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Confession Rates: Does Persuasion Resistance Time Reduce Them?

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CONFESSION RATES: DOES PERSUASION RESISTANCE TIME REDUCE THEM?

A THESIS

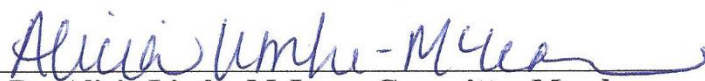
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### Abstract

Confessions are given every day in criminal investigations across the country; countless are true confessions, but there are many false confessions as well. This study focused on participants' personality assessments and their confession rates, whether innocent or guilty, during an experiment that challenged their persuasive resistance when time was given to collect their self-control resources. Resistance to persuasive acts can reduce the rate of true and false confessions. The results from this study indicate that providing time to collect self-control resources does not have an effect on confessions obtained, but Machiavellianism from the Short Dark Triad personality assessment predicted obtained confessions overall.

*Keywords:* confession, interrogation techniques, persuasion, resistance, investigator bias

## Dedication

This thesis is dedicated to my family, friends, and support system. I would not be where I am without all the prayers, love, and encouragement. Thank you to Mom, Dad, Maegan, Garrett, Zac, and the rest of the crew that has gotten me this far. You guys rock!

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## Table of Contents

List of Tables	8
List of Graphs	9
Chapter 1: How Do False Confessions Impact You?	10
Chapter 2: Investigation and Interrogation Bias	12
Chapter 3: Tricks to Deceive and Obtain a Confession	16
Chapter 4: Maintaining Self-Control Despite the Influence	21
Chapter 5: Do Personality Traits Influence Confessions?	24
Chapter 6: Present Study	25
Chapter 7: The Study	26
Method	26
Participants	26
Materials	26
Procedure	28
Results	30
Discussion	35
References	40
Appendix A: G*Power Analysis	45
Appendix B: Nintendo® Wii game, <i>Super Mario Bros. Wii</i>	46
Appendix C: Individual Problem Solving Packet	47
Appendix D: Group Problem Solving Packet	48
Appendix E: Certificate from John E. Reid Interview and Interrogation Seminar	49
Appendix F: Demographic Questionnaire	50

Appendix G: Experiences in Close Relationships (ECR)	51
Appendix H: Need for Closure Scale (NFCS)	53
Appendix I: Preference for Consistency (PFC)	56
Appendix J: Need to Belong Scale (NBS)	58
Appendix K: Short Dark Triad (SD3)	59
Appendix L: UCO SONA System Screenshot	61
Appendix M: Common Interrogation Script	62
Appendix N: Blank Confession Sheet	63
Appendix O: Contingencies for Interrogation	64
Appendix P: Oklahoma Council on Law Enforcement Education and Training Certificate	65
Appendix Q: Data	66

## List of Tables

Table 1. Confession types per condition	30
Table 2. Regression statistics for personality assessments and confederate	33
Table 3. Regression statistics for personality assessments with innocent participants	34



## List of Graphs

Graph 1. Confessions obtained per condition	31
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## **Chapter 1: How do false confessions impact you?**

There are many innocent people incarcerated based on false confession evidence. Interrogation tactics, meant to catch criminals, are also taking the freedom away from innocent people. The goal of the present study is to help determine if providing accused offenders time to collect their self-control before interrogation will help lower the number of false confessions obtained. Before interrogating suspects, law enforcement should give them a chance to build up their self-control resources. During interrogation, law enforcement officials need to be cognizant of how they are conducting the questioning—listening to the accused, and redirecting their questions to get the truth. If a way to protect innocent people is found, not only will their freedom be saved, but tax payer dollars will not be used to fund an incarcerated innocent person, or have to pay compensation to an exoneree.

According to the *Bureau of Justice Statistics* report, as of December 31, 2014, there were approximately 1,561,500 incarcerated individuals in state and federal prisons within the United States (Carson, 2014). According to the Innocence Project (2016), there have been 347 post-conviction DNA exonerations in the United States since 1989, with the average time served 14 years before exoneration; approximately 27% of those cases were incarcerated with false confessions; of those confessions, 63% were wrongful convictions for homicide. As of July 19, 2016, the annual cost of housing a federal inmate in the United States was \$26,082.90 for a Community Corrections Center or \$31,977.62 for a Federal Corrections Facility (Annual Determination of Average Cost of Incarceration, 2016). On a local level, based on the 2010 expenditures for the Oklahoma Department of Corrections, the cost ranged from \$36.31 to \$75.87 per day depending on the type of facility the offender was housed in—Work Center to Maximum Security—equaling \$13,253.15 to \$27,692.55 per year, respectively (<http://www.ok.gov/doc/faqs.html#q1759>).

When guilty people are not caught, they may continue in their criminal activity. There is no way to know how many crimes could be prevented if the actual guilty person is caught the first time. Acker (2012) has compiled a short list of thirty individuals that were convicted for crimes they did not commit. The guilty offenders in those eighteen initial cases went on to commit more than 108 combined crimes, including but not limited to: assault, murder, drug crimes, sexual assault, home invasion, and robbery (Acker, 2012). The present study will help determine if law enforcement gives the accused person time to build up their self-control resources, whether or not the number of false confessions will diminish.

## **Chapter 2: Investigation and interrogation bias**

There is a struggle within the criminal justice system. The struggle of trying to defend our public from violent acts conducted by criminals and keeping the personal rights and liberties safe for each individual cultivates a burden within our criminal justice system (McCann, 1998). The police feel pressure to find the person responsible for a crime as soon as possible. With the pressure on them, law enforcement personnel interview and interrogate people they believe are responsible for the crime. Law enforcement officials need to understand that not every person they think committed a crime is actually guilty and approach the interview and interrogation in that manner.

The main difference between an interview and interrogation is the structure in which they are conducted. Inbau Reid, Buckley, and Jayne (2004) explain that an interview can take place anywhere; it can be at a location that the person being interviewed feels more comfortable or when the investigator suggests. Interviews are not guilt presumptive. An interview is a way for the investigator to build rapport and trust with an individual that cannot be obtained during an accusatory interrogation. The interview is a place to gather information. The language used in an interview is not accusatory, but more inquisitive in nature. An example of an interview question would be, "Is there anyone you think may have done this?" or "Have you ever considered doing something like this, even though you may not have gone through with it?" Investigators may have a strong suspicion that they are talking to the person that perpetrated the crime, or they may not have a clue and are only looking for direction from someone that may have witnessed the crime. The interview is generally laid back, but the investigator is watching for behavioral cues to help determine guilt. Verbal cues can include the person's attitude, body posture, eye contact, body movement, or verbal responses.

An interrogation is different because it is very guilt presumptive. The investigator believes they have the correct perpetrator of the crime. The interrogation is formal and inquisitory questions may be made as accusatory statements. The interrogator uses the same behavioral cues in the hope of obtaining a confession. The interrogation is conducted in a room that furniture is strategically positioned. The interrogator continues to talk and accuse the person being interrogated giving them only enough time to confess before continuing with the accusations if a confession is not obtained. An interrogator essentially badgers the person being interrogated until they confess (Inbau et al., 2004).

During the interrogation process, innocent people are susceptible to the effects of biases that develop during the investigation (Narchet, Meissner, & Russano, 2011). The interrogation is an intense process and, depending on the force of the technique used, can lead to false confessions. Confessions develop a huge bias influence on the “perceptions and decision-making of criminal justice officials and lay jurors alike because most people assume that a confession, especially a detailed confession, is by its very nature, true” (Leo, 2009). Confessions, whether true or false, are huge for a case against the accused person. Because people do not believe that a person would confess to a crime they did not commit, the prosecution uses the confession to convince the jury of the accused’s guilt. There is a colossal problem in false confessions, due to juries believing them, which leads to the individual being wrongly convicted (Kassin & Gudjonsson, 2004). In a trial setting, the jury will likely convict the wrong person for a crime they did not commit, if the confession is false.

Kassin and Kiechel (1996) developed an experimental paradigm that would challenge the thought that people do not confess to crimes they did not commit. The paradigm consisted of using a computer, then telling the person to not touch a specific key during the process of the

experiment because it would end the experiment and all data would be lost. With all experiments, the experimenter remotely shut the computer down; the experimenter accused the participant of touching the forbidden key and then interrogated them in minimization techniques and some were offered leniency; then the experimenter asked for a signed confession. Overall, 69% of the 75 participants signed a confession. This study showed that even in an unimportant task like touching a computer key, innocent people will confess to something they did not do. The computer paradigm was an important breakthrough for researchers and was studied extensively for close to a decade until Russano, Meissner, Narchet, and Kassin (2005) developed an experimental paradigm that aimed to determine confession rates between both innocent and guilty participants based on interrogation techniques.

The Russano et al. paradigm (2005) involved a participant and confederate working on a team building task, having to fill out problem solving questions individually and then working together to fill out group problem solving questions. In the guilty condition, the participant was asked for help by the confederate on an individual question. In the innocent condition, the confederate did not ask for help. In both conditions, the experimenter came in, saying that both participant and confederate had the exact same answer on a specific question and accused them of cheating. The experimenter separated them, and continued to interrogate the participant with either minimization or no minimization techniques. Russano et al. found that both guilty and innocent participants confess under the manipulation of interrogation tactics (Russano et al., 2005). Using the same innocent and guilty experimental paradigm, Narchet et al. (2011) used both minimization and maximization interrogation techniques to gain confessions, with an interrogator bias towards the person being interrogated. The interrogator had either a guilty bias, an innocent bias, or no bias. The results of this study showed that if the participant was innocent,

minimization techniques increased the pressure to confess; and if the the interrogator had a guilty bias on innocent participants, they were more likely to get a false confession than the innocent biased interrogator. The study also found that the bias of the interrogator determined how many tactics of either minimization or maximization were used during the interrogation (Narchet et al., 2011).

There are three different types of false confession. These types consist of voluntary confessions, coerced-compliant confessions, and coerced-internalized confessions (Kassin, 1997; Kassin, 2008; Kassin & Gudjonsson, 2004; Kassin et al., 2010; McCann, 1998). Voluntary false confessions are given without any pressure from law enforcement. It is given by the confessor because they feel the need for fame or notoriety (McCann, 1998). Coerced-compliant false confessions are given by the confessor because they have been manipulated by law enforcement officials and confess as a way of escaping a bad situation or feel that the evidence will exclude them in the end. Coerced-internalized false confessions occur when the vulnerable confessor has been manipulated by law enforcement personnel and believes he/she has committed the crime in question, even though they are innocent (Kassin, 2008). According to Leo (2009), after the police have aquired a confession, they will close their investigation as if it is solved; the confession may be inconsistent or have been coerced out of the confessor. If the case has been closed, it leaves the confessor with no one looking for other evidence that may exclude him/her from the crime committed.

### Chapter 3: Tricks to deceive and obtain a confession

In America, law enforcement officials are allowed to deceive the person being questioned during interrogations to promote confessions as addressed in *Frazier v. Cupp* (1969). This deception may include false evidence or exaggeration of the facts. *Miranda v. Arizona* (1966) requires police to inform any person arrested of their rights to legal representation and that they may remain silent, in an effort to avoid self-incrimination. The arrested person may waive their rights or request an attorney at any time during the interrogation. If the person being interrogated is innocent, they may waive their rights because they feel there is nothing to hide, or they may not fully understand the rights that were read to them. This is where the police become able to manipulate. The interrogator should never take the guilty admission at “face value,” but rather look into everything that surrounds the confession, including body language and the dialogue of the interrogation, to help determine the validity of the confession” (Walton, 2003). The innocence of a person could be the very thing that puts an innocent person at risk (Kassin, 2005). If an admittance of guilt is provided in any interrogation, law enforcement officials should look into what provoked it and do further investigations to be sure that it is a true confession.

Interrogation by nature is a guilt-presumptive process, using theories and social interaction to extract a confession from the accused person (Kassin & Gudjonsson, 2004). Inbau, et al. name nine steps for interrogation, also called the Reid Method. These steps are to be used after an initial interview and when the investigator has come to the conclusion that they have the right person for the crime. The Reid Method uses behavioral cues to help during the interrogation process, focusing on verbal, paralinguistic and nonverbal channels (Inbau et al., 2004). Questions are specifically asked in an interview before the interrogation to induce a behavioral reaction from the person for the investigators to develop a hunch as to if that person was involved in the



crime (Kassin et al., 2010). Focusing on these behavioral reaction cues helps law enforcement during the investigation, but it should not be the only thing they focus on. These behavior cues can lead the investigator to presume guilt when the person in question is actually innocent. The pre-interrogation interview can lead to an investigator confidently creating a prejudgement that the suspected person is guilty, leading to an interrogation. This can cloud the investigator's judgments and their collection of evidence and information, leading the focus to the wrong person accused of the crime (Kassin, Goldstein, & Savitsky, 2003).

