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The Effects of Failure on Self-Esteem and Attributions in Non-Clinical Paranoia

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THE EFFECTS OF FAILURE ON SELF-ESTEEM AND ATTRIBUTIONS IN NON-

CLINICAL PARANOIA

by

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A thesis submitted in partial fulfillment of the requirements for the degree of

Masters of Science

Department of Psychology

Dennis Combs, Ph. D., Committee Chair

College of Education and Psychology

The University of Texas at Tyler

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The University of Texas at Tyler

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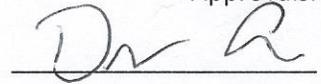This is to certify that the Master's Thesis of

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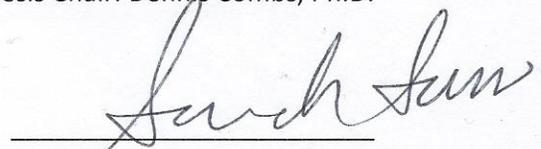
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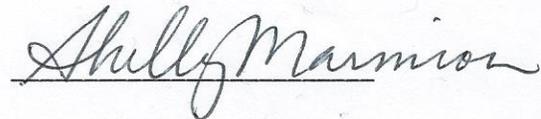
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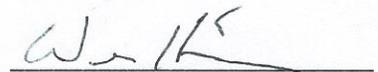
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I would like to acknowledge Casey Reneau, B.S. who originally proposed the study of which this thesis is a portion. She will be missed by all who knew her and is a loss felt by all at the University of Texas at Tyler.

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ABSTRACT

THE EFFECTS OF FAILURE ON SELF-ESTEEM AND ATTRIBUTIONS IN NON-CLINICAL PARANOIA

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July 2014

The present study used Bentall's attribution model of paranoia to investigate the effects of failure on self-esteem and attribution of those with paranoid symptoms. The present study used individuals who scored high and low on the Paranoia Scale (PS), a measure of paranoia, to form two comparison groups. Each group was given an unsolvable anagram task and told that they performed worse than others. This was used to simulate failure. The study utilized the Rosenberg Self-Esteem Scale (RSES) and the Internal Personal, and Situational Attributions Questionnaire (IPSAQ) to determine what effects failure of the presented task had on their self-esteem and attribution. Data was gathered before and after the failure task and examined to determine what effect failure had on paranoid ideation, self-esteem, and attribution biases in a non-clinical college sample.

CHAPTER I: Introduction

Paranoia is the belief that someone is either out to harm one intentionally or take advantage of one in some way (American Psychiatric Association, 2000). While the particulars of the delusion may vary (e.g. some believe aliens are stealing their thoughts and others believe the government is manipulating their mind), there is a common theme of attempting to explain the individual's external reality. At its core, paranoia is the belief that others are out to harm them usually with little evidence to support this belief. While every individual attempts to explain their own reality using information gathered and processed from their environment, those suffering from paranoia do so by blaming others for their failures.

Statement of Purpose

The present study involved a sample of persons with high and low levels of non-clinical paranoia to investigate the effect of failure on their self-esteem and attribution style. The use of the failure task was intended to create a scenario where an individual is exposed to a potential threat to their self-esteem by being told they have failed a task that all others have succeeded in. Since paranoia has been hypothesized to act as a protective measure against threats to an individual's self-esteem, it is predicted that those higher in paranoia would show increased paranoia and preserved their self-esteem following the failure task (Bentall et. al., 2001). In essence, after failure, the paranoid persons blame others which ultimately maintains their self-esteem. Additionally, it is expected that those individuals high in paranoia would exhibit a stronger personalizing bias compared to those low in paranoia. Finally, it is predicted that those

with higher levels of non-clinical paranoia would focus on the role of the experimenter in this process and would rate the experimenter more negatively in terms of their social perception.

Background and Significance

The present study was developed to measure the immediate effects failure had on those high in non-clinical paranoia. This was undertaken due to the lack of sufficient research focusing on the immediate effects of paranoia. Most studies investigate the correlation between those high in paranoia with their perception of social situations. This study is one of the first to present those high in paranoia with a situation which actively threatened their self-esteem in an attempt to measure the effects on their self-esteem and their attribution.

Theoretical Model

The present study utilized the attributional model of paranoia (Bental et. al., 2001). This model postulates that those suffering from paranoia have a difficult time processing neutral or ambiguous social interactions, particularly when their self-esteem is threatened (Bentall and Kaney 2005). When self-esteem is threatened, those with paranoia look externally to determine who or what to attribute this threat to. Where normal individuals attribute self-esteem threat to the situation however, paranoid individuals attribute the self-esteem threat to be others around them or people in general.

Hypotheses

H1: Those high in non-clinical paranoia will show an increase in paranoia on the PS after the failure task compared to pre-test levels. Those low in non-clinical paranoia will not show an increase.

H2: Those high in non-clinical paranoia will show no difference in their self-esteem based upon the RSE after the failure task compared to their pre-test levels. Those low in non-clinical paranoia will show a decrease in self-esteem.

