

2. experiment is ?.

No.29

1. I remembered that I didn't lock my car.

2. I thought that it is very cold outside and I will have to go and close my car after this study.

3. I thought of my family and that I will go and visit them this summer.

4. I remembered that I will have to order food for my ferret, and take him for nail trim at a petstore this evening.

5. I thought of celebrating New Year and presents for my family.

6. I remembered that I have an exam next week.

7. Also, I thought about preparing a dinner today.

8. Thought about a TV show I missed yesterday.

No.22

1. Thought about the grades assigned.

2. Thought about I could improve.

3. Thought about where the grader was.

4. Thought about what I was doing here.

5. Thought about what other study which I needed to sign up for.

6. Thought about what I was going to eat for lunch.

7. Thought about my mid-term tomorrow.

8. Thought about how small this room is.

Negative Self-disclosure

No.1

1. I can't really sit here for 6 to 8 mins. Reading an eval that takes 30 secs to read.

2. I agree to disagree with remarks given the situation.

3. I felt relaxed. It's cold in here but I felt relaxed.

4. What is he really trying to test and figure out here.

5. I really don't think he was listening and knew what he was going to write before I even began talking.

No.2

1. Wondered occupies the room most of the time.

2. Thought some decorations in the room were nice.

3. I looked at the titles of the books.

4. I thought my evaluation was what I expected.

5. Was thinking of a better example to use in the speech.

6. Thought if it was still raining outside.

7. Thought about my schedule for today.

No.3

1. Mistakes 2 made were not "huge" at all.

2. Forget about them so had to make up some instead.

3. English as a second language, how about some mistakes during learning English?

4. Examples (partly made up).

5. Don't let them get hold on you. Get them over with.

6. Like a new born baby.

No.4

1. I was somewhat disappointed with my scores, but I have never given an impromptu speech before.

2. Since I'd never given an impromptu speech before, the results were what I expected.

3. I wondered if my story telling is always subpar and boring or if it's only was because of the situation.

4. I wondered what no being able to present an entertaining speech means to my social interaction in general.

5. Hopefully, after I take public speaking next semester, I will be able to give a better speech.

6. I always did VERY well on speeches in high school English classes.

7. I think I was tense because I was trying to remember all the details.

No.12

1. I was thinking how the speech could have been better.

2. wondering if the poor performance relates to participation pants.

3. recalling the job I just described.

4. thinking of how many research participation points I can achieve for credit.

No.19

1. Thinking about the mistake: changes to improve the speech.

2. looking around the room during the waiting period.

No.30

1. shock because the marks were low.

2. I think of myself as a strong public speaker.

3. I tried to guess the hypothesis that maybe negative feedback is supposed to get

   a certain response.

4. I reviewed my performance and saw where I had made mistakes.

5. I thought about how cold it is in the room.

6. A stray thought made me laugh. (can't remember what it was).

7. If you would roll with me (song I heard on the radio).

8. I felt goofy and silly which means I am tired.

No.23

1. Didn't I speak loud enough.

2. Man, he was right; I do need to be more at ease.

3. Why did the Rex Sox have to lose.

4. How am I going to fix my bank problem.

5. I thought my speech was organized.

6. Is this Dr. Anderson's room?

7. I wonder what am I going to have for dinner tonight.

8. I should have written down more information for my speech.

No.42

1. I tried to think of all my mess ups.

2. Couldn't recall any big mess ups.

3. Related it to a working out class.

4. How I am not very good at speeches.

No.43

1. How I could have rephrased some of my arguments.

2. How this study works, like what is the goal of his research.

3. How do most students do on this task.

4. What were other mistake that I made at job. Would they have been more interesting.

5. How much more rehearsal time would I have needed to have a more plausible argument.

No.45

1. Pretty much trying to figure out the true purpose/methodology of the study and whether the waiting period was supposed to increase feeling of annoyance or frustration from the "much important condition".

