How Personality Influences Compliance: The Power of the Individual

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A Thesis presented to the Graduate Faculty of Middle Tennessee State University in partial fulfillment of the requirements for the degree of Master of Arts

August 2013

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Abstract

This study explores various personality traits that may contribute to an individual's compliant behavior. Previous research has studied the effects of self-esteem, openness to experiences, conscientiousness, extraversion, agreeableness, emotional stability, guilt, and psychological reactance as they pertain to self-reported compliance scores, but not how they related to actual, real-world compliance. This study examines these traits and how they correlated with compliance to a task. Results suggest that complaint and non-compliant individuals score similarly on all traits, but that extraversion correlates negatively with compliance to a task. Implications and limitations of the study are discussed.

Chapter 1

Introduction and Review of the Literature

The primary purpose of this study is to examine the effect of an individual's personality on his or her compliance with a request. Research has shown that compliance—the act of responding in a positive and favorable manner to a request put forward by an individual or group— can be affected by many factors. Several experiments support that the person making a request, how this person is viewed, how the request is made, the reasons behind the request, and the seeming importance of the task to be complied with all have a large impact on whether or not an individual will comply with a request (Cialdini, Vincent, Lewis, & Catalan, 1975; Freedman, & Fraser, 1966; Gudjonsson, Sigurdsson, Einarsson, & Einarsson, 2008; Milgram, 1965). In other words, effects of *situational* factors on individual compliance have been thoroughly studied. In fact "the power of the situation" is a common discussion in introductory psychology text books (Carpenter & Huffman, 2008). However, there has been very little research on how specific *personality* traits can affect an individual's tendency to comply. The current study examines how self-esteem, guilt, the Big Five personality variables, and psychological reactance correlate with each other. In addition, this study seeks to determine how each of these variables correlate with individual's compliance to an actual request.

Self-Esteem

Self-esteem has been found to play an important role in compliance (Gudjonsson & Sigurdsson, 2003; Steele, 1970). Research has shown that there is a negative correlation between compliance and self-esteem (Gudjonsson, Sigurdsson, Brynjolfsdottir, & Hreinsdottir, 2002; Gudjonsson et al., 2008; Steele, 1970). In an early study designed to manipulate state self-

esteem, Steele (1970) employed a sample of housewives to determine the effects of insults on compliance. He placed telephone calls to each housewife asking her if she would participate in a later phone poll. For half the participants, Steele gave an initial negative judgment or an insult regarding their ability to fundraise for a certain community program and, for the other half, he ended the phone call with a positive judgment regarding their fundraising ability. He hypothesized that the self-esteem of those left with a negative judgment would be decreased when compared with those left with a positive judgment. From this, he hypothesized that those left with a negative judgment would try and change the experimenter's ideas about herself, and so be more likely to comply with a subsequent request for help. This hypothesis was tested by a follow-up phone call asking the participants to help form a food cooperative. The results supported Steele's hypothesis, showing that those in the negative judgment condition were more likely to agree to help with the second request. Interestingly, the compliance effect lasted several days, with the follow-up call on the fifth day.

Similar to the previous results, Gudjonsson et al. (2002) studied compliance and its relationship with anxiety, self-esteem, paranoid thinking, and anger. Measures included the Gudjonsson Compliance Scale, the State-Trait Anxiety Scale, the Rosenberg Self-Esteem Scale, the Paranoia/Suspiciousness Questionnaire, and the Novaco Anger Scale to determine how strongly the previously mentioned emotions were related to compliance. The researchers hypothesized that compliance would increase when self-esteem and paranoia decreased. It was also hypothesized that compliance and anxiety would be positively correlated. This supported the idea that, because anxious people are keen to avoid conflict and confrontation with others, they are more likely to comply with a request. Gudjonsson et al. found a negative correlation between self-esteem and compliance (i.e., the lower the participant's self-esteem, the higher the

self-reported compliance rate). Finally, Gudjonsson et al. found that those with a higher level of paranoid thinking had a higher compliance rate. This study shows that self-esteem and other negative traits may play a role in affecting compliance. The lower people's self-esteem, or the more negative they view themselves, the more likely they are to try and raise that self-esteem, possibly by making others view them as helpful or as a good person.

In another compliance study, Gudjonsson and Sigurdsson (2003) examined self-esteem and coping strategies. This study relates compliance and social influence, testing whether instrumental gain is the reason a person will go along with requests. In other words, the study researched whether or not people would comply to increase their standing in another's opinion or to avoid a confrontation. To test this model, the researchers recruited 212 couples who had been living together for at least a year. These couples completed the Gudjonsson Compliance Scale (GCS) to measure their overall compliance tendencies, the COPE scale to measure coping strategies, and the Rosenberg Self-Esteem Scale. The most interesting finding from this study was the gender differences. The researchers reported an overall negative correlation between self-esteem and compliance rate. A woman with a low self-esteem rating was more likely to comply with her husband in order to obtain his approval and praise, potentially so that her own self-esteem is increased. Men with low self-esteem, however, simply avoided their wives thus avoiding confrontation. Also, in a second Gudjonsson et al. (2008) study, the same results were replicated. Once again, a negative correlation was shown between self-esteem and compliance. It was thought that poor self-esteem motivated people to avoid conflict and confrontation, thus compliance was the easiest route. Furthermore, this study showed a significant positive correlation between compliance and antisocial personality traits as measured by the Eysenck Personality Questionnaire (EPQ).