H3: Those high in non-clinical paranoia will show an increased personalizing bias using the IPSAQ compared to those low in non-clinical paranoia.

H4: Those high in non-clinical paranoia will rate the experimenter more negatively on a social perception task, compared to those low in non-clinical paranoia.

Definition of terms

1. *Paranoia* is the belief that someone is either out to harm one intentionally or take advantage of one in some way (American Psychiatric Association, 2000).

2. *Self-Esteem* is an individual's attitude toward oneself and exists as either positive or negative (Rosenberg, 1989).

3. *Attributions* are where an individual places blame for a situation, both positive and negative situations. The attribution can be either internal, situational, or other people.

4. *Attribution style* is the typical method used by an individual to place blame for a situation (Bentall and Kaney 2005).

5. *Social Perception* is how an individual perceives a situation involving other individuals.

CHAPTER II: Review of the Literature

One of the key components of paranoia is the manner in which an attribution is formed. Attributions are the causal explanations for events that occur in a person's life. Attributions vary depending on whether the event is positive or negative. Normally people exhibit a self-serving bias, taking credit for positive events while blaming situational causes or circumstances for negative events (Kinderman, Kaney, Morley, and Bentall, 1992). This allows the average person to feel positive when successful and avoid becoming depressed when they fail. In contrast, depressed individuals have the opposite bias in which they blame themselves for failure and attribute success to others or situational factors. In paranoid individuals, however, a different type of bias is shown (Bental and Kaney 2005). This difference occurs when it comes to negative events, which are not blamed on outside circumstances but towards other people, which is called a Personalizing Bias. This is often shown in the phrase "he/she has it in for me." These attributions have also been found to vary depending on whether the person is currently paranoid, having paranoid ideations, or in remission (Bentall and Kaney 2005, Lincoln et al. 2010). Research has shown that attributions are a key component of paranoia and have been a promising avenue for study.

The next avenue of investigation is why paranoid individuals attribute blame to others as opposed to circumstances. Bentall et. al. (2001) theorizes that the creation of these paranoid attributions, and the exhibition of paranoia, arise as a protective factor against reduced self-esteem. Self-esteem can most easily be conceptualized as an individual's attitude toward oneself

and exists as either positive or negative (Rosenberg, 1989). Positive self-esteem reflects individuals' evaluations of themselves for their successes and generally results in positive emotions, while negative self-esteem reflects self-critical or negative statements. When individuals feel their self-esteem is being threatened or they may fail, either by their own efficacy or by external events, they seek an explanation that will help deal with this event. This search for explanation relies upon information from the environment as well as internal processes. For each individual, this search begins with the self and can end there if the explanation does not negatively affect self-esteem, such as when normal and paranoid individuals relate to positive events thereby creating an internal attribution. If that explanation does not bolster self-esteem, the individual searches for the explanation in the external environment (Bentall, Kinderman, and Kaney, 1994). For normal individuals, this search often is directed toward external circumstances and leads to the external-circumstantial attribution shown in normal individuals. Paranoid individuals, however, focus on the people around them as opposed to the circumstances and construct the external-personal attribution shown in paranoid individuals.

The discussion thus far has focused on those exhibiting paranoid ideation severe enough to significantly impact their functioning in society, thus often referred to as clinical paranoia. There is another type of paranoia that must be discussed, that of non-clinical paranoia. As with many conditions, paranoia appears to lie on a continuum from non-clinical to clinical levels. Those with non-clinical paranoia are shown to be similar to clinically paranoid individuals, but function in society (Combs, Michael, and Penn 2006). Non-clinical paranoia is often in response to environmental events such as incarceration, sleep deprivation, drug use, poverty, discrimination or racism. It can be viewed as a form of heightened self-focused attention.

Clinical paranoia in contrast shows more exaggerated beliefs of harm, less evidence, and more social/community impairment. This has been a boon to researchers, as in the past many studies have been limited to only a few members in each sample group due to the difficulty finding and researching clinically significant individuals. Thus, by investigating those persons with elevated non-clinical paranoia, researchers have the opportunity to further test hypotheses and expand the knowledge base.

CHAPTER III: Methods

The purpose of this study was to determine if failure effected the self-esteem and attributions of those high in non-clinical paranoia. Paranoia was assessed using the Paranoia Scale (PS) which was administered both during the initial recruitment phase of the study as well as after the administration of the failure task. Self-esteem was measured using the Rosenberg Self-Esteem Scale which was administered both during recruitment and after the failure task. Attribution style was measured using the Internal, Personalizing, and Situational Attributions Questionnaire administered after the failure task. To measure social perception an experimenter rating scale was used from previous research (Combs & Penn, 2004) to measure the participant's perception of the experimenter after the failure task.