2. A few songs I heard yesterday popped in there.

3. Wondering if the comments made about my speech were designed to be as ambiguous as they are.

4. How much of a pompous know-it-all + sometimes art like.

5. If I am anywhere near the real "purpose" of the study. I like guessing, but generally I am wrong.

No.48

1. Dang I didn't do so well.

2. I was reviewing my speech in my head to see what I could have said better.

3. I wonder in the mirror to my left was a bi-way mirror.

4. I was thinking of my speech class I took as a freshman.

No.52

1. I this was fair.

2. I was able to hear all the noises in the wall.

3. I was wondering if the experiment was not something else than just giving a speech.

4. I was thinking it would be nice to draw so I did.

5. I thought this experiment was a good thing for my grades.

Appendix H

Responses---Rumination Question

Write down your feelings about the speech feedback. How do you feel about your speech and the feedback provided from the judge?

Positive Non Self-disclosure

No.10

1. I felt like the feedback was positive, full of praise and that it reinforced my comfortable nature when giving a public speech.

No.20

1. I feel the feedback was very positive. I just wish I had more time to write it.

No.21

1. I felt as if my speech was terrible—at least in the middle it was, but apparently I did well, which surprised me, but I'm totally okay with that.

No.39

1. I feel the feedback was very generous

No.44

1. I felt good. I thought the feedback was okay. I hate giving speeches and talking in front of people, and I thought that I did okay considering I had to come up with it in five minutes.

No.46

1. I could of made it better + longer.

No.50

1. I thought the feedback was polite and accurate however not informative. Given the short amount of time I had I think I did OK. However, by comparison to other speeches I have given its not great.

No.51

1. I thought it was an informative speech about some of my experiences at a mental health facility. I was pleases with the feedback and also thought I did well.

No.17

1. Given that this is a psychological study. I did not know whether the feedback was honest, or just to elicit a certain state of mind. Frankly, I KNOW I could have done MUCH better. I can't accept anything less than personal perfection.

No.18

1. I think that this guy doesn't know anything about grading speeches. I would have been a little more harsh.

No.25

1. I felt it was dead on, my organization and detail were mediocre and I feel my enunciation could always be better.

No.31

1. I agree with it. I feel comfortable speaking/giving speeches. Usually my demeanor is relaxed and the words flow.

No.49

1. I thought it was fair. I was worried I didn't talk long enough. The speech should sounded longer in my head.

Negative Non-Self-Disclosure

No.6

1. I thought that I did ok. I knew I was rushing a little during the speech. I liked the feedback because it was honest. I'm trying to remember it so if I do an impromptu again I will know what to do and what not to do.

No.8

1. I felt that under circumstances. My speech was deserving of a bit higher rating.

No.13

1. I thought it was adequate. Maybe a little harsh given the circumstances. I was expecting a little more positive feedback, but I certainly was not devastated to find that I'm not good at giving impromptu speeches.

No.24

1. I thought I did a little better than that for impromptu. I took the comments + processed how I could improve.

No.26

1. Was really shocked at first. Looked at it and set it down. Then was like OK well. Doesn't change anything.

No.28

1. I thought that the feedback was very fair. I do not think that I described the story well. I don't think I was relaxed enough. His comments were right on.

No.33

1. I feel the feedback was honest. I feel that if I had to give the speech again the feedback would help me improve my speech. I feel like I should now give a better speech.

No.35

1. It is a little confusing. The # score says 7, but the comments don't reflect that. My personal feelings know that the speech was awful.

No.36

1. I feel like the judge wasn't very easy person to talk to + was harsh on scoring me.

No.38

1. I thought it was a little harsh and I didn't think I did that bad. Then I started thinking how I would have done it better but I thought I did a decent job.

No.40

1. I think my speech was okay and the feedback surprised me because I wasn't that tensed.

No.47

1. I am not worried about the feedback at all. I was relaxed, but prepared for the speech in only 5 minutes. I agree that I was not clear with appropriate organization, but inadequate preparation can cause that along with a lack establishing clear cut importance.

No.15

1. The feedback I got from the instructor about my speech was exactly what I expected. At the time of my speech I was nervous and I felt I didn't do good and I couldn't express my entire thoughts. And, also like the feedback. He is true that I wasn't relaxed enough.