Hiemer and Abele (2012) also researched compliance and self-esteem. Specifically, they observed individuals who viewed themselves as having "low motivation" (or having low self-esteem or a negative view of their ability and personality) or "high motivation" (the opposite), and whether or not they would comply with risk-taking behavior. Consistent with previous results, those with low motivation were more compliant than those with high motivation.

In summary, self-esteem appears to be a very important person factor in the act of compliance. Low self-esteem makes one more like to comply with a request, while high self-esteem people are less likely to comply. An important consideration is that most of these studies only looked at the participants' projected compliance, not their compliance to a real world request (with the exception of Steele's study). Consistent with past research, I hypothesized that those with low self-esteem will be more likely than those with high self-esteem to comply with an actual task.

Guilt

Guilt proneness is a personality trait that is suggestive of a predisposition to negative feelings when a person does something wrong, even if the wrong is committed in private (Cohen, Panter, & Turan, 2012). It is also a common trait in compliant individuals (Freedman, Wallington, & Bless, 1967). Aronson and Carlsmith (1962) developed the hypothesis that those who had a high sense of guilt would punish themselves by doing more in order to make up for whatever their wrong deed may be. In this case, the researchers asked participants to comply with the request to call future study participants and lie to them about what they would be required to do in the study. In addition to the self-punishment hypothesis, the guilt-compliance effect was considered by researchers to be another reason why participants complied with the

request (Darlington & Macker, 1966). This effect states that when the participants were placed into the deceptive condition and asked to make phone calls in which they were not asked to lie, their compliance rate would not increase when compared with the number of calls made in the lying condition. Konoske, Staple, and Graph (1979) found that the guilt-compliance effect was supported, with those in the guilt/deceptive condition making more overall telephone calls than those in the control, or non-deceptive, situation.

In another study on guilt, Konoske et al. (1979) told two groups of undergraduate students to purposely upset a graduate student's stack of carefully arranged IBM cards. This task was used as an inducement of guilt in the participants. The two groups were then asked to make phone calls for the experimenters to prospective study participants. One group was asked to lie to the prospective participants by telling them that the experiment was unsafe before confirming the individual's participation in future experiments. The second group was not asked to lie to prospective participants. Instead, they merely made phone calls to remind people to show up for the study. It was found that with the added deception, the first group made more phone calls due to their induced guilt.

In summary, there is evidence that guilt is a strong motivator for compliance. Much like self-esteem, it allows individuals to attempt to raise their standing in someone's eyes, and, possibly, makes them feel like they have made up for some past or present transgression. Research has shown that those with a high sense of guilt will be more compliant, even in deceptive situations. The current study will be looking at guilt as it correlates to other personality traits. I hypothesize that guilt will correlate negatively with agreeableness and conscientiousness and will be positively associated with compliance on an actual task

The Big Five Personality Traits and Psychological Reactance

There is very little research on how compliance is related to personality traits. However, Gudjonsson, Sigurdsson, Bragason, Einarsson, and Valdimarsdottir (2004) assessed the relationship between personality and compliance using the EPQ and the GCS. The researchers gave the measures to three different populations: prison inmates, college students (undergraduates), and university students (graduate students). Results indicated that compliance was positively correlated with introversion and neuroticism. These results are interesting when one considers the previously mentioned studies. Research has shown that introversion negatively correlates with self-esteem (Pedersen, 1982), therefore it can be predicted that an individual with a high introversion score will be more likely to comply with a task than one who is more extraverted. Further support for this is given by Hiemer and Abele (2012). This study equated the "high motivation" with someone who was more extraverted, and those with high motivation were less likely to comply with reckless behavior. The idea that neuroticism is negatively related to compliance is consistent with the Gudjonnson et al. (2002) study that showed that those who are less emotionally stable will comply with requests hoping to make themselves appear more stable and increase their standing in the eyes of a requestor. Gudjonsson et al. (2004) also found that psychoticism was positively correlated with compliance in the prison inmates. It is possible that the majority of inmates were asked to take part in some illegal activity that put them in jail. That is, they may have complied with someone else's request or engaged in risk-taking behavior.