Using general psychology college students as participants, Kassin et al. (2003) performed a study that tested the presumption of guilt, and how it effected the process of interrogation. There were two phases. The first phase focused on how the interrogators' expectations influenced their perceptions and behavior before, during and after interrogation. The interrogator was able to choose six questions from a list that would help them during their interrogation; the questions they could choose from were either neutral or guilt-presumptive. After the questioning ended, the interrogator, the person accused, and a panel of observers filled out a questionnaire. The questionnaire was to determine how hard the interrogator worked to get a confession. The second phase of the study focused on the suspects—participants—to see if they had been manipulated by the interrogators' expectations. With this study, Kassin et al. found that interrogators' judgements were not altered by actual innocence or guilt, but the behavior of the interrogators was affected. The interrogators in the study worked harder to provoke a confession from suspects who were actually innocent than those who were guilty.

During the interrogation process, the interrogator has the choice of which interrogation tactics he/she will use. The goal of the interrogator is to obtain any information that will help in the investigation and prevent further harm to others (Walton, 2003). The investigator will either

use maximization or minimization techniques. Maximization includes many strategies that are designed to express the questioner's unyielding confidence that the suspect is guilty and any denials of guilt by the suspect will not be successful (Kassin et al., 2010). The tactics that are involved in maximization consist of making accusations, a presentation of evidence, true or artificial, and refusing to listen to objections from the person in question. The interrogation method is very accusatory in nature. It is guilt presumptive, using manipulation to take control. Some of the procedures of the accusatory method in interrogation are isolating and/or intimidating the suspect, asking the same questions repeatedly, and rejecting denials (Kelly, Miller, Redlich, & Kleinman, 2013). With the use of maximization techniques in interrogation, fear and threats have been known to be very efficient influences to gain confessions (Walton, 2003).

The main principles of the minimization technique of interrogation are based on friendliness and attempting to gain the suspect's trust by underrating the seriousness of the wrongdoing (Kelly et al., 2013). The strategies used in minimization include providing excuses for the accused, reducing the seriousness of the crime committed and conveying sympathy for person and the crime he/she may have perpetrated, with the interrogator conveying that he/she would have behaved in a similar way. Minimization tries to justify the crime to the suspect to elicit the confession. Kassin et al. (2010) explains that minimization tactics that imply leniency could very easily lead innocent suspects to confess when they feel trapped in the interrogation.

Horgan, Russano, Meissner, and Evans (2012) conducted a study, using the guilty/innocent paradigm (Russano et al., 2005) to determine if the use of certain maximization and minimization tactics were more "diagnostic" than others. In the first experiment, participants were asked to read a description from Russano et al. then asked to estimate the probability that

others would sign a confession, and if they, the participant, would sign a confession if put in a similar situation. In the second experiment, participants actively participated in the Russano et al. paradigm. In the interrogation stage, depending on the participant's randomly assigned condition, the experimenter either manipulated the consequences or gave no manipulation, to obtain a signed confession from both innocent and guilty participants. The study found that the participants did not recognize the impact of the manipulative interrogation techniques when they estimated their own decisions to confess. The participants of the first experiment did not think a confession was likely to be elicited, suggesting that the participants did not think the power of the interrogation was very substantial (Horgan et al., 2012). The findings of the Horgan et al. experiment shows that people do not think they would confess if in an interrogation, but they do not understand how manipulative the interrogation really is, even after reading how one would go.

According to Kassin and Gudjonsson (2004), most confessions that were provoked during interrogation can be categorized into four groups. The groups consist of true confessions, false confessions, true denials, and false denials. The three reasons that false confessions cannot be recognized easily are as follows: the nature of people is to be trusting of behaviors, people are not very skilled at identifying deception, and when police induce the confession, the content of the confession can contain details of the crime that associate truthfulness to the confession (Kassin et al. 2010). Each of these reasons can be linked to the types of false confessions explained earlier—voluntary, coerced-compliant, and coerced-internalized.

According to Kassin and Gudjonsson (2004), there are several ways in which a confession can be acknowledged as false. If it is discovered that the crime was actually never committed, such as a murder and the apparent victim is found alive, the confession will be

recognized as false. If there is additional information and evidence that proves that it would be physically impossible for the confessor to have committed the crime, such as being out of the country when the crime occurred, the confession will be deemed false. If the real culprit is caught and connected to the crime, such as knowing the details of the crime that no one else would know, the confession would be determined to be false. Lastly, if there is scientific evidence that exludes the confessor from the crime, such as DNA test results establishing that it is not the confessor's DNA on the victim, the confession will be ruled as false. These ways to exonerate suspects require law enforcement officials to continue to look for and at the evidence of the crime after the confession has been obtained.

#### **Chapter 4: Maintaining self-control despite the influence**

During the interrogation, law enforcement officials are manipulative and can be very persuasive. “Resisting a persuasive influence is often hard work. One must have not only a desire to resist but also the willpower to hold fast in the face of a potentially tempting alternative—giving in” (Burkley, 2008). Language is the most often used style of persuasive communication, making linguistic style and word choice substance key in the determination of successful persuasion (Blankenship & Craig, 2006). Basically, the way the questions are asked in an interrogation are just as important as the questions alone. It can be hard to resist an argument when the interrogator is making the accusatory points. Blankenship and Craig (2006) found that when rhetorical questions were used, there was a superior attitudinal resistance to attacking arguments; meaning that rhetorical questions used during interrogations can help a person resist the strong arguments of the interrogator, but this is not always enough. Janssen, Fennis and Pruyn (2010) found that a person is more successful at resisting unwanted influences when their self-regulatory resources are high, rather than low. Self-control resources must be built up to avoid persuasive arguments.

Muraven (2010) conducted a self-control study, randomly assigning participants to one of four conditions: 1) Avoid sweets for two weeks, 2) Use a handgrip twice a day for as long as possible, 3) Do a set of math problems daily for two weeks (difficulty increased as the two weeks progressed), or 4) Keep a daily diary, writing all the ways they practiced self-control for that day. The participants also called a telephone system daily to report the status of their self-control for the day and if they thought practicing was improving their self-control. The conditions were used for two weeks to determine if self-control could be built, based on the exercises that they were participating in. Using the stop signal procedure (de Jong, Coles, Logan, & Gratton, 1990),

participants' baseline self-control capacity was measured and again at the end of the two weeks. Muraven found that participants in the two conditions that were considered to build strength—avoiding sweets for two weeks and using a handgrip twice a day for as long as possible—were more successful at the end of the two weeks in the stop signal, than the participants that were in the other two conditions. Completing math problems and keeping a daily diary were used to exclude alternate reasons. This study shows that when people actively work on their self-control and building up their resources, they are able to control themselves and their reactions.

If a person exhausts their self-control reserves, they will not have the power to resist temptations or arguments again without a wait period to replenish the resources. In an interrogation sense, the suspects have forewarning that they will need their self-control in the near future. Conserving the self-control resources will remove the effect that completely depleting the resources has in resisting persuasion. When the resources have been completely exhausted, the person does not have any fight left to resist persuasive arguments (Janssen et al., 2010). Although reserving self-control is the goal for actively resisting persuasion, when people are worrying about conserving their self-control resources, they are using their resources which can lead to a poor performance of self-control (Muraven, Shmueli, & Burkley, 2006). If people have recently depleted their self-control reserves, they may try to hold on to their self-control too tightly, contradicting the effect of the reserves. Self-control resources are only expelled in the resistance of strong arguments, not weak ones; so, strong arguments of interrogation should be resisted if all the resources for self-control are intact (Burkley. 2008). Tormala and Petty (2004) found metacognitive processing is used to process high elaboration of thinking—thinking and having thoughts about those thoughts—allowing a person to resist an argument and become more confident in their original attitude; essentially, a person that has a large quantity of thoughts

and concern for those thoughts are able to process and resist persuasion with certainty in their initial arguments. Confidence is a powerful tool to resist future accusations of the same crime.

### **Chapter 5: Do personality traits influence confessions?**

Shrantz (2014) conducted a study that focused on personality and situational correlates that can lead to false confessions. Shrantz used the Kassin and Kiechel (1996) paradigm to determine if false confessions are related to social exclusion involved in interrogations. The study focused on participants' need to belong and self-esteem scales, as well as the participants' situational correlates of experiences in parental and close relationships scales and a relationship questionnaire. Many interesting factors in false confessions were found. The avoidance of attachment in participants predicted the likelihood of false confessions. Participants that were excluded from the activity were more likely to give a false confession than those that were not excluded. The use of both maximization and minimization were also indicative of false confessions across all participants (Shrantz, 2014). These personality correlates can be a great asset to the research of interrogations and confessions. Personality correlates can give an in-depth look at some of the possible personality reasons for false confessions and how to prevent false confessions.



## **Chapter 6: Present Study and Hypothesis**

The present study used the Russano et al. (2005) paradigm. It focused on the relationship between confession rates with participants that are given time to collect their self-control resources and those that are not given any time, for both guilty and innocent participants. It provides insight into the confession rates where the interrogator presumes the guilt of all participants, using interrogation techniques within the Reid Method of Interrogation, focusing on a minimization interrogation model. The present study takes into account different personality characteristics when looking at confession rates and time given, in an effort to further investigate the findings of Schrantz's (2014) study.

In the current study, there are three hypotheses, the first hypothesis is that the guilty participants will confess to cheating more than the innocent participants. The second hypothesis is that the participants that receive time to collect their self-control resources will give fewer confessions than those who do not receive time, despite actual guilt or innocence. The third hypothesis is that innocent participants with the time to collect their self-control resources will yield the fewest confessions. The current study uses an experimental paradigm to study these hypotheses.

## Chapter 7: The study

### Method

#### Participants

Forty-eight undergraduate students enrolled in undergraduate psychology courses at a southern, metropolitan university participated in the current study for course credit (Appendix A). Two participants were removed from analysis; one participant's data were dismissed because the participant did not complete the online personality assessments and the other participant's data were dismissed because the participant was in the guilty condition, but maintained actual innocence during the study. There were 34 females and 12 males in the analysis. The mean age was 20.43 years ( $SD = 4.65$ ). Sixty-three percent of the participants identified as White, 13% identified as Black, 8.7% identified as Hispanic, 8.7% identified as mixed, and 6.5% identified as Native American.

#### Materials

The materials for this study consisted of the Nintendo® Wii game, *Super Mario Bros. Wii* for the rapport building phase (Appendix B). There were three problem-solving packets per participant, including two individual (Appendix C) packets, one for the participant and one for the confederate, and one group (Appendix D) packet for the participant and the confederate to complete together for the problem-solving phase. The interrogator attended the John E. Reid and Associates three-day training seminar for interviewing and interrogation (Appendix E). The participant and confederate were asked to complete a questionnaire that collected their demographic information for the filler phase (Appendix F). The study also collected the

following personality assessments to help determine if personality characteristics had any impact on false confessions obtained.

**Attachment.** The Experiences in Close Relationships (Brennan, Clark, & Shaver, 1998) consists of 36 statements that are rated on a 7-point Likert-type scale (1 = strongly disagree; 7 = strongly agree; Appendix G). This assessment measures the attachment style of the participant in their romantic partners.

**Need for closure.** The Need for Closure Scale (Kruglanski, Webster, & Klem, 1993) consists of 42 statements that are rated on a 6-point Likert-type scale (1 = strongly disagree; 6 = strongly agree; Appendix I). This scale measures the participant's need for cognitive closure on topics—a clear cut answer.

**Preference for consistency.** The Preference for Consistency (Cialdini, Trost, & Newsom, 1995) consists of 18 statements that are rated on a 9-point Likert-type scale (1 = strongly disagree; 9 = strongly agree; Appendix J). This assessment measures the participant's inclination for consistency.

**Need to belong.** The Need to Belong Scale (Leary, Kelly, Cottrell, & Schreindorfer, 2013) consists of 10 statements that are rated on a 5-point Likert-type scale (1 = strongly disagree; 5 = strongly agree; Appendix K). This assessment measures the need for acceptance and belonging in their social interactions.

**Dark triad.** The Short Dark Triad (Jones & Paulhus, 2014) consists of 28 statements that are rated on 5-point Likert-type scale (1 = strongly disagree; 5 = strongly agree; Appendix L). This assessment measures the dark, “aversive” personality traits of the participant, namely: Machiavellianism, narcissism, and psychopathy.

## Procedure

Participants joined the experiment using the UCO SONA system. The participants thought they were joining an experiment that covered individual versus team decision making, with a series of logic problems to solve (Appendix M). There were two parts to this experiment. For Part 1, the participants were asked to answer an assortment of personality assessments on Qualtrics software for Part 1. After completion of the personality assessments, the participants were able to schedule an appointment to complete the experiment, in the lab, for Part 2. The experimenter was the interrogator. The experimenter attended the John E. Reid and Associates training seminar for interviewing and interrogation to learn the techniques of interrogation. A confederate joined the participant during the lab portion of the experiment. Informed consent was obtained twice, once before Part 1 and again before Part 2.