Postive Self-disclosure

No.5

1. Considering the fact that I didn't have much time to come up with the speech I thought it was an "alright" speech; I thought that I should have gotten a higher mark for organization; happy that it was a "wonderful job, with meaningful story and an impressive presentation. "

No.7

1. Considering the short amount of time given to prepare the speech. I felt that the results were good. The judge gave a fair interpretation of how he thought my speech was.

No.9

1. 5 is not a good grade. I need to improve my presentation to convince students to have faith in my concept of what to present to them-I need a job I will work on my interviewing skill to be (present my reply (?) as productive).

No.11

1. It was very fair.

No.14

1. It was nice feedback. I felt like the feedback was fair. I wondered why he gave me a five on the voice part of the speech. It greater encouraged the thought that I have with projecting my voice in a normal way. I am kind of silly. I felt like my speech was interesting but a little hard to follow maybe. So, fair feedback.

No.16

1. It was nice to know I did well according to the feedback. I feel I did well on my speech considering the short amount of time I had to prepare it. I think if I would have gotten negative feedback I may have thought longer about it during the waiting period.

No.27

1. Happy, yet I still question myself. I could feel I was nervous when speaking and talked too quickly.

No.32

1. I don't believe it was "impressive". I think it was not a good story or speech at all.

No.34

1. The feedback was greed bad but if I was getting graded on it for a class I would want more detail, my speech didn't feel like a speech to my it just felt like I was just randomly talking to someone. I wasn't organized nor my speech. Did I present myself the way I normally would.

No.37

1. It was fair judgment. I thought I would get a lower score but his feedback said I did a wonderful job so I was happy. I thought I would have been worse.

No.41

1. Feedback good but maybe underset in the experiment.

No.29

1. I am very glad, for some reason I thought that I will not be able to answer the questions or fail my speech because I was scared speaking in front of a unfamiliar person. Another reason I was worried about is that English is not my first language and I will make mistakes and say something wrong.

No.22

1. I feel it was an impromptu speech, it went quickly and I thought I could do better if given more time. I feel the judge was fair and honest.

Negative Self-disclosure

No.1

1. 5 min to response and I have a neutral response. I said him a lot. I did think that from past speech closed would cause me to get an eval like that but I feel like I was about the average given the situation.

No.2

1. I felt that it was difficult to come about with an experience to talk about. I had a hard time pulling it together. I felt that the feedback given way accurate to my performance.

No.3

1. Might be a little bit harsh but that's about the time except was not really nervous at all when gave speech.

2. Was a long enough waiting time so kind of went through all the names of the books on the shelf on my left hand.

No.4

1. I feel like I didn't deliver a great speech but I think the speech was coherent and could easily be listened to. Impromptu speaking was a new concept for me, so I wasn't expecting to very well but I was still disappointed.

No.12

1. I agree with the feedback. I am not much of one for an impromptu formal speech. The story I told had no catch to it; just the first mistake that came to my head about work.

No.19

1. The grade was acceptable because I know that I can do better if given more time so that I can focus on a story that is more current.

No.30

1. I felt I gave a good speech, but I could have used more details and better descriptions. Honestly, this was not my best speech, but also not my worst. I feel the feedback was overly critical and vague. I was told I wasn't relaxed enough and I need to learn to relax more, these are very subjective statements. I can not use this to improve my performance because it doesn't explain why the judge gave the feedback. Constructive criticism tends to be more effective.

No.23

1. I thought it was going to be bad because I never really had a chance to prepare. I thought my posture was OK, but when I thought back, it could have been bad.

2. He was very honest and true about the feedback.

No.42

1. I felt the feedback was strict but honest. I think I did bad. I am great with people like taking+ hanging out wise but I am horrible at speeches.

No.43

1. My speech was pretty unorganized, as reflected in the feedback. I felt the feedback was informative, and under the short duration of preparation time prior to the speech. I am not surprised at the results.