Most of the research on how compliance is related to personality resides in the medical field. For example, Axelsson, Brink, Lundgren, and Lotvall (2011) studied the personalities of patients' with chronic diseases and their compliance to medical advice given by their doctors. Swedish participants completed the Medication Adherence Report Scale (MARS) and the

Neuroticism, Extraversion, and Openness to experience Five Factor Inventory (NEO-FFI) in order to evaluate personality. This relatively simple study found that Neuroticism, Agreeableness, and Conscientiousness significantly correlated with medical adherence. Neuroticism negatively correlated with it, while the other two positively correlated with adherence. While the results regarding neuroticism are opposite those of previous studies, in a therapeutic setting, they are understandable. An emotionally unstable person would have a harder time completing a full round of therapy than that of a stable individual. Previous studies have looked at singular, quick requests. This result suggests that longer-term, repeated acts of compliance are also affected by personality. Axelsson et al. suggested that medical counselors might measure and utilize patients' personality traits in order to increase their medication adherence.

In addition to the Big Five personality traits, psychological reactance may also affect the compliance of an individual. In fact, reactance and compliance are thought to be closely related. Psychological reactance is defined as a reaction towards others, rules, regulations, or offers that seem to threaten one's behavioral freedom. People become reactant when they feel that something or someone is taking away their choices (Fogarty, 1997). Seemann, Buboltz, Thomas, and Wilkinson (2005) attempted to further define reactance in terms of the five factor model. The Therapeutic Reactance Scale (Dowd, Milne, & Wise, 1991) was used to measure reactance in a therapy setting, and the NEO-Personality Inventory- Revised was used as a measure of personality. Results of this study indicated that Agreeableness (specifically Straightforwardness and Compliance), Openness (to Ideas), and Extraversion (Warmth, Assertiveness, Excitement-Seeking, and Positive Emotions) all correlated negatively with reactance. Agreeableness was seen to have the strongest negative correlation with reactance, as psychologically reactant

individuals conduct themselves in a suspicious and noncompliant manner. There was also a positive correlation between reactance and neuroticism, with highly reactant individuals tending to have very strong emotions as well as a great deal of anxiety and moodiness. Seemann et al. comment that compliant behavior (via medical compliance or therapy termination) could be manipulated through the use of the reactance theory and agreeableness.

It is also possible that psychological reactance plays a role in compliance with medicine and medical advice. Fogarty (1997) studied psychological reactance and how it related to medical noncompliance. Fogarty connected this to medical advice in that when patients show noncompliance, they are essentially taking control of their illness. She speculated that by refusing to follow the recommendations of a health care professional, a person may feel like he or she is in total control. In addition, the type of advice reactant patients receive may affect their levels of compliance. A patient is more likely to comply when the advice is easy to follow or when there is a small amount of instructions. The greater the medical task list for patients, the more the patients see the advice as limiting their options and freedoms. Many patients see doctors as simply one of many options in dealing with an illness or sickness, and when the doctor puts too much on them, they become noncompliant and look elsewhere for help. This also presents the idea that compliance can be self-serving, in this case to a person's health. The need to get the best care, perhaps by taking care into one's own hands or thinking that failure to comply is in one's best interest, may lead to a decrease in compliance.

Fogarty's (1997) article gives practical advice to those in the health field for decreasing noncompliance in patients. She notes that when a medical professional discusses all options with patients, they will feel more in control and be more likely to comply with the medical advice. In addition, she says we are all concerned with death and threats to our physical and psychological

existence. Thus, by reminding a patient of his or her possible death, one could provoke anxiety, and this anxiety has been shown to increase compliant behavior (Gudjonnson et al., 2002). She also advocates the use of personality and trait scales in determining the best route to take when attempting to increase compliance. Fogarty notes that additional research in needed in this field in order to determine the exact relationship between reactance and medical compliance behavior.

Seibel and Dowd (1999) conducted a study that observed psychological reactance and how it correlated with therapeutic noncompliance. Based on the findings of past research, it was hypothesized that psychological reactance would be negatively correlated with compliance, and this was tested using data collected from therapists as well as patients. Psychotherapy patients without any mental retardation or psychotic disorder rated their overall improvement with therapy as well as the Therapeutic Reactance Scale and the Questionnaire for the Measurement of Psychological Reactance (Merz, 1983). The therapists answered questions about the clients' improvement as well as their program and medication compliance. The results of this study showed that, surprisingly, reactance did not correlate with overall compliance. However, the analysis of the therapist questionnaires showed a correlation between reactance and premature termination of the program. This could be viewed as a noncompliant behavior since ending therapy would be going against a therapist's request to see a treatment through.

In summary, the five factor model and the theory of psychological reactance suggest two other factors that appear to affect compliance. Personality traits (as measured by the Big Five) affect compliance despite the situation. This can be seen in the Hiemer and Abele (2012) study when the low and high motivation (or self-esteem) individuals were put in different situations. Despite the situation, those with lower motivation were more likely to comply. Similarly, those individuals with a high level of psychological reactance have been shown to be less compliant

even when the situation would be beneficial to their health (Seibel & Dowd, 1999). In the current study, similar results are expected. Individuals who show high levels of guilt, agreeableness, conscientiousness, or introversion or low levels of reactance and self-esteem are expected to show high compliance rates with an actual request.