Research Design

Data was examined using a series of Mixed Model ANOVAs to compare those high and low in non-clinical paranoid ideation across the measures. Interaction effects will be examined followed by main effect examination. Interaction effects will be examined by using a series of t-tests. Across all analyses the Between Subjects Factor was High versus Low non-clinical paranoia classification and the Within Subjects Factor is Time- pre-test vs. post-test.

The analysis plan was as follows: Data was first examined by computing mean and summary scores by group membership for all important dependent variables. Then a series of correlations was computed to examine the relationship between paranoia and other theoretically meaningful variables. For Hypothesis 1, mixed model ANOVA was used to examine changes in PS scores over time for both groups. For Hypothesis 2, a mixed model ANOVA was used to

examine changes in self-esteem scores (RSE) over time for both groups; score from the RSE was the dependent variable of interest. For Hypothesis 3, a one-way ANOVA was used to examine differences in the Personalizing bias score on the IPSAQ between the groups. For Hypothesis 4, a series one-way ANOVA was used to examine the 5 social perception (experimenter rating) scores between the two groups.

Research Questions

1. Do those high in non-clinical paranoia have an increase in their paranoia following a failure task?

2. Are those high in non-clinical paranoia able to maintain their self-esteem after being told they have failed?

3. Do those high in non-clinical paranoia show an increased personalizing bias after being told they have failed?

4. Do those high in non-clinical paranoia view the experimenter more negatively after being told they have failed?

Procedures

Following the online screening, participants completed the experimental phase of the study. Participants completed a demographic and history questionnaire, and participants who had a history of psychosis were not eligible for the study due to the desire for a non-clinical sample. Participants then completed a 5 minute anagram task. After completion of the anagram task, participants were given feedback that they scored 30% on the task and that this was considered "poor" in relation to their peers. After the feedback was given, the participants were asked to fill out the social perception measure of the experimenter rating form along with the PS, IPSAQ, and RSES.

Participants

Participants were comprised of 60 college students from a regional southern university. Participants were classified as either high or low in non-clinical paranoia based on scores from the PS. High scores on the PS were defined as a score of 52 or greater (+1 SD above the mean) and low scores were defined as less than 32 (-1 SD below the mean). Based upon this criterion, 22 participants were placed in the High PS group and 21 in the Low PS group. Participants completed the PS and a measure of self-esteem (Rosenberg Self-Esteem Scale; RSES) online and those who qualified were asked to participate in the experimental phase of the study which took place two weeks later. Demographic information for the sample can be found in Table 1. There were no differences between the high and low non-clinical groups on educational level, gender, or ethnicity (All Chi Square values < 1, ns).

Table 1

Demographic Characteristics of the Sample

Demographic	M	N	%
Education	13.09	-	-
Gender			
Male	-	5	11.6
Female	-	38	88.4
Ethnicity			
White	-	30	71.4
Black	-	4	9.5
Hispanic	-	2	4.8
Other	-	6	14.3

Instrumentations

Paranoia Scale (PS). The Paranoia Scale (PS) was used to measure non-clinical paranoid ideation. This PS contains 20 items that measure beliefs about others watching, evaluating, or planning to harm them, and each item is measured on a Likert type scale ranging from 1-5 with 1

being "not at all applicable to me" and 5 being "extremely applicable to me" (Fenigstein & Vanable 1992). PS scores range from 20-100 with higher scores representing a higher level of non-clinical paranoid ideation. Mean score of the PS is 43.5 with a standard deviation of 10.2. The PS has been found to have good reliability (.70) and validity (.84). In this study, the PS was administered two times-- pre-test (for group formation) and post-test (after the failure task).

   Rosenberg Self-Esteem Scale (RSE). The Rosenberg Self-Esteem Scale (RSES) was used to measure global levels of self-esteem. The RSES contains ten items that reflect a person's perceptions of their worth and value (Rosenberg, 1965). The 10 items are divided into five negatively and five positively worded responses. Scores from the RSES range from 10 to 40 with 10 being "poor" to 40 being considered "excellent". The RSES has a long history of use in research on self-esteem and has excellent psychometric and validity properties. The RSES was administered two times, at pre-test and post-test.

   Internal, Personal, and Situational Attributions Questionnaire (IPSAQ). The IPSAQ was used to measure attribution style. The IPSAQ contains 32 items that present 16 positive and 16 negative events in which the person reads the scenario and generates a causal explanation (Kinderman & Bentall, 1996). The IPSAQ is constructed so that individuals can attribute blame for a situation on themselves, others, or a situational cause. An example of an IPSAQ item is "A friend betrayed the trust you had in her. What caused your friend to betray your trust?" The IPSAQ was administered after the failure task and was used to identify the locus of their attributed failure. In this study, we computed a Personalizing Bias score (PB scores range from 0-1.0) which is a ratio of the negative events attributed to others compared to situations; higher ratio scores reflect a greater tendency to place blame towards others for negative events.