No.45

The problem is that the statements in the feedback were too ambiguous or otherwise odd. At first I wondered if the "give a speech + receive feedback" was genuine, but looking at the scores and statement it seems to be an affect manipulation of some sort. That I doubt that I would get all three score below FAIR (all it being full of myself, but I do know my delivering was not crappy)

No.48

1. Speech feedback was downer! Thought I did ok or rather than poor with only having 5 mins to prepare.

<u>No.52</u>

1. I gave a good speech and didn't feel that the evaluation change that point of view. All and all I feel pretty good about my speech.

Appendix I

Response of Suspicion Test (1) Experiment Purpose Sorted by Condition

In your own words, what do you think the purpose of the study is?

<u>Positive Non Self-diclosure</u>

<u>No.10</u>

1. To evaluate my impromptu speech and use that to draw conclusions on

personality and emotion.

<u>No.20</u>

1. To see how people react when giving speeches on the spot or preparing for

them.

<u>No.21</u>

1. The purpose of the study is to understand how your mind affects your body,

especially when you are under pressure and/or are nervous about something.

<u>No.39</u>

1.To measure emotion in speech.

<u>No.44</u>

1. To see how well I could come up with a speech topic, prepare it, and give it

all in a short time.

2. Memory recall, picking one topic is hard on the spot.

<u>No.46</u>

1. How I think about myself after the speech.

No.50

1. Probably something to do with waiting or reflection on a possibly stressful experience.

No.51

1. To study the participants reaction in a novel situation.

No.17

1. To gauge emotional reaction during an unexpected situation, and to see how post-feedback introspection works.

No.18

1. Haven't the slightest clue.

No.25

1. To identify how people's people skills are correlated with their public speaking ability and to what extent they feel about criticism given to them.

No.31

1. To get insight in the thought process of speech giving and receiving feedback.

No.49

1. How do people react in tense situation. How do you overcome them to provide sound thought structure.

Positive Self Disclosure

No.5

1. I don't know really but guessing I would say to find out how one reacts to a spontaneous event such as preparing a speech in 5 minutes.

No.7

1. How well one can think "on their feet" meaning how quickly one can come up with a speech.

No.9

1. How well a participant can formulate a speech and present it at a moment notice- following all instructional parts of the speech.

No.11

1. Help students for their speech.

No.14

1. To see how people react giving speeches; AKA their body language, tone of voice, etc. Also, throwing a wedge in there of having to be impromptu increases those feelings, maybe?

No.16

1. To understand how speeches make people feel after they have given one. How feedback about one's speech affects the speaker.

No.27

1. To see how people react to feedback?

No.32

1. To understand what we think and how we reply to answers about our thoughts.

No.34

1. The purpose of this study seemed to be comparing how the person feels for how the actually person themselves.

No.37

.   1. I think it was to test my speech skills and how I waited or feel after giving a

speech.

No.41

1. Feedback maybe underset. Experiment procedured on emotional responses.

No.29

1. To analyze how a person feels while preparing a short quick speech in front of

the audience and measure the level of emotion.

No.22

1. To examine memories. How they are dealt with.

Negative Non Self Disclosure

No.6

1. To see what topics for a speech and what can be written about it in a short

amount of time. To see how confident a person is when they don't have much

time to prepare. To see how different people act when they have to give a

speech in front of people they may not know.

No.8

1. To find out if low preparation for a speech and negative feedback leads to one

questioning him/herself.

No.13

1. To analyze how I did under pressure, how I dealt with the critique I received

and much I thought about the critique and the speech I gave.

No.24

1. To see if people can take criticism and to see how comfortable they are

 expressing themselves.

No.26

1. To gauge people in a stressful situation and getting negative news on their act.

Or what it says is a study on people interaction with communication.

No.28

1. I think that the purpose of this study is to see how people respond after

 speaking to either a group or another person. I think the study is trying to

 figure out what people think after they something.

No.33

1. To measure emotions of students while they are giving speeches, and to learn

 about their feeling after receiving feedback about the speech.

No.35

1.To gauge emotion and social influence on individuals.

No.36

1.To see how well people can think of things to say to a stranger in a limited

amount of time.

No.38

1.To see how people can prepare for a speech in short amount of time and how

they handle the stress/situation emotionally.