Past research has focused mostly on the situation surrounding some compliance task. Two classic examples include Milgram's (1965) obedience study that determined how long an individual would listen to an authority figure and Asch's (1956) study in which individuals conformed to a group that they knew was wrong. However, it is harder to find research regarding the personality traits of compliant individuals. The current study seeks to help fill that gap in the research by examining the correlations between the traits and compliance with an actual compliance task. It is possible that personality may not be a strong predictor of compliance due to uncontrollable situational effects. Also, it is possible that a ceiling effect may occur simply because participants are used to completing any task (be it survey or other request) in a research setting. To address this, the current study created a very weak situation by using an online survey site. Individuals were not in a laboratory setting, nor did they have a researcher present. This procedure was used to increase the chances that personality traits would be effective at predicting compliance.

Hypotheses

In the current study, compliance is defined as the act of responding in a positive and favorable manner to a request put forward by an individual or a group. This means that the individual must be willing to do some task without being bribed or coerced. Research has shown that each of the previously discussed traits correlates with compliance differently: self-esteem,

psychological reactance, and extraversion are negatively correlated with compliance, whereas guilt, agreeableness, and conscientiousness are positively correlated with compliance.

Based on past research, the following are expected findings with respect to the sample as a whole:

1. Compliant individuals have higher scores than non-compliant individuals for guilt, agreeableness, conscientiousness, introversion, and psychological reactance. Non-compliant individuals will have higher self-esteem scores than compliant individuals.

2. Self-esteem will positively correlate with extraversion scores.

3. Guilt will positively correlate with agreeableness and conscientiousness.

Next, with respect to the compliant group only, the following findings are expected:

4. Guilt, extraversion, agreeableness, and conscientiousness will correlate positively with task compliance.

5. Self-esteem will correlate negatively with task compliance.

6. Psychological reactance will correlate negatively with task compliance.

Chapter II

Method

Participants

One hundred and thirty-eight Middle Tennessee State University undergraduate students (52 men, 86 women) were recruited via the Psychology Department research pool. Participation was voluntary, and there was no monetary compensation for participants. They received course credit for their participation. The sample consisted of 65 freshmen, 43 sophomores, 12 juniors, and 18 seniors. With respect to ethnicity, 58% of the sample considered themselves Caucasian or White, 25.4% Black or African-American, 5.1% American Indian, 5.8% Hispanic, and 5.8% Asian American/Pacific Islander.

Materials

Rosenberg Self-Esteem Scale. The Rosenberg Self-Esteem Scale (SES; Rosenberg, 1965) is a commonly used 10-item scale consisting of positive and negative self-appraisal statements such as, "I certainly feel useless at times," and "I feel I have a number of good qualities." These are rated on a 4-point scale ranging from "*strongly agree*" to "*strongly disagree.*" Possible scores range from 10 to 40, with higher scores reflecting higher self-esteem. Rosenberg (1965) reported test-retest reliability ranging from .82 to .88 for samples of college students. With the current sample, the observed coefficient alpha was acceptable, $r = .89$.

Ten Item Personality Inventory. The Ten Item Personality Inventory (TIPI; Gosling, Rentfrow, & Swann, 2003) is a very brief measure of the Big Five Personality dimensions. It

contains descriptions such as “extraverted, enthusiastic” and “critical, quarrelsome.” Participants rate themselves on a 5-point scale (1, *“strongly agree”* to 5, *“strongly disagree”*). Though it is not as in-depth as the longer instruments, it has been found to converge with widely used Big Five inventory measures in self, observer, and peer reports, test-retest reliability, patterns of predicted external correlation, and convergence between self-and observer ratings (Gosling et al., 2003). With the current sample, the observed coefficient alpha was acceptable for openness to experience, r = .43, contentiousness, r = .36, extraversion, r = .57, agreeableness, r = .31, and emotional stability, r = .52.

The Interpersonal Guilt Questionnaire. The Interpersonal Guilt Questionnaire (IGQ; O'Connor, Berry, Weiss, Sampson, & Bush, 1997) contains 45 statements rated on a 7-point scale (1, *“strongly agree”* to 7, *“strongly disagree”*), such as “I conceal or minimize my success” and “I am uncomfortable discussing my achievements in social situations.” The scale includes different categories of guilt, such as theoretically-based and clinically relevant categories of guilt: survivor guilt, separation/disloyalty guilt, omnipotent responsibility guilt, and self-hate guilt. The items are added to calculate a total score. The scale shows good internal consistency, and shows predicted correlations with previously published measures (O’Connor et al., 1997). In the current sample, the observed coefficient alpha for survival guilt , r = .73 , separation guilt, r = .71, omnipotence guilt, r = .70 , and self-hate guilt, r =.77, were all acceptable.