Experimenter Rating Scale. To measure the participant's perception of the experimenter, we used a social perception measure developed in our previous research with paranoia (Combs & Penn, 2004). The scale asks participants to rate the experimenter on 5 items, and all items are rated on a six point Likert scale with ratings from 1 (not at all) to 6 (extremely). Of the five questions, three reflect possible paranoid perceptions of the experimenter: Question 2- "The experimenter seemed hostile to me," Question 3- "The experimenter was analyzing my actions," and Question 4- "The experimenter was influencing my performance during the study," while two reflect positive attributes to the experimenter, Question 1- "The experimenter was friendly toward me," and Question 5- "The experimenter appeared to be trustworthy." Each item was examined separately in this study.

Anagram Task. This study utilized a 12 question anagram task which has been shown to elicit the sense of failure from the participants (Wood et. al., 1994). An anagram is a mixed up letter sequence which is recombined to form a word (e.g., oty is an anagram for the word toy). The anagram task in this study consisted of four solvable anagrams and eight unsolvable ones. Participants completed the task over a 5 minute time period. Participants were told the task was scored and told they failed the task, receiving a 30%, compared to others.

CHAPTER IV: Results

Mean scores by group membership can be found in Table 2. As evident in the data,

persons high in non-clinical paranoia showed higher scores on the Paranoia Scale, Rosenberg

Self-Esteem Scale, IPSAQ persecutory bias, and items reflecting a more paranoid interpretation

of the experimenter (Questions 2 and 3) of the Experimenter Rating Scale.

Table 2

Summary of Means for High and Low Paranoia

	Paranoia	
Measures	High	Low
	M(SD)	M(SD)
PS(pretest)	59.14 (7.02)	27.57 (3.96)
PS(posttest)	55.00 (10.30)	29.33 (6.92)
RSE(pretest)	29.55 (5.60)	34.38 (4.62)
RSE(posttest)	29.18 (4.478)	31.71 (4.42)
IPSAQ	0.62 (0.23)	0.39 (0.25)
Question 1 (Friendly)	5.0 (1.07)	5.38 (1.16)
Question 2 (Hostile)	1.82 (1.43)	1.14 (0.67)
Question 3 (Analyzing)	3.36 (1.43)	2.55 (1.76)
Question 4 (Influencing)	1.44 (1.01)	1.52 (1.25)
Question 5 (Trustworthy)	5.09 (1.27)	5.78 (0.44)

A series of Pearson correlations was computed for the study variables. These correlations

can be found in Table 3 below. As evident, paranoia scores for the pretest were found to be

correlated with the RSE given after the failure task, the IPSAQ, and Questions 3 and 5 of the

experimenter rating scale. For the Posttest, paranoia scores were correlated with the RSE pre and posttest, the IPSAQ and Question 3 of the experimenter rating scale.

Table 3

Summary of Correlations between Paranoia Scores and Other Measures

	Paranoia Scores	
Measures	Pretest	Posttest
Edu. Level	-.089	-.017
Ethnicity	.133	.195
Gender	.024	.072
RSE (pretest)	-.276	-.394**
RSE (posttest)	-.433**	-.465**
IPSAQ	.475**	.526**
Question 1 (Friendly)	-.130	-.115
Question 2 (Hostile)	.256	.191
Question 3 (Analyzing)	.345*	.334*
Question 4 (Influencing)	.101	.236
Question 5 (Trustworthy)	-.344*	.249

*p< .05 **p< .01

Primary Analyses

A 2 (Group: High vs. Low paranoia) X 2 (Time: Pre-test vs. Post-test) mixed model ANOVA was conducted on the scores from the Paranoia Scale (dependent variable). There was a significant Group X Time interaction, $F(1, 41) = 10.52$, p = .002. There was also a significant group effect, $F(1, 41) = 189.4$, $p = .0005$. There was no significant within subjects effect for Time noted, $F(1,41) = 1. 70$, $p = .19$. Probing the Group x Time interaction, we found that paranoia significantly declined in the High Paranoia group, $t(21) = 3.10$, p = .005, over time ranging from $M = 59.14$, $SD = 7.02$ to $M = 55.00$, $SD = 10.30$. Thus, following the failure task,

persons high in non-clinical paranoia showed a modest decrease in paranoia while those low in non-clinical paranoia showed a non-significant increase as well.

A 2 (Group: High vs. Low paranoia) x 2 (Time: pre-test vs. post-test) mixed model ANOVA was conducted on the scores from the Rosenberg Self-Esteem Scale (dependent variable). No significant interaction effect was found for Group X Time, $F(1, 41) = 2.87$, $p = .089$. There was a significant within subjects effect for Time, $F(1,41) = 4.97$, $p = .03$, with self-esteem being higher during the pre-test, $M = 31.91$, $SD = 5.64$, compared to the post-test, $M = 30.42$, $SD = 4.73$. There was also a significant group effect, $F(1,41) = 7.73$, $p = .008$, with those low in paranoia showing higher self-esteem in general, $M = 33.05$, $SE = .95$, compared to those high in paranoia, $M = 29.36$, $SE = .93$. This would indicate that the failure task negatively affected self-esteem across both groups with pre-test scores being higher than post-test scores regardless of group membership.