No.40

1. The purpose of his study was to see the effect of feedback on people.

No.47

1. How I think about myself after the speech.

No.15

1. To describe one's behavior at times.

Negative Self-disclosure

No.1

1. Reaction. To see how I would respond to a negative feedback.

No.2

1. The purpose of the study I believe is to evaluate the response after the evaluation of the performance is given.

No.3

1. Personally have no idea.

2. To see how imp it is to make public speaking course a must?

No.4

1. I think the purpose of this study is to determine how students accept criticism, whether justified or not. Also, the study is to determine whether a student who does well on the speech or a student who doesn't do well on the speech thinks about it more.

No.12

1. To judge how people respond to a quick 5-minute speech with very little preparation. Emotions and nervousness are key in spur of the moment studies.

No.19

1. To improve public speaking and to understand the connection between speaking and behavior.

No.30

1. To look at how people respond to negative feedback and how much they dwell on negative responses.

No.23

1. To see how people react to positive or negative feedback.

No.42

1. I think this study is to show how students give speeches on short notice about the topic.

No.43

1. Effect of criticism on speaking confidence.

No.45

1. I gave this response on the first questionnaire, but I will give it here, too. Seeing how rumination (if there the right word) over negative, neutral, or positive feedback would influence what I thought about or how I regarded the person giving the feedbacks during those 5-10 mins of alone time.

No.48

1. To see how quickly someone can put together a past experience with detail and present it to someone quickly.

No.52

1. Behavior. To see how I would react to the situation.

Appendix J

Response of Suspicion Test (2) Strangeness Sorted by Condition

 Did any of the experimental procedures seem strange or unexpected to you? If so, please

describe.

<u>Positive Non Self Disclosure</u>

<u>No.10</u>

    1. NA.

<u>No.20</u>

    1. No, I knew I had to give an impromptu speech.

<u>No.21</u>

    1. All the questionnaires felt as if they were simply busywork but I suppose they

       are useful.

<u>No.39</u>

    1. No.

<u>No.44</u>

    1. No, not really. I knew I was going to have to speak. But I guess the giving a

speech caught me caught me a little off guard.

<u>No.46</u>

    1. The waiting, why he was not ready.

<u>No.50</u>

    1. No.

<u>No.51</u>

    1. No.

No.17

1. No, it all seemed SOP for me.

No.18

1. The time given to prepared seemed shorter than expected. Didn't understand why I had to stand, let alone stand behind the chair. Thought it was odd that he had to retrieve this questionnaire from somewhere else and that he told me he'd be back in "6 to 8 mins".

No.25

1. I wasn't ready for the questions regarding how much I thought about the criticism given.

No.31

1. No.

No.49

1. Not really. I thought he was just making copies for a while.

Positive Self Disclosure

No.5

1. The personality configuration paper.
2. Because it was a research about speech (impromptu) so I was not expecting my personality to be judged.

No.7

1. No.

No.9

1. No.

No.11

1. No.

No.14

1. Amm, when he left after the speech. I was not sure what I was supposed to do so I sat there thinking of stuff and texted people.

2. Not really. I thought it was odd that the judge had to leave to get paperwork

for me, but I realized that giving me alone time to think was part of this study.

No.16

1. Not really. I thought it was odd that the judge had to leave to get paperwork

for me, but I realized that giving me alone time to think was part of this study.

No.27

1. No.

No.32

1. Yeah, that I had to wait but now I understand that it was part of the story.

No.34

1. I wasn't sure was it was called Impromptu, I figured I would just come in for a

talk without all the quiet time waiting. It was unexpected for him to ask questions

but I glad he did because I had no clue what I was doing.

No.37

1. The leaving the room right away was strange because usually after giving a

speech, I get criticize and a verbal feedback.

No.41

1. Experimenter left the room and this made me nervous.

No.29

1. Not really.

No.22

1. The walking out of the room part did. That caught me off guard.

Negative Non Self Disclosure

No.6

1. None if it was unexpected. I have done impromptu speaking in one of my classes in high schools, so it wasn't too bad.

No.8

1. The low ranking of negative feedback on my speech seemed strange but I thought about the research part of it and realized that may be a part of the experiment.