Psychological Reactance Scale. Hong’s Psychological Reactance Scale (PRS), developed by Hong and Faedda (1996), is 14-item measure of a person’s trait propensity to reactance. It includes statements such as, “The thought of being dependent on others aggravates me,” which are measured on a 7-point (1 =*strongly disagree*, 7 =*strongly agree*) Likert scale.

The alpha reliabilities of the scale range from .45 to .71 (Hong & Faedda, 1996). With the current sample, the observed coefficient alpha was acceptable, $r = .83$.

Procedure

The measures were online, in both MTSU's Sona System and available to participants through an online survey which consisted of five parts. The first part was a set of demographic questions including year in school, gender, and race. Next came the Rosenberg Self-Esteem Scale followed by the Ten Item Personality Inventory (TIPI). The fourth part was the Interpersonal Guilt Questionnaire. Finally, participants completed Hong's Psychological Reactance Scale. All participants completed these measures in the same order. After the participants completed these measure, the following message appeared:

> Thank you for your participation in this study. At this point, you have completed the study and have earned your credit.
>
> The following questions are from an undergraduate student who needs participants for his research. You cannot earn any more credit, but if you would be willing, please take some time and complete the extra survey. To do so please click "continue" at the bottom of your screen. If you choose not to answer the extra questions, please click "done" at the bottom of your screen.

The supplementary questions came from the 44-item inventory that measures an individual on the Big Five Factors (dimensions) of personality (John & Srivastava, 1999). For each 4-question set the participant answered, a compliance score was given (for example, a participant completing 4 or fewer questions before quitting earned a compliance score of 1, whereas a person completing all 44 earned a compliance level of 11). Those participants who completed no

extra items received a compliance score of 0. In between each set of four questions, a reminder appeared:

> Thank you for answering the previous questions. If you are willing to continue, please click “continue” at the bottom of this page and you will be taken to more of the survey questions. Again, you cannot earn any extra credit, and can quit at any time.

If the participants chose not to complete the extra measures, they were taken to a debriefing page. After the participants finished the supplementary question sets, they were debriefed (See Appendix B for debriefing page).

Chapter III

Results

Hypothesis 1

Descriptive statistics for all personality factors are included in Table 1. As the table shows, compliant and non-compliant groups were similar for most of the traits. Only 19% of participants started the compliance task. Of those, 26% completed more than half of the extra questions (at least 22 questions out of a possible 44). On average, those that complied with the task completed 14.77 items (*SD* = 13. 75).

In test whether personality variables differed between those who did and did not comply, *t*-tests were performed for each trait for those who complied with the task and those who did not comply. As predicted, extraversion was found to be significantly lower for those who complied with the task than those who did not comply, $t(134) = 3.83$, $p < .001$. Those scoring lower in extraversion were more likely to comply with the task. Contrary to predictions, no other comparisons were significant (all *ps* >.05).

Table 1

Descriptive Statistics for Personality Measures

Personality Variable	Total *M (SD)*	Compliant Group *M (SD)*	Non-compliant Group *M (SD)*
Self-Esteem	31.77(4.71)	30.78 (5.32)	32.04 (4.62)
Openness	5.44 (1.16)	5.25 (1.34)	5.47 (1.11)
Contentiousness	5.37 (1.08)	5.21 (1.14)	5.43 (1.06)
Extraversion	4.66 (1.38)	3.76 (1.43)	4.88 (1.30)
Agreeableness	4.76 (1.12)	4.70 (.99)	4.75 (1.15)
Emotional Stability	4.44(1.27)	4.15 (1.32)	4.54 (1.26)
Survival Guilt	66.20 (8.31)	65.96 (8.29)	66.25 (8.35)
Separation Guilt	43.89 (6.97)	43.08 (7.90)	44.07 (6.78)
Omnipotence Guilt	45.23 (6.44)	45.88 (6.44)	45.09 (6.46)
Self-Hate Guilt	41.94 (7.90)	35.56 (8.70)	35.38 (7.75)
Psychological Reactance	35.41 (8.29)	43.21 (7.22)	41.65 (8.50)

Note: Higher scores denote a higher possession of the measured trait. $N = 138$, $n_{\text{compliant group}} = 26$, $n_{\text{non-compliant group}} = 112$

Hypothesis 2

Accounting for the whole sample, a significant positive correlation was found between self-esteem and extraversion (see Table 2), supporting Hypothesis 2. Compliant individuals were assigned a compliance score of 1 regardless of the number of items completed, and non-compliant individuals were assigned a compliance score of 0. Also, Table 2 contains correlations for compliance by question. This refers to the actual number of extra questions an individual completed .

Hypotheses 3

It was predicted that guilt would positively correlate with conscientiousness and agreeableness for those who complied with the task. As Table 2 shows, significant correlations were found for self-hate guilt with conscientiousness as well as agreeableness. Those with higher levels of trait self-hate guilt reported lower levels of agreeableness and conscientiousness. These results provide no support for the hypotheses.