During Part 2, participants were randomly assigned to one of four cells within the design, (innocent vs guilty)  $\times$  (time given vs no time given). The experimenter was blind to the condition of all participants during the lab portion. Only the confederates were privy to the condition of the participants. The experimenter wore noise canceling headphones, with music playing, to avoid listening to the experiment while in progress. All participants participated in a rapport building activity with the confederate. There were two confederates used through the duration of the study. They were both females, aged 22 and 25 respectively. Both confederates identified as White.

The rapport building activity consisted of playing a game of Nintendo® Wii's *Super Mario Bros. Wii* set at two players working together and individually at the same time. After the experimenter received informed consent, the participants started their rapport building exercise. After seven minutes, the experimenter returned to the room to start the problem solving phase.

For the problem solving phase, the experimenter gave the participant and confederate three packets. Before leaving the room, the experimenter explained that the participant and confederate should work individually on the individual packets but should work together on the group questions; this was considered the “critical rule” of the experiment (Russano et al., 2005). They were given fifteen minutes to answer the problems in the packets. If the participant was in the guilty condition, the confederate asked for help on the second individual problem. If the participant was in the innocent condition, there was no communication during the individual packets. After completion of the packets, or fifteen minutes had lapsed, the problem solving packets were collected and the participant and confederate were asked to complete a questionnaire about their demographic information. This was a filler phase.

In all conditions, the experimenter returned, stating that there was a problem with one of their answers matching and that they were going to have to be separated to investigate it, taking the confederate out of the room. If the participant was in the time given condition, the experimenter waited before interrogation to give the participant a chance to collect themselves. If the participant was in the no time given condition, the interrogation began immediately. The interrogation loosely followed a script (Appendix N). The experimenter continued to interrogate the participant until the participant signed a confession, or until ten minutes had passed (Appendix O). If a confession was signed, the participant was immediately debriefed. If a confession was not reached within the ten minutes of interrogation, the participant was immediately debriefed upon completion of the ten minutes of interrogation. If the participant asked to leave at any point during the experiment or interrogation, the participant was immediately debriefed. There were no participants during this study that requested to leave during any portion of the study. There were other contingencies in place for reactions the

participant could have shown during the interrogation process (Appendix P). At the end of the debriefing phase, the experimenter asked if the participant had actually cheated and warned the participant of the consequences of cheating in the future.

### Results

Of the 46 participants that completed both portions of the study, there were 23 total confessions obtained, with only 4 (17% of all confessions) being false confessions. The average time for a confession to be obtained was 8 minutes and 26 seconds. Table 1 displays the number of confessions in each condition. Graph 1 shows the confessions obtained per condition. If the condition was innocent, it was a false confession. If the condition was guilty, it was a true confession. There were 10 (44% of all guilty participants) guilty participants that self-reported being innocent, even after finding out that the confederate was involved with the study; while there were 3 (13% of all innocent participants) innocent participant that self-reported being guilty.

**Table 1.** *Confession types per condition.*

Condition	Confession	No Confession
Innocent Time	2	10
Innocent No Time	2	9
Guilty Time	9	2
Guilty No Time	10	2



*Graph 1. Confessions obtained per condition.*

The first hypothesis of this study was that guilty participants would confess to cheating more than the innocent participants. A Chi-square test of independence indicated that condition of guilt and confessions obtained were not independent of each other,  $\chi^2(1, N = 46) = 19.57, p < .001, K = -.65, p < .001$ . There were 19 (83%) guilty participants and only 4 (17%) innocent participants that confessed to cheating. The second hypothesis was that the participants that received time to collect their self-control resources would give fewer confessions than those who did not receive time, despite actual guilt or innocence. A Chi-square test of independence indicated that condition of time and confessions obtained were independent of each other,  $\chi^2(1, N = 46) = .35, p = .56, K = .09, p = .55$ . There were 11 (48%) participants that were given time that confessed to cheating, where only 12 (52%) confessed that were not given time. The third hypothesis was that innocent participants with time to collect their self-control resources would yield the fewest confessions. A Chi-square test of independence indicated that the overall condition of participant, including time and guilt conditions, and confessions obtained were not

independent of each other,  $\chi^2(3, N = 46) = 19.58, p < .001, K = .01, p = .84$ . Innocent participants with time gave 2 (17%) confessions. Innocent participants that were not given time gave 2 (18%) confessions. Guilty participants with time gave 9 (81%) participants confessing; guilty participants that were not given time gave the most confessions, with 10 (83%) confessions. A Chi-square test of independence indicated that confederate used and confessions obtained were independent of each other,  $\chi^2(1) = 1.39, p = .24, K = .17, p = .24$ . There was not a hypothesis concerning the personality assessments. The exploratory investigation into personality assessments was to help further examine how personality characteristics influence confessions on both guilty and innocent participants. The Need for Closure Scale and Preference for Consistency Scale were significantly correlated,  $r(40) = .414, p = .006$ . The Need for Closure Scale and the Need to Belong Scale were significantly correlated,  $r(42) = .325, p = .032$ . The Need to Belong Scale and Preference for Consistency Scale were significantly correlated,  $r(42) = .429, p = .004$ . The Short Dark Triad-Machiavellianism and the Short Dark Triad-Psychopathy were significantly correlated,  $r(42) = .557, p < .001$ .

A direct logistic regression was used to analyze the data. All personality assessments were entered at the same time. The overall model did not indicate that personality assessments significantly predicted all confessions,  $\chi^2(8, N = 46) = 11.07, \text{Nagelkerke } R^2 = .32, p = .20$ . Further analysis of the individual personality assessments and confederate revealed that Machiavellianism from the Short Dark Triad did significantly predict an obtained confession,  $p = .03$ . There were no other personality assessments that significantly predicted confessions obtained, but there were some that approached significance. Table 2 displays the overall model with the individual personality assessment and confederate predictors.



**Table 2.** Regression statistics for personality assessments.

Overall Model	$X^2$	df	Nagelkerke $R^2$		$p$			
	11.07	8	.32		.20			
Individual Predictors	B	SE	Wald $X^2$	df	Exp(B)	95% C.I. for Exp(B)		$p$
						Lower	Upper	
Avoidance	-.23	.46	.24	1	.80	.32	1.98	.62
Anxiety	-.97	.64	2.30	1	.38	.11	1.33	.13
Need for Closure	-.02	.03	.59	1	.98	.92	1.04	.44
Preference for Consistency	.02	.03	.55	1	1.02	.97	1.07	.46
Need to Belong	.13	.10	1.76	1	1.14	.94	1.38	.18
SD3-Machiavellianism	1.85	.87	4.50	1	6.34	1.15	34.95	.03*
SD3-Narcissism	-.05	.77	.004	1	.95	.21	4.33	.95
SD3-Psychopathy	.38	.71	.29	1	.59	.36	5.92	.59
Constant	-4.11	5.20	.62	1	.43			.43

Note. \* $p < .05$

The demographic questionnaire asked all participants if they had been previously penalized for academic misconduct. There were four participants that self-reported being penalized for academic misconduct; two confessions were obtained from these participants, one of which was a false confession.

A direct logistic regression was used to analyze the innocent participant data. All personality assessments were entered at the same time. The overall model indicated that personality assessments significantly predicted false confessions,  $X^2(8, N = 23) = 20.45$ , Nagelkerke  $R^2 = 1.00$ ,  $p = .01$ . Table. 3 shows the overall model between innocent participants and confessions obtained. There was not significance found with any particular personality characteristic. The table shows that the combination of the personality assessments together works, but further investigation of each one does not, indicating that some of the personality assessments and characteristics are highly correlated with each other.

**Table 3.** Regression statistics for personality assessments with innocent participants.

Overall Model	$\chi^2$	Df	Nagelkerke $R^2$	$p$				
	20.45	8	1.00	.01*				
Individual Predictors	B	SE	Wald $\chi^2$	df	Exp(B)	95% C.I. for Exp(B)		$p$
						Lower	Upper	
Avoidance	-49.63	9909.02	.00	1	.00	.00		1.00
Anxiety	-40.17	5050.26	.00	1	.00	.00		.99
Need for Closure	.01	248.98	.00	1	1.03	.00	.00	1.00
Preference for Consistency	-2.19	400.82	.00	1	.11	.00		1.00
Need to Belong	19.16	2250.72	.00	1	209215866.3	.00		.99
SD3-Machiavellianism	-19.89	6004.50	.00	1	.00	.00		1.00
SD3-Narcissism	-250.24	26816.47	.00	1	.00	.00		.99
SD3-Psychopathy	4.31	5033.63	.00	1	.00	.00		1.00
Constant	625.31	74942.17	.00	1	.00			.99

Note. \* $p < .05$

After tripling the data through copy and paste, another standard logistic regression was completed to determine the analysis if more participants had been acquired. The analysis indicated that there was a significant effect of personality assessments and confessions being obtained,  $\chi^2(8, N = 138) = 33.22$ , Nagelkerke  $R^2 = .33$ ,  $p < .001$ . Further analysis of the individual predictors of the personality assessments indicate that Anxiety,  $p = .01$ , the Need to Belong,  $p = .02$ , and Machiavellianism,  $p < .001$ , significantly predicted whether a confession was obtained. It is important to note that this regression was exploratory and was only used to determine if the study would have been successful if it had more power. The missing data from the personality assessments was interpolated by using the mean of each variable. The results found that SD3 Machiavellianism,  $p = .04$  significantly predicted a confession in the original data set. On the data set that was tripled for exploratory purposes, Need for Closure  $p = .04$ , and SD3 Machiavellianism,  $p < .001$ , both significantly predicted an obtained confession.

### Discussion

The study was statistically underpowered and cannot confirm nor deny that time prevents false confessions, but the results of the study indicate that giving time to a person does not prevent false confessions from being obtained. The investigator of the study did accurately

predict that guilty participants would confess more than innocent participants, but did not correctly predict that providing time to participants would provide fewer confessions than those participants that did not have time. Time did not appear to have an effect on confessions being obtained by guilty or innocent participants, overall. The guilty and innocent conditions appeared to confess equally whether given time or not, respectively. The data indicated that innocent participants that were given time would yield the fewest confessions overall was predicted successfully by the investigator, but it is important to note that there was an uneven number of participants across the conditions; there were 11 participants in two conditions and 12 participants in the other 2 conditions. The data could have been different if the participant count was even through all conditions. Overall, the participants of this study indicate that regardless of consequences, people are generally honest; this study only reported 4 false confessions and 4 guilty non confessions.

Inbau, et al. (2004) recommends that the interrogator wait five minutes after the person has been placed in the interrogation room before starting the questioning. This time is similar to the ten minutes used in the current study, but did not show to have a significant effect under the circumstances of this study and actually appeared to weaken the study. Many of the participants that were given time asked what the confederate had said about cheating after they were removed from the room. These participants became defeated when told the confederate confessed to cheating. This supports the isolation effect on confessions that Schrantz (2014) found. The isolation could be further represented in real world scenarios where a person is placed in a room that is clearly labeled for interrogation. Substantial time waiting in an interrogation could lead to increased anxiety and possibly false confessions. A new direction in this paradigm could involve removing the participant from the room, rather than the confederate, and placing them in an

“interrogation” room for the interrogation portion of the experiment. Beginning the interrogation immediately could bring forth more true confessions and avoid false confessions, or waiting for a period of time before interrogation under the before mentioned new direction could further imitate a true police interrogation.

The personality assessments indicate interesting results. The study did not have the power necessary for the overall model to have significant results, but Machiavellianism from the Short Dark Triad within the overall model did show significance in predicting an obtained confession. Machiavellianism is a personality characteristic that indicates a person is so fixated on their own goals and interests that they will lie, manipulate, cheat, steal, and exploit others to attain or accomplish them, making this an interesting predictor in obtained confessions. The Machiavellianism predictor could show that the person is going to say anything just to get out of the interrogation and away from the room. There was also significance when the current data were tripled to determine if power would indicate a good study. Tripling the data was a way to determine if the study was a good study and if the personality assessments could predict obtained confessions. It is important to note that this was an exploratory regression when the original data was tripled. The exploratory regression did indicate a good study, with two personality assessments, Need to Belong and Machiavellianism, both predicting obtained confessions. Better understanding of personality could help prevent false confessions in the future. Police officers could use personality data to better understand the people they question on a daily basis. If anxiety is a predictor of false confessions, they know they should tread lightly with suspects that appear anxious.

There were many participants that stood out to the experimenter. There was a guilty female participant that knew what cheating was and even told the experimenter a definition of

cheating but she did not feel like she cheated. She told the experimenter that she told the confederate what she put on for the answer but “it wasn’t [her] fault they wrote down [her] answer.” She did not sign a confession. The experimenter had suspicions that this participant knew the true nature of the study, but the participant denied knowing anything about the study prior to participation. There was a guilty male participant that denied cheating, but signed a confession anyway. During debriefing, the participant found out the confederate was a part of the study, then the experimenter asked why he signed the confession, even though he claimed innocence, the participant claimed that he knew the experimenter needed confessions. The same male participant also claimed this was the first time he had actually been caught cheating. Upon being asked, he too denied knowing anything about the study prior to participation.