No.13

1. Yes I thought it was strange that he had to leave to go set more questions.

No.24

1. NO.

No.26

1. No.

No.28

1. Yes, it seemed strange when he left and told me to go over his comments, but at this point it makes sense now.

No.33

1. When the instructor said he needed to go down stairs for 7mins. Confused about what he was doing but now understand.

No.35

1. They didn't seem strange, but I didn't quite understand the need for a supervised room via video, it seemed like any other experiment.

No.36

1. I thought you were going to give me some thing to read, not make something up.

No.38

1. No. I understand everything.

No.40

1. I found it strange that he left me for some minutes to get more questionnaires.

No.47

1. Yes, the waiting periods were strange, but I believe he was just disorganized and had to go receive papers.

No.15

1. Yes I found it strange when the instructor went outside of the room to bring his materials.

Negative Self Disclosure

No.1

1. No. I understand that in research studies things are done for certain reasons.

No.2

1. Nothing seemed strange or unexpected.

No.3

1. Yes

2. Waiting time is a kind of long.

3. And the room is a kind of dark and cold.

4. Didn't really know not my imaginary audience would be.

No.4

1. I wasn't expecting to be left alone for a set amount of time to ponder the feedback from my speech.

No.12

1. No.

No.19

1. It was not expected because I thought it was to give a speech that is already complete because of this I had to struggle to think of a speech in 5 mins or less.

No.30

1. The questionnaire at the beginning seemed strange because they had little to do with the speech.

No.23

1. No they seemed pretty straight forward.

No.42

1. I didn't like how the door was open so people could hear your speech walking by.

No.43

1. Not really. Did not know what the break time to look at the at the results was about until after the experiment.

No.45

1.   Not really. I knew something was up when the researcher left but no decent researcher forgets material for a study.

No.48

1.   Just how quickly I had to give the speech. I felt rushed.

No.52

1.   Yes, it seem set-up.

Appendix K

Response of Suspicion Test (3) Comment Sorted By Condition

Finally, please write down any additional comments or questions you have about this

research study.

<u>Positive Non Self disclosure</u>

<u>No.10</u>

1. NA

<u>No.20</u>

1. I liked it!!

<u>No.21</u>

1. It's a nerve racking study, but it was worth doing. I realized how much

anxiety really affects me.

<u>No.39</u>

1. NA.

<u>No.44</u>

1. NA

<u>No.46</u>

1. NA.

<u>No.50</u>

1. I think it would be helpful if the speech judge spoke a little clearly.

<u>No.51</u>

1. I am glad I am receiving credit for it.

No.17

1. Can't think of anything.

No.18

1. Turn up the heat. It's clod in this office.

No.25

1. NA

No.31

1. NA.

No.49

1. I thought it was a pretty good experience. Performance anxiety is a HUGE deal to a lot of people.

Positive Self Disclosure

No.5

1. What is the real purpose of the study? Is it going to be a published study that will enhance the knowledge of others?

2. It was not a complicated research; it was rather simple to understand for the most part and to answer the questions.

No.7

1. No comments.

No.9

1. I hope something was validated.

No.11

1. I didn't have any comments.

No.14

1. NA.

No.16

1. I was a little nervous before coming in today, but everything went very

    smoothly.

No.27

1. I enjoyed it. Its has helped me to look at a current situation I am dealing with

    in a new perspective.

No.32

1. Maybe have a different topic for the speech. It was kind of hard for me to think

of one.

No.34

1. Researcher was nice. Friendly.

No.37

1. I am curious how this would benefit a research study.

No.41

1. NA

No.29

1. I think it is a very interesting study. First I was worried, but it was really

    interesting.

No.22

1. Interesting study.

Negative Non Self Disclosure

No.6

1. I liked the research study. I was anticipating to do a second speech, but I wasn't sure. I was wondering what the long waiting period was for.

No.8

1. NA

No.13

1. I thought this study was interesting. Now that I think about it, I did think about my speech in the time that he left and wandered what I should have done differently.