Hypothesis 4

For those that complied with the task, it was hypothesized that guilt would correlate positively with task compliance. As seen in Table 3 no significant correlations were found, but omnipotence guilt was positively correlated with compliance, but self-hate guilt, survival guilt, and separation guilt correlated negatively with task compliance. This partially supports the hypothesis.

Hypotheses 5and 6

I hypothesized that, for the compliant group, guilt, self-esteem, reactance, agreeableness, extraversion, and conscientiousness would predict task compliance. However, no significant correlations were found for any of these traits and compliance with the task (see Table 3). However, correlations trended in the predicted direction. Self-esteem, extraversion, conscientiousness, and three guilt factors all trended negatively with the completion of the compliance task, whereas openness, conscientiousness, emotional stability, omnipotence guilt, and reactance trended positively. These trends were consistent with expectations except for omnipotence guilt and reactance.

Table 2

Correlations Among Personality Variables and Task Compliance Items Completed for Entire Sample

	Personality Variable	1	2	3	4	5	6	7	8	9	10	11	12
1	Self-Esteem	1	.336**	.242**	.460**	.074	.463**	-.470**	-.003	-.375**	-.712**	-.154	-.104
2	Openness	.336**	1	.111	.490**	.217*	.215*	-.085	.068	-.102	-.332**	.087	-.076
3	Conscientiousness	.242**	.111	1	.152	.201*	.206*	-.044	-.076	-.124	-.252**	-.339	-.083
4	Extraversion	.460**	.490**	.152	1	-.064	.227**	-.288	.073	-.239**	-.398	-.045	-.314**
5	Agreeableness	.074	.215*	.201*	-.064	1	.261**	.118	.044	.144	-.193**	-.289**	-.18
6	Emotional Stability	.463**	-.085	.206*	.227**	.261**	1	-.347**	-.023	-.299**	-.452**	-.144	-.120
7	Survival Guilt	-.470**	.068	-.044	-.288**	.118	-.347	1	.329*	.628**	.420**	.215*	-.014
8	Separation Guilt	-.003	-.102	-.076	.073	.044	-.023	.329**	1	.412**	.060	.011	-.055
9	Omnipotence Guilt	-.357**	-.332**	-.124	-.239**	.144	-.299**	.628**	.412**	1	.443**	.201*	.047
10	Self-Hate Guilt	-.712**	.087	-.252**	-.398**	-.193*	-.452**	.420*	.060	.443**	1	.388**	.009
11	Psychological Reactance	-.154	-.004	-.339*	-.045	-.289*	-.144	.215*	.011	.201*	.388*	1	.073
12	Overall Compliance	-.104	-.076	-.083	-.314**	-.018	-.120	-.014	-.055	.047	-.009	.073	1
13	Compliance by Question	-.094	-.035	.030	-.271**	-.024	-.043	-.048	-.090	.092	-.024	.083	.702**

Note. $N = 138$. $n_{\text{non-compliant group}} = 112$. $n_{\text{compliant group}} = 26$ **Significance at .001 level. *Significance at .05 level. Overall compliance refers to if a participant started the task, compliance by question refers to the amount of extra questions completed.

Table 3

Correlations Among Personality Variables for the Compliant Group

Personality Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Self-Esteem	1	.517**	.278	.618**	.348	.385	-.592**	-.079	-.417*	-.817**	-.101	-.061
2. Openness	.517**	1	.355	.461*	.371	.270	-.170	-.232	-.378	-.547**	.177	.052
3. Conscientiousness	.278	.355	1	.293	.084	.460*	-.143	-.002	-.015	-.386	-.223	.272
4. Extraversion	.618**	.461*	.293	1	.344	.267	-.453*	-.193	-.313	-.719*	-.341	-.157
5. Agreeableness	.348	.371	.084	.344	1	.423*	-.322	-.104	.004	-.419*	-.248	-.043
6. Emotional Stability	.385	.270	.460*	.267	.423*	1	-.475*	-.036	-.069	-.413*	-.222	.129
7. Survival Guilt	-.592**	-.170	-.143	-.453*	-.322	-.475*	1	.591*	.500*	.618**	.424	-.124
8. Separation Guilt	-.079	-.232	-.002	-.193	-.104	-.036	.519*	1	.638**	.212	-.167	-.153
9. Omnipotence Guilt	-.417*	-.378	.015	-.313	.004	-.069	.500*	.638**	1	.376	-.135	.203
10. Self-Hate Guilt	-.817**	-.547*	-.386	-.719**	-.419*	-.413*	.618**	.212	.376	1	.255	-.093
11. Psychological Reactance	-.101	.177	-.223	-.341	-.248	-.222	.424*	-.167	-.135	.255	1	.123
12.Compliance by Question	-.061	.052	.272	-.157	-.043	.129	-.124	-.153	.203	-.093	.123	1

Note. $N = 26$; * $p < .05$;** $p < .001$.