There was a guilty female participant that had been penalized for academic misconduct previously. She became irate during the interrogation when she found out that she was going to be turned in for cheating. She signed a confession and then apologized for her own behavior when told the true nature of the study. There was an innocent female participant that had been penalized for academic misconduct previously and had been arrested three days prior to her participation in the current study. She began to question whether or not she had actually cheated and was emotional. During debriefing, she told the experimenter that she was very close to saying she did it because she could not actually remember and would take all the help she could get at an academic misconduct hearing. She did not sign a confession. There was an innocent male participant that verbally confessed to cheating very quickly and signed a confession. After debriefing, he still believed that he had cheated and had to be told that he was actually innocent.

There was an innocent female participant that cried. She explained during debriefing that they were scared tears at first then they turned to happy tears. She remained after interrogation

for a little while to completely compose herself. The experimenter stayed with her answering questions and comforting her. She did not sign a confession. The last participant of the study was a guilty female. During the interrogation, the experimenter walked in and told her that they knew cheating occurred. The participant immediately said she had done it and signed a confession. All of the participants had different reactions to being accused of cheating. Some cried, some became angry, and some froze up a little bit. There is never a specific emotional reaction, and any future experimenter should be prepared for any situation.

During the course of the study, there were verbal confessions given, even when there was not a written confession obtained. There were participants that began to question their memories of what actually happened and if they had cheated; for these participants, a confession could have been obtained if given more than the ten minutes allotted for interrogation purposes. Future research could benefit from a longer time allotment for interrogation, overall. There were also participants that wrongly maintained innocence or guilt, even after the confederate was revealed as part of the study. Those that maintained guilt when actually innocent would be considered to have given a coerced internalized confession.

Future research would of course benefit from more power, but should also consider looking at the personality assessment types of the participants that falsely maintain either guilt or innocence even after they have been debriefed. It could bring understanding about those that can maintain a specific disposition without wavering or questioning their thoughts. There has been quite a bit of research on false confessions, but more research could be done on true or false non-confessions. Non-confessions could bring better understanding to false confessions and personality types overall. More research could be focused in the time between the written problems and the interrogations. Many police agencies place their accused in a holding cell

before an interrogation begins. Though the entire process cannot be simulated, a longer wait time could be beneficial in determining if an extended period of time has any impact on confessions obtained.

It is also important to remember that The Reid Technique of Interviewing and Interrogations does teach that innocent people will not confess to crimes they did not commit. This is the leading training institute for law enforcement personnel when it comes to interviews and interrogations. Even as small as the four false confessions this study obtained, this maintains previous research that claims people will confess even when innocent. Further investigation should continue, even after a confession has been obtained to avoid prosecuting the wrong person.

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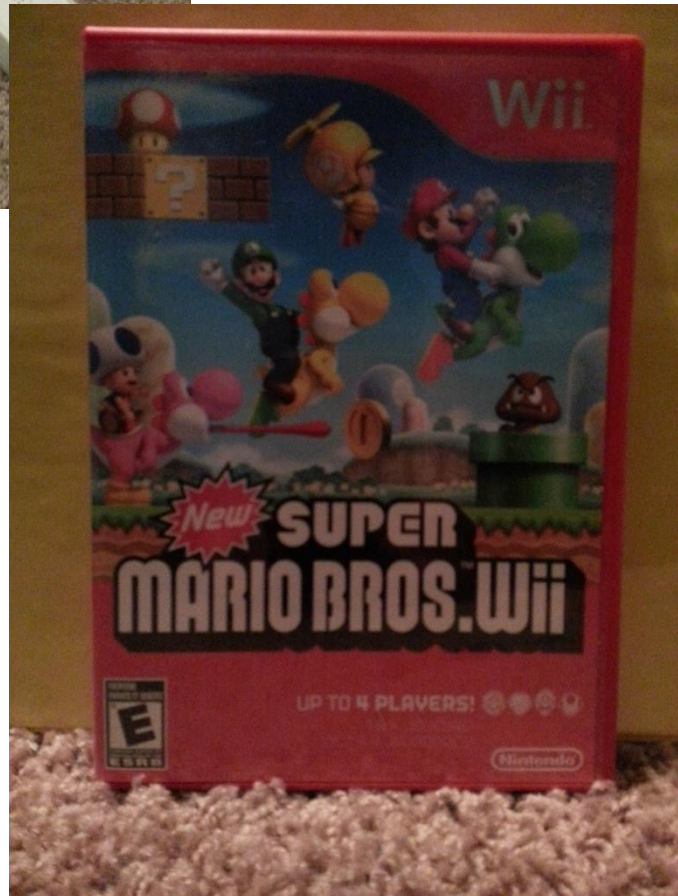
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## **Appendix A**

A G\*Power analysis was conducted to determine sample size, effect size, and power for the present study. The analysis showed that the total sample size should be 145 participants, with a 0.30 effect size and a 0.95 power.

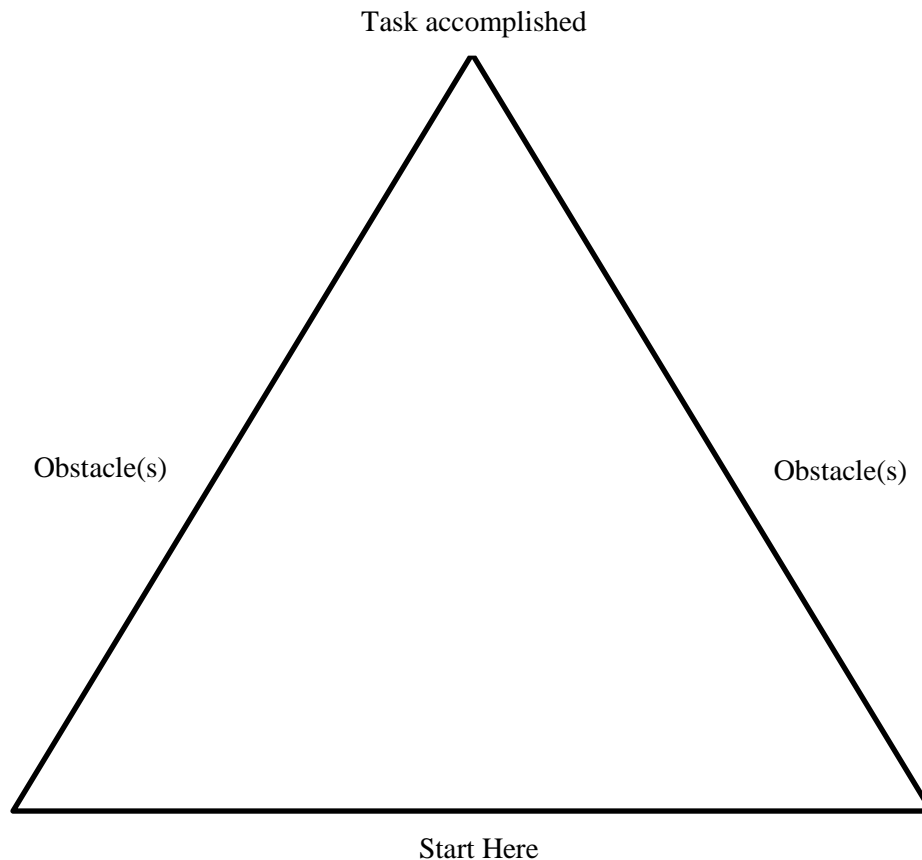
### Appendix B



## Appendix C

**Please answer the following questions individually.**

1. How did the activity change when you had to work together to accomplish the task, as opposed to doing it on your own? Was it easier or harder?
2. What are some ways you think you could make accomplishing a task simpler when there are multiple people? Please note that others may be there to accomplish the same task or help you with your task.
3. Look at the diagram below, what are some of the obstacles you faced working individually and by yourself that were involved in the activity you participated in today?



## Appendix D

**In the following questions, please work together to answer.**

1. In the task, what are the ways you worked together to accomplish the mission?
2. How did you decide on the way you would work on the task?
3. What were some of the complications you had to overcome together to be successful at the task?
4. Would the task have been easier with a person you already knew? Why or why not?
5. Did the task get easier the longer you worked together?



Appendix E

# John E. Reid and Associates

Chicago, Illinois

Hereby Certifies That

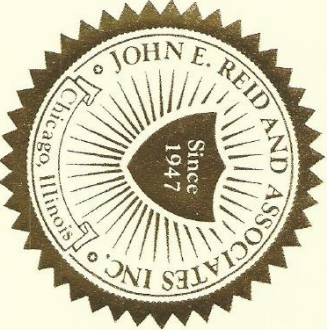
**Karissa Dugger**

Attended and successfully completed a Course

## on The Reid Technique of Interviewing and Interrogation

August 3-5, 2015

18 Continuing Professional Education Credits Awarded



*John E. Reid*  
Course Instructor

## Appendix F

Please answer honestly. Your answers will help in understanding the results of the study.

1. How old are you?
2. What is your sex? (Gender)
3. What is your race/ethnicity?
4. How many years of education have you completed?
5. Do you have any siblings? If so, how many?
6. What is your marital status? (Single, Married, Divorced, Separated, Other)
7. Do you have any kids? If so, how many?
8. How many programs and/or groups have you participated in the last 3 years?
9. Have you ever been penalized for academic misconduct?
10. Have you ever been arrested?

**\*\*note:** The answers to Questions 9 and 10 could impact the results of the study. If there is a history of academic integrity, it could be a factor with the results of the study. If the participant has been penalized for cheating before, they could treat the interrogation differently than someone who has not been penalized before. They may not confess in the allotted time for interrogation, due to the seriousness of the cheating accusation and their worries for their academic future. If a participant has been arrested previously, they may have been subjected to interrogation tactics before and may not confess in the max time allotted for interrogation.

## Appendix G

### Experiences in Close Relationships

*Instructions:* The following statements concern how you feel in romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it. Use the following rating scale:

Disagree strongly		Neutral/mixed		Agree strongly		
1	2	3	4	5	6	7

1. I prefer not to show a partner how I feel deep down.
2. I worry about being abandoned.
3. I am very comfortable being close to romantic partners.
4. I worry a lot about my relationships.
5. Just when my partner starts to get close to me I find myself pulling away.
6. I worry that romantic partners won't care about me as much as I care about them.
7. I get uncomfortable when a romantic partner wants to be very close.
8. I worry a fair amount about losing my partner.
9. I don't feel comfortable opening up to romantic partners.
10. I often wish that my partner's feelings for me were as strong as my feelings for him/her.
11. I want to get close to my partner, but I keep pulling back.
12. I often want to merge completely with romantic partners, and this sometimes scares them away.
13. I am nervous when partners get too close to me.
14. I worry about being close.
15. I feel comfortable sharing my private thoughts and feelings with my partner.
16. My desire to be very close sometimes scares people away.
17. I try to avoid getting too close to my partner.

18. I need a lot of reassurance that I am loved by my partner.
19. I find it relatively easy to get close to my partner.
20. Sometimes I feel that I force my partners to show more feeling, more commitment.
21. I find it difficult to allow myself to depend on romantic partners.
22. I do not often worry about being abandoned.
23. I prefer not to be too close to romantic partners.
24. If I can't get my partner to show interest in me, I get upset or angry.
25. I tell my partner just about everything.
26. I find that my partner(s) don't want to get as close as I would like.
27. I usually discuss my problems and concerns with my partner.
28. When I'm not involved in a relationship, I feel somewhat anxious and insecure.
29. I feel comfortable depending on romantic partners.
30. I get frustrated when my partner is not around as much as I would like.
31. I don't mind asking romantic partners for comfort, advice, or help.
32. I get frustrated if romantic partners are not available when I need them.
33. It helps to turn to my romantic partner in time of need.
34. When romantic partners disapprove of me, I feel really bad about myself.
35. I turn to my partner for many things, including comfort and reassurance.
36. I resent it when my partner spends time away from me.