There was a significant effect in the one way ANOVA between those high and low in non-clinical paranoia on the IPSAQ Personalizing Bias score, $F(1, 42) = 9.12$, $p = .004$ with those high in paranoia showing a higher personalizing bias ($M = .61$, $SD = .23$) compared to those low in paranoia ($M = .39$, $SD = .25$). This would indicate that those high in paranoia placed more blame toward others following failure compared to low in non-clinical paranoia.

To examine differences in social perception scores, a series of one-way ANOVAs were used. There were no significant differences between those high and low in paranoia on Question 1 (The experimenter was friendly toward me), $F(1,41) = 1.126$, $p = .27$, Question 3 (The experimenter was analyzing me), $F(1,40) = 2.72$, $p = .11$, or Question 4 (The experimenter was influencing my performance during the study), $F(1,41) = .004$, $p = .95$. A trend for differences was found for Question 2 (The experimenter was hostile to me), $F(1,41) = 3.47$, $p = .07$ and a

significant difference was found for Question 5 (The experimenter appeared to be trustworthy) $F(1,41)= 5.27$, p= .03. Participants high in non-clinical paranoia rated the experimenter as less trustworthy ($M = 5.09$, $SD = 1.27$) compared to those low in paranoia ($M = 5.76$, $SD = .44$). Tentative interpretation of the trend would indicate that those high in non-clinical paranoia felt the experimenter to be more hostile ($M = 1.82$, $SD = 1.53$) compared to those low in non-clinical paranoia ($M = 1.14$, $SD = .66$).

CHAPTER V: Summary

The present study investigated the effect of failure on a sample of individuals with non-clinical paranoia. The study utilized failure at an impossible anagram task to elicit the feelings of failure and then measured the participants' scores on measures of self-esteem, persecutory bias, paranoid ideation, and perception of the experimenter.

We predicted that those higher in non-clinical paranoia would show an increase in paranoia after the failure task compared to paranoia levels at pre-test. The results, however, indicate that those higher in paranoia actually had a decrease in their level of paranoia after the failure task and those low in paranoia experienced a non-significant increase in paranoia. It is also possible that once those high in non-clinical paranoia blamed others for the failure, they experienced a reduction in paranoia due to a need for closure to the task. The second hypothesis predicted that those high in paranoia would show no change in self-esteem following the failure task while those low in self-esteem would show a decrease. This hypothesis was supported, as those high in paranoia showed little difference before and after the failure task while those low in paranoia showed a decrease in their self-esteem. Thus, paranoia seems to maintain self-esteem in those high in non-clinical paranoia. The third hypothesis, that those high in paranoia would exhibit a higher personalizing bias on the IPSAQ compared to those low in paranoia, was supported with those higher in paranoia exhibiting a higher personalizing bias compared to those low in paranoia. This is supportive of Bentall's model of the effect of negative events on attributions in paranoid individuals and was a key finding of the study. The data for the fourth hypothesis; those high in paranoia would show differences in social perception of the experimenter, showed mixed

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support. The question related to trustworthiness indicated that those higher in paranoia were less trusting of the experimenters during the experiment. When combined with the trend found on the question relating to hostility it would appear that those higher in paranoia interpreted the experimenter as a threat at the conclusion of the experiment. While no data was gathered to determine if their perception of the experimenter was different before the experiment, this would support the idea that the persecutory delusions utilize individuals in the environment, in this case the experimenter, to explain their failure.

Overall, the main results reflect a small decrease in paranoid ideation, preserved self-esteem, and a possible tendency to blame others for their failure. The issue of blame is a key construct in paranoia and is linked to a wide number of social interaction problems typical of those high in paranoia. The impact of self-esteem reflects that self-esteem is not reduced or increased but maintained is interesting and consistent with findings in research on paranoia. Perhaps using a clinical sample would show additional differences.

The present study suffers from a number of limitations. First, the study was limited to only those in a small undergraduate population using a small sample size. The use of a larger pool and a larger sample size would allow for more power in the study. Using a clinical population may have enhanced the results as well. Second, the time between when those participating in the study took the initial measures and the second time was two weeks which may have led to the results being influenced by outside forces, not only the failure task. Finally, while this is one of the first attempts to elicit paranoia in an experimental setting, it is possible that the task was not sufficiently threatening to the participant's self-esteem, requiring those high in paranoia to utilize their paranoia to defend their self-esteem. Future research would focus on

using a variety of self-esteem threatening stimuli to determine whether non-clinical paranoid individuals exhibit paranoia under more or less threatening conditions.

In conclusion, the investigation into the effects of failure on sample of individuals with non-clinical paranoia showed support for Bentall's theory of paranoia. The results give additional avenues of investigation for future research and can help build a better understanding of the mechanisms of paranoia and the effects the persecutory perception has on the individual.