Chapter IV

Discussion

The purpose of this study was to examine whether or not certain personality traits were correlated with compliance rates. Self-esteem, guilt, the big-five personality factors, and psychological reactance were identified and measured as traits that potentially influence compliance. Based on previous research findings, it was hypothesized that self-esteem would positively correlate with extraversion and that guilt would negatively correlate with extraversion, but positively correlate with agreeableness, and conscientiousness. I also predicted that self-esteem would correlate negatively with task compliance, and guilt and psychological reactance would correlate positively with task compliance.

As expected, individuals who scored low in extraversion (or introverts) were more likely to begin and to do more sets of questions than when compared to those who scored high in extraversion. Gudjonsson et al. (2004) found that introversion correlated positively with self-reported compliance scores, and the current finding suggests that this correlation can generalize to real world requests. It is possible that introverts are more likely to comply with a request in order to make the individual making the request view them more positively, even though there was no one present to ingratiate themselves to, thus increasing liking. An introverted individual could possibly be complying in order to obtain friendship and a larger social group. This individual would possibly continue to comply with requests from friends in order to keep them. Extraverts, on the other hand, most likely already have a large friend group and have less motivation to increase

other's liking through compliance. It is also possible that extroverts are more motivated by social reward. Since there was nothing like this in the current study, extraverts were could have been less likely to comply. Introverts may also be more guilt prone, as the current data suggests. This would cause greater compliance from an introverted individual in order to offset the negative feelings of guilt associated with rejecting a request, even when that request came from a stranger. Also, it may be that introverts had more time to complete the extra questions since, typically, they do not have the demands of a large social group.

Although not statistically significant, there was also a trend for individuals who began and/or completed the compliance task to report lower self-esteem than those who did not (see Table 2). This trend mirrors results from previous studies (Gudjonsson et al., 2002, 2003; Hiemer & Abele, 2012). Again, since self-esteem did correlate negatively with extraversion, it is possible that those with low self-esteem comply with tasks in order to make people see them as good, helpful, or any other positive trait, thus increasing their self-esteem. Alternatively, those with high self-esteem have less of a reason to increase their self-esteem, and therefore may be less motivated to comply with a request.

Those who scored higher in psychological reactance also tended to comply with the additional task (see Table 2), although once again this did not reach statistical significance. This trend is not consistent with previous research. Seibel and Dowd (1999), Dowd et al. (1991), and Seeman et al. (2005) showed that more reactant individuals are less likely to comply with a task. It is possible that some of the other variables measured in the current study, such as extraversion,

influence compliance more than reactance. However, though reactance showed no significant correlation, it should be considered in compliance research. It is possible that the situation, or external variables, would make this trait stronger. For example, if the researcher were to ask individuals to comply in person, reactance might be stronger since the individuals would have to defend their reason for complying or for not complying. More forceful requests might also trigger stronger reactance since an individual could feel as though his or her freedom was being threatened more than in the current context.

Overall, 80% of participants did not complete any extra questions. This could be due to fatigue (by the time participants finished the 100 required questions, they simply did not want to complete any more) or participants finding the task uninteresting. It is also possible that since participants were collected at the end of the semester, those recruited were trying to meet a deadline and only interested in doing what was required. Because of this, no extra questions would have been completed despite the participant's personality. In addition, personality could have no effect on compliance in weak situations. It is possible that even without strong situational influences, people rely more on their surroundings to determine compliance rather than their personality.

In summary, the findings from this study suggest that extraversion showed the strongest relationship among the personality traits with whether or not a person will comply with a request. Previous research has only looked at self-reported compliance data, but the current findings suggest the generalizability of

this component of personality to actual, real-world requests. The trends in self-esteem and reactance also suggest generalizability to real world tasks.

Limitations of the Study

The largest limitation of this study was the small sample size. Even though over 100 participants completed the personality measures, only 26 complied with the request to fill out the extra questionnaire. Had more people participated in the study, it is possible that some of the trends, such as self-esteem, could have reached statistical significance. It is also possible that some of the other traits could show a significant effect if a larger number of participants could be induced to comply with the extra task.

In addition to the small sample size, the participants were all taking the survey to receive credit for a class. It is possible that those who complied and answered the extra questions were hoping for even more credit and that without the offer of credit for any part of the survey, there would have been no compliance. It is also possible that greater compliance would have been achieved if participants knew a professor or some other authority figure had made the request instead of an unknown researcher who may or may not have been in a position of authority. This might have effected those that scored lower on extraversion or higher on agreeableness. However, the study was administered online in order to decrease as many external factors as possible. Had a professor been used to administer the request (or the reasoning for the extra questions that involved a professor rather than a different undergraduate student researcher), internal variables might have not been the reason for compliance. Instead, it could

have been students trying to get a better grade in the class, helping behaviors, or fear of not listening to an instructor.

A more diverse age range and different populations could also be useful in assessing generalizability. The current study used undergraduate college students. College students tend to have higher self-esteem than other populations. This could have affected the results by making self-esteem a less important variable (by having a decreased range of self-esteem scores) or not giving a realistic overall view of it, and the specific population used decreases generalizability.