## Appendix H

### Need for Closure Scale

1. I think that having clear rules and order at work is essential for success.
2. Even after I've made up my mind about something, I am always eager to consider a different opinion. (R)
3. I don't like situations that are uncertain.
4. I dislike questions which could be answered in many ways.
5. I *like* to have friends that are unpredictable. (R)
6. I find that a well ordered life with regular hours suits my temperament.
7. When dining out, I like to go to places where I have been before so that I know what to expect.
8. I feel uncomfortable when I don't understand the reason why an event occurred in my life.
9. I feel irritated when one person disagrees with what everyone else in the group believes
10. I hate to change my plans at the last minute.
11. I don't like to go into a situation without knowing what I can expect from it.
12. When I go shopping, I have difficulty deciding exactly what it is that I want. (R)
13. When faced with a problem I usually see the one best solution very quickly.
14. When I am confused about an important issue, I feel very upset.
15. I tend to put off making important decisions until the last possible moment. (R)
16. I usually make important decisions quickly and confidently.
17. I would describe myself as indecisive. (R)
18. I think it is fun to change my plans at the last moment. (R)

19. I enjoy the uncertainty of going into a new situation without knowing what might happen.  
(R)
20. My personal space is usually messy and disorganized. (R)
21. In most social conflicts, I can easily see which side is right and which is wrong.
22. I tend to struggle with most decisions. (R)
23. I believe that orderliness and organization are among the most important characteristics  
of a good student.
24. When considering most conflict situations, I can usually see how both sides could be  
right. (R)
25. I don't like to be with people who are capable of unexpected actions.
26. I prefer to socialize with familiar friends because I know what to expect from them.
27. U think that I would learn *best* in a class that *lacks* clearly stated objectives and  
requirements. (R)
28. When thinking about a problem, I consider as many different opinions on the issue as  
possible. (R)
29. I like to know what people are thinking all the time.
30. I dislike it when a person's statement could mean many different things.
31. It's annoying to listen to someone who cannot seem to make up his or her mind.
32. I find that establishing a consistent routine enables me to enjoy life more.
33. I enjoy having a clear and structured mode of life.
34. I *prefer* interacting with people whose opinions are very different from my own. (R)
35. I like to have a place for everything and everything in its place.
36. I feel uncomfortable when someone's meaning or intention is unclear to me.

37. When trying to solve a problem I often see so many possible options that it's confusing.

(R)

38. I always see many possible solutions to problems I face. (R)

39. I'd rather know bad news than stay in a state of uncertainty.

40. I do not usually consult many different opinions before forming my own view.

41. I dislike unpredictable situations

42. I *dislike* the routine aspect of my work (studies). (R)

## Appendix I

### Preference for Consistency Scale

Strongly Disagree

Neutral

Strongly Agree

1          2          3          4          5          6          7          8          9

1. I prefer to be around people whose reactions I can anticipate.
2. It is important to me that my actions are consistent with my beliefs.
3. Even if my attitudes and actions seemed consistent with one another to me, it would bother me if they did not seem consistent in the eyes of others.
4. It is important to me that those who know me can predict what I will do.
5. I want to be described by others as a stable, predictable person.
6. Admirable people are consistent and predictable.
7. The appearance of consistency is an important part of the image I present to the world.
8. It bothers me when someone I depend upon is unpredictable.
9. I don't like to appear as if I am inconsistent.
10. I get uncomfortable when I find my behavior contradicts my beliefs.
11. An important requirement for any friend of mine is personal consistency.
12. I typically prefer to do things the same way.
13. I dislike people who are constantly changing their opinions.
14. I want my close friends to be predictable.
15. It is important to me that others view me as a stable person.
16. I make an effort to appear consistent to others.
17. I'm uncomfortable holding two beliefs that are inconsistent.



18. It doesn't bother me much if my actions are inconsistent. (R)

## Appendix J

### Need to Belong Scale

**Instructions:** For each of the statements below, indicate the degree to which you agree or disagree with the statement by writing a number in the space beside the question using the scale below:

1 = Strongly disagree

2 = Moderately disagree

3 = Neither agree nor disagree

4 = Moderately agree

5 = Strongly agree

- \_\_\_\_\_ 1. If other people don't seem to accept me, I don't let it bother me.
- \_\_\_\_\_ 2. I try hard not to do things that will make other people avoid or reject me.
- \_\_\_\_\_ 3. I seldom worry about whether other people care about me.
- \_\_\_\_\_ 4. I need to feel that there are people I can turn to in times of need.
- \_\_\_\_\_ 5. I want other people to accept me.
- \_\_\_\_\_ 6. I do not like being alone.
- \_\_\_\_\_ 7. Being apart from my friends for long periods of time does not bother me.
- \_\_\_\_\_ 8. I have a strong need to belong.
- \_\_\_\_\_ 9. It bothers me a great deal when I am not included in other people's plans.
- \_\_\_\_\_ 10. My feelings are easily hurt when I feel that others do not accept me.

## Appendix K

### SHORT DARK TRIAD – 28 items



Please rate the degree to which you agree with the following statements.

- | 1                    | 2        | 3       | 4     | 5                 |
|----------------------|----------|---------|-------|-------------------|
| Disagree<br>Strongly | Disagree | Neutral | Agree | Agree<br>Strongly |
1. It's not wise to tell your secrets.
  2. Generally speaking, people won't work hard unless they have to.
  3. Whatever it takes, you must get the important people on your side.
  4. Avoid direct conflict with others because they may be useful in the future.
  5. It's wise to keep track of information that you can use against people later.
  6. You should wait for the right time to get back at people.
  7. There are things you should hide from other people because they don't need to know.
  8. Make sure your plans benefit you, not others.
  9. Most people are suckers.
  10. Most people deserve respect. (R)
  11. People see me as a natural leader.
  12. I hate being the center of attention. (R)
  13. Many group activities tend to be dull without me.
  14. I know that I am special because everyone keeps telling me so.
  15. I like to get acquainted with important people.
  16. I feel embarrassed if someone compliments me.(R)
  17. I have been compared to famous people.

18. I am an average person. (R)
19. I insist on getting the respect I deserve.
20. I like to get revenge on authorities.
21. I avoid dangerous situations. (R)
22. Payback needs to be quick and nasty.
23. People often say I'm out of control.
24. It's true that I can be cruel.
25. People who mess with me always regret it.
26. I have never gotten into trouble with the law. (R)
27. I like to pick on losers.
28. I'll say anything to get what I want.

## Appendix L

The screenshot shows a web browser window with two tabs labeled 'Study Information'. The address bar displays the URL: [https://uco.sona-systems.com/exp\\_info\\_participant.aspx?experiment\\_id=4088p\\_preview=1](https://uco.sona-systems.com/exp_info_participant.aspx?experiment_id=4088p_preview=1). The page content is titled 'Study Information' and features a blue 'PREVIEW MODE' warning box at the top. Below the warning is a table with the following rows:

<b>Study Name</b>	Individual vs Group Decision Making Part 1
<b>Study Type</b>	 <b>Web Study</b> This is an online study. To participate, sign up, then go to the website listed below to participate.
<b>Credits</b>	1 Credits
<b>Duration</b>	60 minutes
<b>Sign-Up Restrictions</b>	You must NOT have signed up or completed ANY of these studies: Fear of Alone Personality
<b>Abstract</b>	This is a two part study, which consists of a web survey portion and a lab participation portion. This section of the study will involve the participant filling out a questionnaire online before coming in for the lab activity.
<b>Eligibility Requirements</b>	English must be first language; participants must be over the age of 18
<b>Website</b>	You may not view the website until you sign up for this study.
<b>Researcher</b>	Karissa Dugger 

## Appendix M

### Common Script for Interrogation

The script for the interrogation is very simple. The interrogator will remain calm and continue to repeat herself until a confession is obtained or time has lapsed. The interrogator will not stop talking until a confession is obtained. This is a key factor in the Reid Method of Interrogation.

“I know you cheated. I want to sit down with you and see if we can get this matter straightened out. You were helping each other out. The questions are a little confusing. I know this is a scary situation but we can get it taken care of. Cheating can follow you around for the rest of your academic life and possibly longer. I know this doesn't seem like a big deal but the results of this study can seriously suffer due to your cheating. I need to know so that I can help my study. You are here for course credit. I'm sure you didn't have the intention of cheating during the study today. Let's get this taken care of so that we can move on. I know you cheated. There is no other way the answers could be the exact same. We can sort this out. I just need to know why you did it. Was it because you truly needed help or you just wanted to mess with the results? Was that it? You just wanted to mess with the results? Because if that is the reason you cheated I don't even need to be talking to you, but I can call Dr. Mather and your professor down here. That will not be a fun conversation to have. Just tell me why you cheated. I can help you, but you need to help yourself first. Tell me you did it so I can help you.”

“Thank you for coming clean. I'm going to have you write and initial a confession (Appendix G), so that my research will not suffer.”

## Appendix N

## Appendix O

### Contingencies for participant reactions during interrogation:

If a participant becomes emotionally distraught (crying/sobbing longer than three minutes continuously, unresponsive, hyperventilation, vomiting, angry/violent, etc.), the interrogation will immediately be stopped and the participant will be debriefed. During the debriefing, the participant will be assured that there will not be any adverse action taken regarding their academic standing.

If a participant becomes violent, the experimenter has been trained in Non-Violent Crisis Intervention procedure with former employer, Choctaw Nation of Oklahoma Mental Health Department. The experimenter has also been trained and completed all the requirements of the Council on Law Enforcement Education and Training for Peace Officers in the State of Oklahoma (Appendix Q).

Experimenter will also have the room set up with safety in mind. There will be an escape route for the experimenter at all times.

**\*\*note:** I was looking at “emotionally distraught” in as many ways as I could because I know everyone has a different reaction to being accused of something they may or may not have done. I have no reason to believe that a participant will react in any way like what is represented above, but I do want to be overly cautious when looking at contingencies.



Appendix P



# East Central University


Department of Human Resources  
Criminal Justice Program  
Ada, Oklahoma  
Affirms

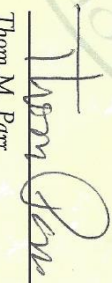
## Karissa L. Dugger

*has successfully completed*

**Law Enforcement Basic Skills Academy**  
**SFST - Radar - LEDT - Defensive Tactics - Firearms**

May 23<sup>rd</sup> 2011 through June 29<sup>th</sup> 2011

  
James W. Burke, Ph.D.  
Professor & Chair  
Department of Human Resources

  
Thom M. Parr  
Assistant Professor  
Criminal Justice Program

## Appendix Q

<b>ID</b>	<b>Unique Identifier</b>	<b>Age</b>	<b>Gender</b>	<b>Ethnicity</b>	<b>Siblings</b>	<b>Years of Education</b>	<b>Marital Status</b>
1	JW0417	23	Male	White	1	15	Single
2	Jess93	22	Female	White	1	16	Single
3	abb0797	18	Female	White	2	13	Single
4	kweber6	18	Female	White	3	12	Single
5	aubrey	20	Female	White	2	12	Single
6	M1997	18	Female	White	1	12	Single
7	Cool102	19	Female	White	2	13	Single
8	prodigy	19	Male	Hispanic	4	12	Single
9	012581	18	Male	Black	1	14	Single
10	ET1998	18	Female	White	2	12	Single
11	JSA1103	18	Female	White	5	14	Single
12	Mocha	19	Female	White	2	12	Single
13	dtaylor	18	Male	White	2	12	Single
14	Caitlin	18	Female	Black	2	16	Single
15	believe	22	Female	White	3	14	Single
16	cab14	18	Female	White	5	12	Single
17	3133236	18	Female	Mixed	4	12	Single
18	mic68	21	Female	White	2	14	Single
19	anak20	18	Female	White	3	12	Single
20	DERRA	18	Female	Mixed	3	13	Single
21	ST1979	37	Female	White	1	14	Married
22	fester	18	Female	White	3	12	Single
23	Mel76	40	Female	White	1	13	Divorced
24	Rpffot1	18	Female	White	4	12	Single
25	Wgatap1	20	Female	White	2	13	Single
26	PRO218	24	Male	White	1	17	Married
27	465718	19	Female	Mixed	2	12	Single
28	SE0103	18	Female	Black	2	12	Single
29	fefe97	18	Female	White	7	13	Single
30	6.peace	18	Female	Hispanic	1	12	Single
31	lb7877	21	Male	White	2	15	Single
32	Alfred1	20	Male	Black	3	18	Single
33	Alirobe	18	Female	Hispanic	4	12	Single
34	a1b2c3d	19	Female	Native American	8	13	Single
35	RM0815	19	Female	White	3	13	Single
36		18	Female	Mixed	2	13	Single
37	EGreyT	19	Female	Native American	0	12	Single
38	Kim\$	19	Female	Mixed	6	14	Single
39	Pen20	20	Female	White	5	12	Single
40	W1NN3R	19	Female	Black	4	13	Single
41	soccer	19	Female	White	3	13	Married
42	dl0731	20	Male	White	6	13	Single

<b>ID</b>	<b>Unique Identifier</b>	<b>Age</b>	<b>Gender</b>	<b>Ethnicity</b>	<b>Siblings</b>	<b>Years of Education</b>	<b>Marital Status</b>
43	Donny	20	Male	White	2	14	Single
44	jeg17	19	Male	Mexican	3	13	Single
45	Jenks15	20	Female	Black	3	13	Single
46	Adam123	18	Male	Mixed	1	12	Single
47	je0317	31	Male	White	6	17	Married
48	Blue8	27	Female	Native American	1	14	Divorced