REFERENCES

Bentall, R. P., & Kaney, S. (2005). Attributional liability in depression and paranoia. *British Journal of Clinical Psychology, 44*, 475-488. doi:10.1348/014466505X29602

Bentall, R. P., Corcoran, R., Howard, R., Blackwood, N., & Kinderman, P. (2001). Persecutory delusions: A review and theoretical integration. *Clinical Psychology Review, 21*(8), 1143-1192.

Bentall, R. P., Kinderman, P., & Kaney, S. (1994). the self, attributional processes, and abnormal beliefs: Towards a model of persecutory delusions. *Behavioral Research and Therapy, 32*(3), 331-341.

Ben-Zeev, D., Granholm, E., & Guy, C. (2009). Symptoms of depression and anxiety mediate the relationship between self-esteem and paranoia. *Schizophrenia Research, 115*(2-3), 377-378. doi:10.1016/j.schres.2009.06.009

Combs, D. R., Michael, C. O., & Penn, D. L. (2006). Paranoia and emotion perception across the continuum. *British Journal of Clinical Psychology, 45*, 19-31. doi:10.1348/014466505X29099

Fenigstein, A., & Vanable, P. A. (1992). Paranoia and self-consciousness. *Journal of Personality and Socian Psychology, 64*, 129-138.

Kinderman, P., & Bentall, R. P. (1996). Self-discrepancies and persecutory delusions: Evidence for a model of paranoid ideation. *Journal of Abnormal Psychology, 105*(1), 106-113.

Kinderman, P., & Bentall, R. P. (1997). Causal attributions in paranoia: Internal, personal and situational attributions for negative events. *Journal of Abnormal Psychology, 106*, 341-345.

Kinderman, P., Kaney, S., Morley, S., & Bentall, R. P. (1992). Paranoia nad the defensive attributional style: Deluded and depressed patients' attributions about their own attributions. *British Journal of Medical Psychology, 65*, 371-383.

Lincoln, T. M., Mehl, S., Exner, C., Lindenmeyer, J., & Rief, W. (2010). Attributional style and persecutory delusions. Evidence for an event independent adn state specific external-

personal attribution bias for social situations. *Cognitive Therapy and Research, 34*, 297-302. doi:10.1007/s10608-009-9284-4

Rosenberg, M. (1965). *Society and the adolescent self-image.* Princeton, NJ: Princeton University Press.

Rosenberg, M. (1989). *Society and the adolescent self-image (revised ed.).* middletown, Connecticut: Wesleyan University Press.

Watson, D., Weber, K., Assenheimer, J. S., Clark, L., Strauss, M., & McCormick, R. A. (1995). Testing a tripartite model: I. Evaluating the convergent and discriminant validity of anxiety and dpression symptom scales. *Journal of Abnormal Psychology, 104*(1), 3-14. doi:10.1037/0021-843X.104.1.3

Wood, G. C., Bentall, R. P., Gopfert, M., Dewey, M. E., & Edwards, R. (24). The differential response on chronic fatigue, neurotic muscular dystrophy patients to experimental psychological stress. *Psychological Medicine*, 357-364.

Appendix A: Paranoia Scale (PS)

Please answer the following questions as if they apply to you. Please be sure to answer all questions.

1	2	3	4	5
Not at all Applicable	Somewhat applicable	Moderately applicable	Very much applicable	Extremely applicable

__ 1). Someone has it in for me.
__ 2). I sometimes feel as if I'm being followed.
__ 3). I believe that I have often been punished without cause.
__ 4). Some people have tried to steal my ideas and take credit for them.
__ 5). My parents and family find more faults in me than they should.
__ 6). No one really cares much what happens to you.
__ 7). I am sure I get a raw deal from life.
__ 8). Most people will use somewhat unfair means to gain profit or an advantage, rather than lose it.
__ 9). I often wonder what hidden reason another person may have for doing something nice for me.
__ 10). It is safer to trust no one.
__ 11). I have often felt that strangers were looking at me critically.
__ 12). Most people make friends because friends are likely to be useful to them.
__ 13). Someone has been trying to influence my mind.
__ 14). I am sure I have been talked about behind my back.
__ 15). Most people inwardly dislike putting themselves out to help other people.
__ 16). I tend to be on my guard with people who are somewhat more friendly than I expected.
__ 17). People have said insulting and unkind things about me.
__ 18). People often disappoint me.
__ 19). I am bothered by people outside, in cars, in stores, etc. watching me.
__ 20). I have often found people jealous of my good ideas because they had not thought of them first.

Appendix B: Rosenberg Self-Esteem Scale (RSES)

Please rate each of the following statements as to the extent which you agree or disagree, using the following scale.

1= Strongly Disagree.

2= Disagree.

3= Agree.

4= Strongly Agree.