This survey was online. This method was used to make situational variables less prominent (no one watching a participant fill out a survey, no direct influence from the researcher, etc.). However, if this survey was given in person, it is possible that more compliance could have occurred, perhaps due to participants wanting the researcher to think they did a good job filling out the survey or that they were good participants who really earned their credit. It would be of interest to run a future study in which half the participants were surveyed via an online source and half in person to see if the presence of a researcher increased or decreased compliance rates and the relationship of compliance to personality variables.

Implications for Future Research

The results from this study could be used to strengthen persuasion techniques. In addition to the results of other studies that show the power of the situation, the current results have shown that personality plays a role in the compliance of an individual. Taking personality into account, persuasive messages could be tailored to play into certain traits. Specifically, instead of creating an advertisement or commercial about how a product works or what the product does, advertisers could create something geared towards the introverted person. Such an ad could imply that people who buy a product or use a service were seen as better or more interesting. Similarly, the results could be used to create a type of inoculation program against persuasive techniques. If individuals realize they have a certain trait, it may be possible that they can guard against persuasive techniques that prey upon the trait. For example, if an individual makes a request and frames it by saying something like, "if you are a good friend you would…," or "if you want people to like you, you would…" the individual with low self-esteem or someone seeking a friend group might be more likely to comply with such a request. However, if individuals knew of this certain personality trait and recognized the tactic, they may not comply with the request. Further research could be conducted to determine if this type of program would, in fact, be helpful. It could also determine the effectiveness of persuasive techniques tailored to specific traits.

The current results suggest that personality is a potentially relevant factor in compliance. Therefore it would be beneficial to continue to study personality

and compliance in general. Different populations may have different levels of the identified traits and may react differently to a request. It is also possible that traits that have not been identified in the current study play a large role in compliant behavior, such as helpfulness or dependability. In addition, stronger tests of the current traits could be conducted, such as taking participants from the extreme ends of the trait and testing their compliance. Future research could identify these traits and determine their effectiveness in predicting compliant behavior. The current study was also strictly correlational. Future research could obtain a sample of individuals with certain traits, such as extremes of the Big 5, in order to predict compliance by making requests of those who score very low or very high in certain variables.

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APPENDICES

Appendix A

[IRB Approval Letter]

March 27, 2013

Jennifer Hurst
Department of Psychology
Jrh8i@mtmail.mtsu.edu
Protocol Title: "The Effect of Personality on Compliance"
Protocol Number: **13-289**
Dear Investigator(s),

The MTSU Institutional Review Board, or a representative of the IRB, has reviewed the research proposal identified above. The MTSU IRB or its representative has determined that the study poses minimal risk to participants and qualifies for an expedited review under 45 CFR 46.110 Category 6.

Approval is granted for one (1) year from the date of this letter.

According to MTSU Policy, a researcher is defined as anyone who works with data or has contact with participants. Anyone meeting this definition needs to be listed on the protocol and needs to provide a certificate of training to the Office of Compliance. **If you add researchers to an approved project, please forward an updated list of researchers and their certificates of training to the Office of Compliance (Box 134) before they begin to work on the project.** Any change to the protocol must be submitted to the IRB before implementing this change.

Please note that any unanticipated harms to participants or adverse events must be reported to the Office of Compliance at (615) 494-8918.

You will need to submit an end-of-project form to the Office of Compliance upon completion of your research located on the IRB website. Complete research means that you have finished collecting and analyzing data. **Should you not finish your research within the one (1) year period, you must submit a Progress Report and request a continuation prior to the expiration date.** Please allow time for review and requested revisions. Your study expires **March 27, 2014**.

Also, all research materials must be retained by the PI or faculty advisor (if the PI is a student) for at least three (3) years after study completion or be destroyed as evidenced in the application. Should you have any questions or need additional information, please do not hesitate to contact me.

Sincerely,

Charles H. Apigian, PhD.
Associate Professor of IS
Committee Member of IRB
Middle Tennessee State University

Appendix B

[General Demographic Questionnaire]

Please complete the following demographic items.

1. I am a

male female

2. I am a

Freshman Sophomore Junior Senior Other

3. I am

African-American (Black) Caucasian (White) American Indian

Asian American/ Pacific Islander Hispanic

Appendix C

[Debriefing Page]

Thank you for your participation in this survey!

For my master's thesis, I am studying the effects of personality on compliance. The first four scales that you completed represented different personality traits; self-esteem, guilt, psychological reactance, openness to experience, conscientiousness, extraversion, agreeableness, and emotional stability. The second set of questions you had the option of completing were not for another study, but were a measure of compliance. The more questions you completed, the higher your compliance score. I plan on running correlations on the data to find out how actual compliance correlates with the personality variables.

If you have any questions, would like more information on this study, or would like a copy of the results please contact Jennifer Hurst (jrh8i@mtmail.mtsu.edu) or Dr. Tom Brinthaupt (tom.brinthaupt@mtsu.edu).