<b>ID</b>	<b>Kids</b>	<b>Groups</b>	<b>Academic Misconduct</b>	<b>Arrested</b>
1	0	4	No	No
2	0	10	No	No
3	0	1	No	No
4	0	5	No	No
5	0	0	No	No
6	0	3	No	No
7	0	0	No	No
8	0	8	No	No
9	0	5	No	No
10	0	6	No	No
11	0	4	No	No
12	0	0	No	No
13	0	3	No	No
14	0	9	No	No
15	0	2	No	No
16	0	5	No	No
17	0	2	No	No
18	0	2	No	No
19	0	4	No	No
20	0	3	No	No
21	1	0	Yes	Yes
22	0	2	No	No
23	7	0	Yes	No
24	0	5	No	No
25	0	0	Yes	Yes
26	0	3	No	No
27	0	5	No	No
28	0	5	No	No
29	0	5	No	No
30	0	3	No	No
31	0	2	No	No
32	0	5	Yes	No
33	0	0	No	No

<b>ID</b>	<b>Kids</b>	<b>Groups</b>	<b>Academic Misconduct</b>	<b>Arrested</b>
34	0	6	No	No
35	0	0	No	No
36	0	1	No	No
37	0	0	No	No
38	0	2	No	No
39	0	0	No	Yes
40	0	3	No	No
41	0	3	No	No
42	0	0	No	No
43	0	0	No	No
44	0	1	No	No
45	0	0	No	No
46	0	3	No	No
47	3	1	No	No
48	0	0	No	No

<b>ID</b>	<b>Condition</b>	<b>Confession</b>	<b>Time of Interrogation</b>	<b>Confederate</b>
1	Guilty Time	Yes	3:22	Heather
2	Innocent No Time	Yes	2:25	Heather
3	Guilty No Time	Yes	2:22	Heather
4	Innocent Time	Yes	1:27	Heather
5	Guilty No Time	Yes	3:42	Olivia
6	Innocent No Time	No	10:00	Heather
7	Guilty No Time	Yes	4:03	Heather
8	Guilty Time	Yes	6:25	Heather
9	Innocent Time	No	10:00	Olivia
10	Guilty Time	No	10:00	Olivia
11	Guilty Time	Yes	7:17	Olivia
12	Guilty Time	Yes	7:23	Olivia
13	Innocent No Time	No	10:00	Olivia
14	Guilty No Time	No	10:00	Heather
15	Innocent Time	No	10:00	Heather
16	Guilty Time	No	10:00	Heather
17	Innocent Time	No	10:00	Olivia
18	Innocent No Time	No	10:00	Heather
19	Guilty Time	Yes	3:13	Olivia
20	Innocent No Time	No	10:00	Olivia
21	Guilty Time	Yes	9:00	Heather
22	Innocent Time	No	10:00	Heather
23	Innocent No Time	No	10:00	Olivia
24	Innocent No Time	No	10:00	Heather

<b>ID</b>	<b>Condition</b>	<b>Confession</b>	<b>Time of Interrogation</b>	<b>Confederate</b>
25	Innocent Time	No	10:00	Olivia
26	Guilty Time	Yes	5:54	Olivia
27	Innocent No Time	No	10:00	Olivia
28	Guilty Time	Yes	9:01	Olivia
29	Innocent No Time	No	10:00	Olivia
30	Guilty No Time	Yes	2:59	Heather
31	Innocent No Time	No	10:00	Olivia
32	Innocent No Time	Yes	4:03	Olivia
33	Innocent Time	No	10:00	Heather
34	Guilty No Time	No	10:00	Olivia
35	Guilty Time	Yes	4:56	Heather
36	Innocent Time	No	10:00	Olivia
37	Guilty No Time	No	10:00	Olivia
38	Guilty No Time	Yes	2:29	Heather
39	Innocent Time	Yes	7:56	Olivia
40	Guilty No Time	Yes	5:20	Olivia
41	Innocent Time	No	10:00	Heather
42	Guilty No Time	Yes	2:00	Heather
43	Innocent Time	No	10:00	Olivia
44	Guilty No Time	Yes	4:14	Heather
45	Innocent No Time	No	10:00	Olivia
46	Guilty No Time	Yes	9:17	Heather
47	Innocent Time	No	10:00	Olivia
48	Guilty Time	Yes	3.56	Olivia

<b>ID</b>	<b>Time/No Time Condition</b>	<b>Guilty/Innocent Condition</b>	<b>Actual Guilt/Innocence</b>	<b>Self Report Guilt/Innocence</b>
1	Time	Guilty	Innocent	Innocent
2	No Time	Innocent	Innocent	Innocent
3	No Time	Guilty	Guilty	Innocent
4	Time	Innocent	Innocent	Guilty
5	No Time	Guilty	Guilty	Guilty
6	No Time	Innocent	Innocent	Innocent
7	No Time	Guilty	Guilty	Guilty
8	Time	Guilty	Guilty	Guilty
9	Time	Innocent	Innocent	Innocent
10	Time	Guilty	Guilty	Innocent
11	Time	Guilty	Guilty	Innocent
12	Time	Guilty	Guilty	Innocent
13	No Time	Innocent	Innocent	Innocent
14	No Time	Guilty	Guilty	Innocent
15	Time	Innocent	Innocent	Innocent

<b>ID</b>	<b>Time/No Time Condition</b>	<b>Guilty/Innocent Condition</b>	<b>Actual Guilt/Innocence</b>	<b>Self Report Guilt/Innocence</b>
16	Time	Guilty	Guilty	Innocent
17	Time	Innocent	Innocent	Innocent
18	No Time	Innocent	Innocent	Innocent
19	Time	Guilty	Guilty	Guilty
20	No Time	Innocent	Innocent	Innocent
21	Time	Guilty	Guilty	Guilty
22	Time	Innocent	Innocent	Innocent
23	No Time	Innocent	Innocent	Innocent
24	No Time	Innocent	Innocent	Innocent
25	Time	Innocent	Innocent	Innocent
26	Time	Guilty	Guilty	Guilty
27	No Time	Innocent	Innocent	Innocent
28	Time	Guilty	Guilty	Innocent
29	No Time	11.00	Innocent	Innocent
30	No Time	Guilty	Guilty	Guilty
31	No Time	Innocent	Innocent	Innocent
32	No Time	Innocent	Innocent	Guilty
33	Time	Innocent	Innocent	Innocent
34	No Time	Guilty	Guilty	Innocent
35	Time	Guilty	Guilty	Guilty
36	Time	Innocent	Innocent	Innocent
37	No Time	Guilty	Innocent	Innocent
38	No Time	Guilty	Innocent	Innocent
39	Time	Innocent	Innocent	Guilty
40	No Time	Guilty	Guilty	Guilty
41	Time	Innocent	Innocent	Innocent
42	No Time	Guilty	Guilty	Guilty
43	Time	Innocent	Innocent	Innocent
44	No Time	Guilty	Guilty	Guilty
45	No Time	Innocent	Innocent	Innocent
46	No Time	Guilty	Guilty	Guilty
47	No Time	Innocent	Innocent	Innocent
48	Time	Guilty	Guilty	Guilty

<b>ID</b>	<b>Avoidance</b>	<b>Anxiety</b>	<b>Attachment</b>	<b>NFCS</b>	<b>PFC</b>	<b>NBS</b>
1	1.94	3.50	1	156.00	89.00	32.00
2	5.11	4.89	2	169.00	142.00	45.00
3	3.39	5.67	3	179.00	142.00	40.00
4	3.56	2.67	4	162.00	97.00	29.00
5	3.17	4.94	3	157.00	93.00	39.00
6	3.11	2.83	4	154.00	112.00	32.00
7	1.94	3.22	1	153.00	120.00	32.00

<b>ID</b>	<b>Avoidance</b>	<b>Anxiety</b>	<b>Attachment</b>	<b>NFCS</b>	<b>PFC</b>	<b>NBS</b>
8	4.22	3.67	2	167.00	97.00	25.00
9	2.29	2.94	1	147.00	112.00	30.00
10	4.61	4.61	2	173.00	111.00	39.00
11	3.22	3.72	2	168.00	104.00	32.00
12	2.00	4.83	3	164.00	70.00	27.00
13	2.89	4.17	3	167.00	100.00	32.00
14	2.61	5.17	3	176.00	95.00	37.00
15	4.00	4.39	2	193.00	110.00	37.00
16	2.17	3.83	3	176.00	109.00	38.00
17	3.22	3.50	2	162.00	90.00	28.00
18	1.94	4.33	3		143.00	38.00
19	2.83	4.33	3	172.00	90.00	32.00
20	3.22	4.06	2	172.00	109.00	20.00
21	4.28	5.61	2	172.00	89.00	44.00
22	2.50	5.44	3	169.00	105.00	29.00
23	4.06	4.72	2	135.00	59.00	38.00
24	3.06	5.50	3	174.00	113.00	39.00
25	3.35	4.28	2	158.00	111.00	32.00
26	3.56	2.83	4	146.00	93.00	25.00
27	2.72	4.83	3	180.00	90.00	33.00
28	2.94	4.11	3	150.00	100.00	28.00
29	1.94	4.11	3	151.00	93.00	18.00
30	1.83	2.89	1	144.00		29.00
31	2.78	3.94	3	161.00	106.00	28.00
32	3.22	3.89	2	129.00	72.00	34.00
33	3.17	4.83	3	181.00	107.00	31.00
34	2.56	4.11	3	154.00	104.00	34.00
35	2.72	4.67	3	158.00	110.00	38.00
36						
37	2.22	4.17	3	173.00	116.00	39.00
38	1.17	4.44	3	172.00	131.00	42.00
39	2.12	5.44	3	154.00	121.00	37.00
40	5.22	4.22	2	163.00		24.00
41	2.83	3.94	3		103.00	34.00
42	1.33	1.83	1	150.00	55.00	10.00
43	2.17	3.67	1	144.00	111.00	33.00
44	1.28	2.56	1	150.00	100.00	21.00
45	4.28	2.61	4	170.00	70.00	32.00
46	1.44	4.39	3	196.00	140.00	36.00
47	1.06	2.11	1	154.00	117.00	23.00
48	3.50	3.44	2	168.00	100.00	31.00

<b>ID</b>	<b>SD3 Machiavellianism</b>	<b>SD3 Narcissism</b>	<b>SD3 Psychopathy</b>
1	3.00	4.00	1.98
2	3.10	2.11	2.11
3	4.40	3.89	2.56
4	1.80	2.56	1.22
5	2.50	2.33	1.33
6	1.90	3.22	1.33
7	2.80	3.44	2.11
8	4.00	3.11	3.11
9	2.70	2.78	1.89
10	3.10	2.22	2.11
11	2.50	2.89	1.89
12		2.44	2.33
13	3.50	2.89	2.56
14	3.10	2.44	1.56
15	3.20	3.00	1.78
16	2.40	2.44	2.11
17	2.70	3.44	2.33
18	2.10	2.00	1.33
19	3.30	3.22	2.56
20	2.60	3.89	1.22
21	4.00	2.22	4.00
22	3.00	2.44	2.11
23	2.50	3.22	1.00
24	2.80	3.33	2.44
25	2.40	2.56	2.67
26	3.70	3.11	2.33
27	3.50	2.78	3.00
28	2.80	2.89	
29	2.90	1.89	1.22
30	2.80	2.78	1.67
31	3.10	2.89	2.00
32	3.80	2.89	2.56
33	3.50	3.78	1.44
34	2.80	2.56	2.22
35	3.40	2.78	1.44
36			
37	2.60	1.89	
38	3.40	3.11	2.11
39	3.60	2.67	2.22
40	3.60	3.00	2.22
41	2.60	2.56	1.78
42	3.70	1.78	3.33
43	2.80	3.00	1.78



<b>ID</b>	<b>SD3 Machiavellianism</b>	<b>SD3 Narcissism</b>	<b>SD3 Psychopathy</b>
44	3.80	3.00	1.33
45	3.50	2.89	1.33
46	2.80	3.89	2.22
47	2.40	3.67	1.33
48	2.80	2.89	1.11

<b>ID</b>	<b>ECR_1</b>	<b>ECR_2</b>	<b>ECR_3</b>	<b>ECR_4</b>	<b>ECR_5</b>	<b>ECR_6</b>	<b>ECR_7</b>	<b>ECR_8</b>
1	2	2	6	3	2	2	1	5
2	3	7	3	6	5	6	6	6
3	6	5	5	6	5	7	4	7
4	5	1	4	2	2	5	2	2
5	5		6	5	3	7	2	5
6	2	2	5	2	3	5	3	2
7	1	6	6	2	2	5	2	2
8	5	4	5	5	6	2	5	3
9	2	5	6	2	2	5	3	3
10	5	3	3	7	5	6	5	6
11	4	3	5	5	4	4	4	4
12	2	7	6	5	2	7	2	5
13	2	5	4	3	2	5	2	6
14	1	7	3	7	4	7	1	7
15	4	3		3	4	6	4	6
16	2	5	7	6	1	6	1	6
17	2	6	4	4	5	5	2	3
18	2	5	7	3	2	5	2	5
19	3	5	6	5	5	6	1	5
20	1	5	6	4	5	5	1	3
21	6	7	5	7	7	7	6	7
22	1	7	7	5	5	7	2	6
23	1	7	5	6	7	7	6	7
24	5	7	7	7	7	7	2	6
25	2	2	2	5	5	5	5	5
26	5	3	5	3	2	2	3	2
27	2	7	6	7	2	7	2	7
28	2	6	6	6	2	6	2	6
29	2	5	7	5	1	4	2	6
30	7	2	7	2	1	1	1	1
31	3	3	6	2	5	6	3	4
32	1	7	4	6	1	7	1	1
33	2	6	6	6	6	6	5	6
34	2	6	6	4	3	5	4	3
35	5	7	3	7	2	6	3	1