__ 1) I feel that I'm a person of worth, at least on an equal plane with others.

__ 2) I feel that I have a number of good qualities.

__ 3) All in all, I am inclined to feel that I am a failure.

__ 4) I am able to do things as well as most other people.

__ 5) I feel that I do not have much to be proud of.

__ 6) I take a positive attitude toward myself.

__ 7) On the whole, I am satisfied with myself.

__ 8) I wish I could have more respect for myself.

__ 9) I certainly feel useless at times.

__ 10) At times I think I am no good at all.

Appendix C: Internal, Personal, and Situational Attributions Questionnaire (IPSAQ)

Please read the statements on the following pages. For each statement, please try to vividly imagine that events happened to you. Then try to decide what was the main cause of the event described in each statement. Please write down the cause you have thought of in the space provided. Then circle the appropriate letter (a, b, or c) according to whether the cause is:

    a) Something about you
    b) Something about another person (or a group of people)
    c) Something about the situation (circumstances or chance)

It might be quite difficult to decide which of these options is exactly right. In that case, please pick one option, the option which best represents your opinion. Please pick only one letter in each case.

Thank you for your time and cooperation.

1.   A friend gave you a lift home.

      What caused your friend to give you a lift home?
      (Please write down one major cause)
      _____

      Is this:
      a. Something about you?
      b. Something about the other person or other people?
      c. Something about the situation (circumstances or chance)?

2.   A friend talked about you behind your back.

      What caused your friend to talk about you behind your back??
      (Please write down one major cause)
      _____

      Is this:
      a. Something about you?
      b. Something about the other person or other people?
      c. Something about the situation (circumstances or chance)?

3.   A friend said that he (she) has no respect for you.

      What caused your friend to say that he (she) has no respect?
      (Please write down one major cause)
      _____

Appendix C (Continued)

Is this:
a. Something about you?
b. Something about the other person or other people?
c. Something about the situation (circumstances or chance)?

4. A friend helped you with the gardening.

What caused your friend to help you with the gardening?
(Please write down one major cause)

_____

Is this:
a. Something about you?
b. Something about the other person or other people?
c. Something about the situation (circumstances or chance)?

5. A friend thinks you are trustworthy.

What caused your friend to think that you are trustworthy?
(Please write down one major cause)

_____

Is this:
a. Something about you?
b. Something about the other person or other people?
c. Something about the situation (circumstances or chance)?

6. A friend refused to talk to you.

What caused your friend to refuse to talk to you?
(Please write down one major cause)

_____

Is this:
a. Something about you?
b. Something about the other person or other people?
c. Something about the situation (circumstances or chance)?

7. A friend thinks you are interesting.

What caused your friend to think you are interesting?
(Please write down one major cause)

_____

Appendix C (Continued)

       Is this:
       a.   Something about you?
       b.   Something about the other person or other people?
       c.   Something about the situation (circumstances or chance)?

8.   A friend sent you a postcard.

       What caused your friend to send you a postcard?
       (Please write down one major cause)
       _____

       Is this:
       a.   Something about you?
       b.   Something about the other person or other people?
       c.   Something about the situation (circumstances or chance)?

9.   A friend thinks you are unfriendly.

       What caused your friend to think that you are unfriendly?
       (Please write down one major cause)
       _____

       Is this:
       a.   Something about you?
       b.   Something about the other person or other people?
       c.   Something about the situation (circumstances or chance)?

10.   A friend made an insulting remark to you.

       What caused your friend to insult you?
       (Please write down one major cause)
       _____

       Is this:
       a.   Something about you?
       b.   Something about the other person or other people?
       c.   Something about the situation (circumstances or chance)?

11.   A friend bought you a present.

       What caused your friend to buy you a present?
       (Please write down one major cause)
       _____

Appendix C (Continued)

Is this:
a. Something about you?
b. Something about the other person or other people?
c. Something about the situation (circumstances or chance)?

12. A friend picked a fight with you.

What caused your friend to fight with you?
(Please write down one major cause)
_____

Is this:
a. Something about you?
b. Something about the other person or other people?
c. Something about the situation (circumstances or chance)?

13. A friend of yours thinks you are dishonest.

What caused your friend to think you are dishonest?
(Please write down one major cause)
_____

Is this:
a. Something about you?
b. Something about the other person or other people?
c. Something about the situation (circumstances or chance)?

14. A friend spent some time talking to you.

What caused your friend to spend time talking to you?
(Please write down one major cause)
_____

Is this:
a. Something about you?
b. Something about the other person or other people?
c. Something about the situation (circumstances or chance)?

15. A friend thinks you are clever.

What caused your friend to think you are clever?
(Please write down one major cause)
_____

Appendix C (Continued)

Is this:
a. Something about you?
b. Something about the other person or other people?
c. Something about the situation (circumstances or chance)?

16. A friend thinks you are sensible.

What caused your friend to think you are sensible?
(Please write down one major cause)
_____

Is this:
a. Something about you?
b. Something about the other person or other people?
c. Something about the situation (circumstances or chance)?