No.24

1. What are you trying to get at?

No.26

1. No.

No.28

1. NA.

No.33

1. Don't really have any additional comments. I did think it was very interesting research study though.

No.35

1. NA.

No.36

1. NA.

No.38

1. I thought it was very good and was happy to help

No.40

1. The study was interesting.

No.47

1. NA.

No.15

1. This research has helped me to think critically about topics and also about what should be in mind while giving speech.

Negative Self Disclosure

No.1

1 .NA

No.2

1. Why was the topic chosen for the speech for the speech? For what reason was that topic used?

No.3

1. To think it's a enlightening experiment. Kind of wonder it'd be all right to evaluate by solely one person.

No.4

1. NA

No.12

1. If more time was added in preparation how much of a difference in prepared reaction would take place?

No.19

1. I think that this is a excellent research to test how fast student can prepare in any given situation.

No.30

1. I enjoyed this because it allowed me to think about my speaking skills and to flex my brain a bit.

No.23

1. Couldn't it have been a three minute speech? I would have felt more comfortable speaking less.

No.42

1. NA.

No.43

1. Good luck on the rest of trials.

No.45

1. I am very full of myself.

No.48

1. NA.

No.52

1.What was it about.

Appendix L Experiment Consent Form

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Adult Consent Form

Title of Research Study: <u>Impromptu Speaking</u>

You are invited to take part in this research study as you are currently enrolled in a psychology class at UNO, and are 19 years of age or older. The information in this consent form is meant to help you decide whether or not to take part. If you have any questions, please ask.

To understand certain mechanisms of emotion in the social context, the researcher will assess how individuals feel after carrying out a task requiring intellectual (verbal) skills, i.e., giving a short speech. If you agree to participate, you will be given a topic for you to make an impromptu speech, after which you will be given feedback on the speech. Also you will be asked to respond to some questionnaires. The total amount of time required is approximately one hour.

You may feel some psychological distress or stressful memory after giving your speech. You may benefit from the chance to practice an impromptu speech, and receiving feedback on the speech. However, you may receive no benefit. Your participation in this study may help the researchers better understand how emotion and cognition function and how they are triggered by social interaction.

Instead of being in this research study you can choose to not participate, and you may instead complete a writing assignment for extra credit for your psychology class. For participation in this study you will receive extra credit based on your psychology class rules.

If you have a problem as a direct result of participating in this study, you should immediately contact one of the people listed at the end of this consent form. Reasonable steps will be taken to protect your privacy and the confidentiality of your study data. The only persons who will have access to your research records are the study personnel, the Institutional Review Board (IRB), and any other person or agency required by law. The information from this study may be published in scientific journals or presented at scientific meetings, but your identity will be kept strictly confidential.

You have rights as a research subject. These rights are explained in this consent form and in *The Rights of Research Subjects* that you have been given. If you have any questions concerning your rights or complaints about the research, talk to the investigator or contact the Institutional Review Board (IRB) by telephone (402) 559-6463, e-mail: IRBORA@unmc.edu, or mail: UNMC Institutional Review Board, 987830 Nebraska Medical Center, Omaha, NE 68198-7830.

You can decide not to be in this research study, or you can stop being in this research study (withdraw) at any time before, during, or after the research begins. Deciding not to be in this research study or deciding to withdraw will not affect your relationship with the investigator, or with the University of Nebraska at Omaha. You will not lose any benefits to which you are entitled.

You are freely making a decision whether to be in this research study. Signing this form means that (1) you have read and understood this consent form, (2) you have had the consent form explained to you, (3) you have had your questions answered, and (4) you have decided to be in the research study.

If you have any questions during the study, you should talk with one of the investigators listed below. You will be given a copy of this consent form to keep.

Signature of Subject: _____ Date: _____ Time: _____

My signature certifies that all the elements of consent described on this consent form have been explained to the subject. In my judgment, the subject possesses the legal capacity to give consent to participate in this research and is voluntarily giving consent to participate.

Signature of Person Obtaining Consent: _____ Date: _____

Authorized Study Personnel

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