<b>ID</b>	<b>ECR_1</b>	<b>ECR_2</b>	<b>ECR_3</b>	<b>ECR_4</b>	<b>ECR_5</b>	<b>ECR_6</b>	<b>ECR_7</b>	<b>ECR_8</b>
36								
37	6	6	6	5	2	5	2	5
38	1	7	6	7	1	5	1	4
39	2	7	6	7	1	6	1	7
40	7	4	5	3	6	4	5	5
41	2	6	7	5	2	5	2	7
42	7	1	7	1	1	1	1	1
43	2	2	6	3	1	5	2	3
44	2	1	7	2	1	1	1	5
45	5	2	6	3	5	5	3	2
46	2	6	1	5	1	5	1	5
47	1	1	7	1	1	1	1	1
48	3	1	5	4	4	5	5	1

<b>ID</b>	<b>ECR_9</b>	<b>ECR_10</b>	<b>ECR_11</b>	<b>ECR_12</b>	<b>ECR_13</b>	<b>ECR_14</b>	<b>ECR_15</b>	<b>ECR_16</b>
1	3	2	2	1	2	2	6	2
2	5	6	6	2	6	6	3	2
3	3	7	6	5	6	6	6	5
4	5	4	4	1	2	2	6	1
5	2	6	3	3	2	3	6	6
6	3	4	4	2	2	2	3	2
7	2	4	2	3	2	2	6	2
8	5	7	5	4	6	6	6	1
9	2	4	2	2	2	2	2	2
10	5	6	5	5	5	5	3	5
11	2	4	4	4	4	5	6	4
12	5	4	2	3	2	2	7	5
13	5	3	2	2	3	5	5	2
14	3	7	1	1	5	5	4	7
15	2	6	4	4	4	4	4	4
16	1	4	1	1	1	1	6	1
17	2	4	5	2	2	2	6	2
18	2	5	2	4	2	2	7	2
19	4	5	4	2	4	2	5	2
20	2	4	5	5	3	5	5	5
21	5	6	5	3	5	5	3	3
22	4	4	4	6	5	5	7	6
23	3	7	7	3	3	6	7	2
24	5	4	4	7	5	1	5	7
25	5	5	5	2	3	3	5	4
26	5	4	5	1	3	3	3	2

ID	ECR_9	ECR_10	ECR_11	ECR_12	ECR_13	ECR_14	ECR_15	ECR_16
27	4	7	5	1	1	2	5	4
28	6	7	2	6	2	2	6	2
29	1	4	2	2	2	2	6	5
30	5	1	1	4	1	1	7	6
31	2	6	4	3	2	2	6	3
32	3	3	3	2	2	2	3	3
33	3	4	5	3	6	3	6	5
34	2	6	3	4	3	3	3	4
35	6	6	2	4	1	2	7	4
36								
37	2	1	2	2	2	2	7	2
38	1	4	1	1	1	1	7	1
39	5	4	1	4	1	4		5
40	7	2	6	4	6	6	2	2
41	2	3	3	4	3	3	4	5
42	1	6	1	1	1	1	7	1
43	2	4	2	4	2	2	6	3
44	1	2	1	1	1	5	6	1
45	3	2	7	3	3	3	3	1
46	1	7	1	4	1	1	7	1
47	1	1	1	1	1	1	7	1
48	5	4	4	1	4	4	4	1

ID	ECR_17	ECR_18	ECR_19	ECR_20	ECR_21	ECR_22	ECR_23	ECR_24
1	1	5	6	2	2	6	2	5
2	5	4	3	5	5	3	5	4
3	6	6	7	5	3	1	5	5
4	5	5	5	1	6	7	4	5
5	5	5	6	4	3	2	2	5
6	2	2	5	4	4	6	2	5
7	2	3	6	2	2	3	2	2
8	5	2	6	1	5	4	5	2
9	2	5	6	5	2	5	2	3
10	5	4	3	4	5	3	5	5
11	4	4	4	4	4	4	4	2
12	1	6	5	5	2	3	1	5
13	2	3	4	2	6	5	3	5
14	4	7	5	2	2	1	1	5
15	4	7	4	4	4	6	4	4
16	1	6	6	1	5	3	1	1
17	5	5	5	4	5	3	2	3
18	2	5	6	3	2	3	2	5
19	3	7	6	4	4	3	1	5

ID	ECR_17	ECR_18	ECR_19	ECR_20	ECR_21	ECR_22	ECR_23	ECR_24
20	4	7	6	6	7	7	3	4
21	5	7	3	7	2	1	3	7
22	4	6	5	4	6	2	2	6
23	5	7	5	5	7	1	1	4
24	2	6	5	5	3	2	1	7
25	2	6	5	6	2	2	2	2
26	3	2	5	4	5	5	3	3
27	2	6	5	1	5	1	1	1
28	2	7	6	6	6	2	2	2
29	2	6	6	6	4	2	2	5
30	2	1	7	1	4	6	1	1
31	3	5	6	3	5	6	2	6
32	3	3	5	2	5	2	6	5
33	4	7	6	2	3	2	3	6
34	3	5	5	4	3	3	3	6
35	3	4	4	4	4	2	3	6
36								
37	1	7	3	5	5	3	2	6
38	1	7	5	4	1	1	1	5
39	1	7	6	4	5	2	2	6
40	6	6	6	1	6	7	6	6
41	1	5	5	5	5	5	3	3
42	1	1	7	1	1	7	1	1
43	2	3	6	3	2	6	2	4
44	1	6	7	1	2	7	1	2
45	5	2	2	1	4	6	3	4
46	1	4	7	1	1	4	1	4
47	1	2	7	1	2	7	1	2
48	1	7	5	1	5	7	3	4

ID	ECR_25	ECR_26	ECR_27	ECR_28	ECR_29	ECR_30	ECR_31	ECR_32
1	5	1	6	6	7	5	6	5
2	3	5	3	6	3	5	3	5
3	7	2	7	5	4	7	6	7
4	2	1	5	1	4	6	6	2
5	5	5	5	4	4	5	3	6
6	3	4	5	2	5	2	5	2
7	6	2	6	2	6	3	6	2
8	4	2	3	4	4	5	5	4
9	6	2	6	2	6	2	6	2
10	4	3	3	2	3	4	5	3
11	5	4	5	4	7	2	6	3
12	5	3	7	7	6	7	7	5

<b>ID</b>	<b>ECR_25</b>	<b>ECR_26</b>	<b>ECR_27</b>	<b>ECR_28</b>	<b>ECR_29</b>	<b>ECR_30</b>	<b>ECR_31</b>	<b>ECR_32</b>
13	6	3	6	2	4	5	6	5
14	5	4	7	1	3	5	7	6
15	2	4	4	4	4	4	4	4
16	6	1	1	5	5	5	5	3
17	5	3	5	2	4	3	5	6
18	6	3	6	3	5	5	6	5
19	6	2	5	4	3	5	6	6
20	3	2	5	3	3	4	6	5
21	3	2	5	7	6	5	3	6
22	7	4	7	4	6	6	7	5
23	6	4	6	1	1	5	1	5
24	5	1	2	6	6	7	7	7
25	6	4	6	6		6	2	6
26	3	3	5	2	5	3	5	3
27	4	5	6	5	4	2	5	4
28	6	2	6	1	1	3	5	2
29	6	2	6	3	6	5	5	4
30	7	1	7	3	6	5	7	5
31	5	3	6	2	4	6	6	6
32	5	1	3	3	4	5	6	5
33	7	2	7	2	3	6	6	4
34	6	2	6	4	6	2	6	3
35	7	1	7	4	6	6	6	6
36								
37	7	2	7	4	5	6	7	5
38	7	1	7	4	7	7	7	7
39	6	4	6	5	4	5	6	5
40	1	1	2	1	4	6	5	7
41	3	3	6	1	4	5	5	4
42	7	1	7	5	7	1	7	1
43	5	3	5	2	5	6	6	6
44	6	2	7	2	6	2	7	2
45	2	1	3	1	3	2	3	3
46	7	1	7	4	6	6	7	5
47	7	1	7	3	7	3	7	5
48	5	3	5	2	3	5	5	5

	<b>ECR_33</b>	<b>ECR_34</b>	<b>ECR_35</b>	<b>ECR_36</b>	<b>NFCS_1</b>	<b>NFCS_2</b>	<b>NFCS_3</b>	<b>NFCS_4</b>
1	6	7	6	2	6	4	4	2
2	3	5	2	5	5	4	5	5
3	7	7	6	5	5	5	6	5
4	6	1	5	1	5	5	5	4
5	3	5	4	4	4	5	4	5

ID	ECR_33	ECR_34	ECR_35	ECR_36	NFCS_1	NFCS_2	NFCS_3	NFCS_4
6	5	5	5	2	6	4	5	3
7	6	5	6	2	5	4	4	2
8	5	1	5	3	5	4	3	5
9	6	4		2	5	5	4	3
10	5	6	5	4	6	3	4	4
11	5	4	5	3	5	3	4	5
12	6	5	6	3	5	5	6	4
13	6	7	6	5	5	4	6	3
14	6	1	7	3	4	3	6	6
15	4	6	4	4	6	4	6	6
16	5	5	6	1	6	4	6	5
17	5	2	5	2	3	5	6	5
18	6	6	6	5	5	4	5	5
19	7	5	6	3	6	4	4	5
20	5	6	6	3	6	5	4	2
21	6	7	5	7	6	3	6	4
22	7	5	7	6	5	4	5	4
23	2	2	6	2	5	3	4	5
24	7	7	7	3	5	2	6	4
25	6	6	6	2	5	5	5	3
26	6	6	5	2	4	3	4	3
27	6	7	6	1	6	4	5	6
28	4	5	5	3	6	5	6	2
29	6	6	7	2	5	2	5	5
30	7	6	7	3	4	5	3	2
31	6	5	6	2	6	4	5	3
32	3	2	6	3	1	3	2	6
33	6	3	5	6	6	4	5	5
34	7	6	7	2	6	5	4	3
35	6	6	6	4	6	3	3	1
36								
37	7	7	7	2	5	4	5	2
38	7	4	7	4	5	4	5	5
39	6	7	7	5	6	3	5	4
40	4	7	4	4	5	4	5	4
41	5	5	5	1	5	4	5	6
42	7	1	7	1	4	4	5	3
43	6	5	5	4	4	4	4	4
44	7	3	7	1	5	4	4	3
45	6	3	5	1	5	5	6	5
46	7	6	7	4	6	5	5	5
47	7	5	7	1	5	5	4	3
48	5	6	6	1	5	5	6	5

ID	NFCS_5	NFCS_6	NFCS_7	NFCS_8	NFCS_9	NFCS_10	NFCS_11
1	4	5	4	5	2	3	4
2	2	5	5	5	4	5	5
3	1	4	4	5	5	6	6
4	4	4	3	4	1	3	3
5	2	4	2	4	2	5	4
6	3	5	4	4	3	2	4
7	4	4	4	4	3	5	3
8	4	3	4	4	1	5	6
9	4	3	2	2	2	4	3
10	3	5	5	5	4	5	5
11	3	4	4	5	4	4	4
12	4	5	2	2	1	4	4
13	3	3	4	6	2	5	5
14	2	6	3	6	1	6	6
15	3	4	6	6	5	5	5
16	2	4	5	4	4	6	5
17	4	3	4	5	2	5	5
18	2	5	5	3	2	6	4
19	5	5	3	5	4	5	6
20	5	4	2	2	1	5	4
21	4	3	3	5	4	5	4
22	3	5	5	5	4	5	5
23	5	2	1	1	1	2	3
24	4	5	5	4	1	6	6
25	4	5	2	5	3	4	5
26	4	4	4	3	2	4	4
27	4	4	2	6	4	5	5
28	2	3	2	1	1	5	2
29	1	6	3	4	2	3	6
30	4	4	3	2	1	4	3
31	5	4	3	2	3	5	4
32	1	1	1	5	1	6	1
33	3	5	3	5	4	3	5
34	2	3	4	4	3	4	4
35	1	6	6	6	3	1	6
36							
37	4	4	5	6	4	6	5
38	4	5	4	6	4	5	5
39	2	5	6	4	3	1	5
40	4	4	2	6	2	4	5
41	2	4	5	4	5	3	5
42	5	3	5	2	1	6	4
43	2	3	4	3	2	4	4
44	3	5	5	2	1	5	6
45	3	2	5	4	2	5	6