17. A friend refused to help you with a job.

What caused your friend to refuse to help you with the job?
(Please write down one major cause)
_____

Is this:
a. Something about you?
b. Something about the other person or other people?
c. Something about the situation (circumstances or chance)?

18. A friend thinks you are unfair.

What caused your friend to think that you are unfair?
(Please write down one major cause)
_____

Is this:
a. Something about you?
b. Something about the other person or other people?
c. Something about the situation (circumstances or chance)?

19. A friend said that he (she) dislikes you.

What caused your friend to say that he (she) dislikes you?
(Please write down one major cause)
_____

Appendix C (Continued)

Is this:
a. Something about you?
b. Something about the other person or other people?
c. Something about the situation (circumstances or chance)?

20. A friend called to see how you were doing.

What caused your friend to call to see how you were doing?
(Please write down one major cause)
_____

Is this:
a. Something about you?
b. Something about the other person or other people?
c. Something about the situation (circumstances or chance)?

21. A friend ignored you.

What caused your friend to ignore you?
(Please write down one major cause)
_____

Is this:
a. Something about you?
b. Something about the other person or other people?
c. Something about the situation (circumstances or chance)?

22. A friend said that she (he) admires you.

What caused your friend say that she (he) admired you?
(Please write down one major cause)
_____

Is this:
a. Something about you?
b. Something about the other person or other people?
c. Something about the situation (circumstances or chance)?

23. A friend said that he (she) finds you boring.

What caused your friend to say that he (she) finds you boring?
(Please write down one major cause)

Appendix C (Continued)

_____

Is this:
a. Something about you?
b. Something about the other person or other people?
c. Something about the situation (circumstances or chance)?

24.   A friend said that she (he) resents you.

What caused your friend to say that she (he) resents you?
(Please write down one major cause)
_____

Is this:
a. Something about you?
b. Something about the other person or other people?
c. Something about the situation (circumstances or chance)?

25.   A friend visited you for a friendly chat.

What caused your friend to visit you for a chat?
(Please write down one major cause)
_____

Is this:
a. Something about you?
b. Something about the other person or other people?
c. Something about the situation (circumstances or chance)?

26.   A friend believes that you are honest.

What caused your friend to believe that you are honest?
(Please write down one major cause)
_____

Is this:
a. Something about you?
b. Something about the other person or other people?
c. Something about the situation (circumstances or chance)?

27.   A friend betrayed the trust you had in her.

Appendix C (Continued)

    What caused your friend to betray your trust?
    (Please write down one major cause)

    _____

    Is this:
    a. Something about you?
    b. Something about the other person or other people?
    c. Something about the situation (circumstances or chance)?

28.   A friend ordered you to leave.

    What caused your friend to order you to leave?
    (Please write down one major cause)

    _____

    Is this:
    a. Something about you?
    b. Something about the other person or other people?
    c. Something about the situation (circumstances or chance)?

29.   A friend said that she (he) respects you.

    What caused your friend to say that she (he) respects you?
    (Please write down one major cause)

    _____

    Is this:
    a. Something about you?
    b. Something about the other person or other people?
    c. Something about the situation (circumstances or chance)?

30.   A friend thinks you are stupid.

    What caused your friend to think you are stupid?
    (Please write down one major cause)

    _____

    Is this:
    a. Something about you?
    b. Something about the other person or other people?
    c. Something about the situation (circumstances or chance)?

Appendix C (Continued)

31.   A friend said that he (she) liked you.

        What caused your friend to say that he (she) liked you?
        (Please write down one major cause)

        _____

        Is this:
        a. Something about you?
        b. Something about the other person or other people?
        c. Something about the situation (circumstances or chance)?

32.   A neighbor invited you in for a drink.

        What caused your friend to invite you in for a drink?
        (Please write down one major cause)

        _____

        Is this:
        a. Something about you?
        b. Something about the other person or other people?
        c. Something about the situation (circumstances or chance)?

Appendix D: Experimenter Rating Scale

Subject # _____   Date_____

Please rate the <u>experimenter</u> on the scale below. Rate how much you agree or disagree
with each item by circling a number from 1-6.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree

1.   The experimenter was friendly toward me

1	2	3	4	5	6

2.   The experimenter seemed hostile to me

1	2	3	4	5	6

3.   The experimenter was analyzing my actions

1	2	3	4	5	6

4.   The Experimenter was influencing my performance during the study

1	2	3	4	5	6

5.   The experimenter appeared to be trustworthy

1	2	3	4	5	6

ANAGRAMS

Instructions: You will have 5 minutes to solve a series of anagrams. Anagrams are scrambled words that can be put together to spell out a real word. For instance, the anagram "OTY" when rearranged spells the word "TOY". You must use all of the letters.

Please work as quickly as you can

OLSO   _____

SETB   _____

UCKTR   _____

GMGI   _____

IAET   _____

EHDAK   _____

ESRDSI   _____

YKTRI   _____

GIWHUT   _____

QUUEA   _____