<b>ID</b>	<b>NFCS_5</b>	<b>NFCS_6</b>	<b>NFCS_7</b>	<b>NFCS_8</b>	<b>NFCS_9</b>	<b>NFCS_10</b>	<b>NFCS_11</b>
46	2	5	4	6	4	6	6
47	3	5	3	4	3	5	4
48	3	6	3	4	1	4	4

<b>ID</b>	<b>NFCS_12r</b>	<b>NFCS_13</b>	<b>NFCS_14</b>	<b>NFCS_15r</b>	<b>NFCS_16</b>	<b>NFCS_17r</b>	<b>NFCS_18r</b>
1	5	3	5	5	4	5	2
2	4	3	5	5	3	4	2
3	6	6	5	5	3	4	1
4	1	4	3	6	1	6	4
5	6	4	4	5	2	5	3
6	5	5	4	2	3	2	4
7	5	4	4	3	4	3	2
8	4	5	1	4	5	2	3
9	6	5	4	5	2	6	2
10	5	4	4	4	3	4	2
11	2	5	3	4	5	4	4
12	5	5	6	2	4	4	2
13	4	4	4	3	5	2	3
14	1	3	6	6	3	5	1
15	5	4	4	4	4	4	4
16	4	4	5	4	4	2	1
17	4	3	6	2	4	3	2
18	5	3		5	3	5	3
19	5	3	6	4	2	4	3
20	2	5	2	3	3	3	5
21	1	3	5	6	3	6	2
22	5	2	5	2	4	5	2
23	4	3	3	1	6	1	5
24	6	4	5	2	3	2	1
25	2	3	4	2	3	5	2
26	3	4	3	2	4	2	3
27	6	4	4	3	4	5	2
28	5	4	5	2	4	2	2
29	6	2	5	4	2	4	2
30	2	4	2	2	4	1	4
31	4	3	4	5	3	5	2
32	4	1	4	1	5	5	6
33	5	4	6	3	5	4	1
34	5	4	4	3	4	4	2
35	1	6	6	6	4	2	1
36							
37	2	4	5	4	2	5	1
38	3	3	6	6	3	4	1



<b>ID</b>	<b>NFCS_12r</b>	<b>NFCS_13</b>	<b>NFCS_14</b>	<b>NFCS_15r</b>	<b>NFCS_16</b>	<b>NFCS_17r</b>	<b>NFCS_18r</b>
39	2	3	6	4	4	2	1
40	1	4	5	6	4	2	1
41	4	4	5	2	4	2	3
42	2	5	1	1	6	5	1
43	4	4	2	2	4	2	3
44	4	4	2	4	4	5	3
45	6	2	4	5	4	4	2
46	1	4	5	4	5	4	2
47	2	5	3	2	5	1	2
48	5	3	3	3	3	4	3

<b>ID</b>	<b>NFCS_19r</b>	<b>NFCS_20r</b>	<b>NFCS_21</b>	<b>NFCS_22r</b>	<b>NFCS_23</b>	<b>NFCS_24r</b>	<b>NFCS_25</b>
1	4	6	5	4	2	4	3
2	2	5	4	5	4	3	4
3	1	3	5	4	4	2	5
4	2	3	5	6	6	5	2
5	4	3	3	3	5	5	3
6	3	3	4	2	5	5	4
7	4	4	4	3	3	4	3
8	5	5	6	2	3	6	4
9	5	3	5	5	2	5	5
10	3	2	4	4	6	4	5
11	4	4	5	3	5	6	2
12	4	5	4	2	4	5	2
13	2	5	4	3	4	6	3
14	1	4	3	5	4	6	2
15	4	3	6	6	4	4	4
16	3	2	5	3	4	4	4
17	4	2	5	3	5	5	2
18	2	5	5	3	4	4	6
19	2	2	5	5	6	5	2
20	5	3	6	3	6	6	3
21	5	6	5	4	4	4	3
22	2	4	3	4	4	5	3
23	3	6	1	1	2	6	2
24	1	6	6	2	6	6	
25	4	2	4	4	5	4	4
26	4	1	4	3	5	5	5
27	4	3	5	5	6	5	3
28	2	1	3	4	6	5	4
29	1	1	3	5	6	4	3
30	5	3	5	3	5	6	4
31	3	4	4	2	4	5	3

<b>ID</b>	<b>NFCS_19r</b>	<b>NFCS_20r</b>	<b>NFCS_21</b>	<b>NFCS_22r</b>	<b>NFCS_23</b>	<b>NFCS_24r</b>	<b>3 NFCS_25</b>
32	2	4	4	2	5	4	2
33	4	6	5	4	4	5	5
34	2	4	4	4	3	4	3
35	1	1	4	1	6	3	3
36							
37	2	5	4	4	4	4	4
38	1	1	3	5	5	3	3
39	1	1	5	2	6	4	4
40	1	1	6	2	5	5	3
41	1	1	5	2	4	5	3
42	4	5	6	1	3	5	2
43	4	3	5	2	4	4	4
44	2	5	5	2	1	5	3
45	1	3	5	2	4	5	5
46	3	4	6	2	5	5	4
47	3	2	5	1	5	5	2
48	3	2	4	3	6	5	4

<b>ID</b>	<b>NFCS_26</b>	<b>NFCS_27r</b>	<b>NFCS_28r</b>	<b>NFCS_29</b>	<b>NFCS_30</b>	<b>NFCS_31</b>	<b>NFCS_32</b>
1	4	2	2	4	3	3	3
2	5	1	3	5	5	5	5
3	6	5	4	5	5	5	3
4	4	1	6	3	3	6	2
5	4	1	4	4	2	4	3
6	4	1	5	2	4	4	4
7	3	2	5	3	4	4	3
8	4	2	4	4	3	6	4
9	5	2	4	4	3	2	2
10	5	2	4	4	5	5	6
11	4	1	5	5	5	4	4
12	4	1	6	4	4	6	3
13	4	3	5	5	3	4	3
14	4	1	5	6	6	6	6
15	5	4	4	6	5	6	5
16	4	3	4	5	6	4	4
17	2	2	5	5	4	4	3
18	5	1	5	3	4	5	5
19	3	1	4	3	4	5	3
20	3	2	5	6	6	2	5
21	5	4	4	6	4	5	4
22	5	2	5	4	6	4	4
23	4	1	6	1	3	3	2
24	5	1	4	4	5	5	5

ID	NFCS_26	NFCS_27r	NFCS_28r	NFCS_29	NFCS_30	NFCS_31	NFCS_32
25	5	1	2	2	3	4	5
26	4	2	5	3	4	4	4
27	4	1	6	4	5	2	4
28	5	1	5	5	5	3	5
29	5	1	5	2	4	3	6
30	3	2	4	6	4	3	4
31	4	2	4	3	4	5	4
32	5	5	5	6	1	1	1
33	5	6	5	6	5	3	5
34	4	3	4	3	4	3	4
35	5	1	2	5	6	6	6
36							
37	5	1	5	4	6	4	4
38	5	3	4	4	5	5	5
39	6	1	3	2	4	5	5
40	4	1	5	2	5	5	4
41	4	2	4	5	3	4	5
42	6	3	4	5	3	5	3
43	4	3	4	3	3	4	3
44	4	3	3	2	2	4	3
45	4	1	3	4	3	4	5
46	6	3	6	6	6	6	6
47	4	4	5	4	4	5	3
48	4	1	4	4	5	3	6

ID	NFCS_33	NFCS_34r	NFCS_35	NFCS_36	NFCS_37r	NFCS_38r	NFCS_39
1	4	2	3	3	4	2	5
2	5	2	4	5	4	3	5
3	5	1	4	6	5	3	5
4	2	4	3	3	1	6	4
5	4	2	4	5	4	4	5
6	4	3	3	4	4	3	5
7	4	3	4	4	3	4	5
8	3	3	4	2	6	5	6
9	3	2	5	2	2	2	5
10	6	3	5	4	4	4	4
11	4	4	4	4	5	6	4
12	5	5	2	4	4	3	4
13	3	3	3	4	5	5	6
14	6	3	4	5	4	5	6
15	5	1	6	6	6	4	6
16	4	4	5	4	4	5	5
17	4	2	4	5	4	4	5

<b>ID</b>	<b>NFCS_33</b>	<b>NFCS_34r</b>	<b>NFCS_35</b>	<b>NFCS_36</b>	<b>NFCS_37r</b>	<b>NFCS_38r</b>	<b>NFCS_39</b>
18	5	3	2	5	3	4	5
19	4	4	5	4	4	5	6
20	5	5	4	6	2	5	6
21	4	3	3	5	3	3	6
22	4	3	4	5	4	3	5
23	1	5	1	3	6	6	5
24	6	4	4	5	3	2	6
25	5	3	5	5	3	4	6
26	4	4	5	3	2	5	5
27	5	4	5	4	4	5	5
28	5	4	6	6	4	4	5
29	6	3	5	5	3	2	3
30	3	5	1	2	4	5	5
31	5	5	3	4	5	3	5
32	2	3	3	4	4	2	2
33	5	3	1	5	5	3	5
34	4	3	4	4	4	4	5
35	6	3	6	6	1	1	6
36							
37	4	3	3	6	5	5	6
38	5	4	5	5	3	4	5
39	5	2	6	6	2	4	5
40	4	4	4	6	4	4	5
41	5	2	6	4	2	4	5
42	3	2	3	3	2	5	6
43	4	4	4	3	2	4	4
44	4	5	3	2	2	3	5
45	4	4	4	4	4	4	6
46	6	4	4	6	4	6	6
47	3	3	5	4	2	4	6
48	6	5	5	5	5	5	6

<b>ID</b>	<b>NFCS_40</b>	<b>NFCS_41</b>	<b>NFCS_42r</b>	<b>PFC_1</b>	<b>PFC_2</b>	<b>PFC_3</b>	<b>PFC_4</b>
1	4	4	4	4	6	5	3
2	2	5	2	8	8	8	7
3	1	6	4	9	9	7	8
4	2	3	3	6	8	4	4
5	3	4	4	4	7	7	3
6	3	4	3	6	9	8	4
7	2	4	4	7	9	8	6
8	4	4	4	6	4	5	3
9	2	3	2	7	8	7	5
10	3	4	2	7	6	6	5
11	3	3	2	5	6	8	5

<b>ID</b>	<b>NFCS_40</b>	<b>FCS_41</b>	<b>NFCS_42r</b>	<b>PFC_1</b>	<b>PFC_2</b>	<b>PFC_3</b>	<b>PFC_4</b>
12	4	5	4	3	7	2	2
13	5	5	3	7	5	5	4
14	3	6	1	4	9	2	1
15	1	4	3	9	9	6	5
16	5	5	5	5	7	7	5
17	4	4	4	5	8	2	3
18	3	5	2	8	9	8	8
19	3	4	4	5	5	5	2
20	6	3	6	6	9	9	1
21	3	3	3	4	3	8	2
22	3	5	3	6	6	7	5
23	5	4	3	2	8	7	1
24	4	5	4	8	8	5	6
25	2	5	3	8	8	8	2
26	1	3	3	6	8	2	2
27	2	6	3	7	9	6	1
28	2	1	1	8	7	4	4
29	1	5	1	8	6	2	5
30	2	3	4	1	8	7	4
31	3	4	3	7	8	3	5
32	3	3	2	5	8	7	6
33	2	4	4	7	7	4	5
34	2	4	3	7	7	5	6
35	4	6	1	7	8	5	7
36							
37	3	6	3	8	9	8	5
38	3	5	3	8	8	7	7
39	2	5	2	8	8	2	5
40	6	5	4	6	7	1	1
41	4	1		7	7	5	6
42	2	1	5	2	9	1	1
43	3	4	3	6	6	6	5
44	4	6	3	6	8	1	4
45	5	6	5	8	2	2	1
46	2	6	5	8	9	9	5
47	2	4	5	6	8	6	7
48	2	4	1	6	8	6	5

<b>ID</b>	<b>PFC_5</b>	<b>PFC_6</b>	<b>PFC_7</b>	<b>PFC_8</b>	<b>PFC_9</b>	<b>PFC_10</b>	<b>PFC_11</b>
1	2	4	3	7	4	8	5
2	8	7	8	8	8	8	8
3	9	8	9	9	8	8	8

<b>ID</b>	<b>PFC_5</b>	<b>PFC_6</b>	<b>PFC_7</b>	<b>PFC_8</b>	<b>PFC_9</b>	<b>PFC_10</b>	<b>PFC_11</b>
4	4	4	4	6	7	9	4
5	3	4	6	8	6	7	5
6	6	6	7	6	6	7	6
7	6	5	7	6	6	8	7
8	5	6	6	7	6	9	5
9	4	4	6	4	8	8	8
10	7	6	7	7	5	6	6
11	6	6	6	5	6	6	6
12	3	2	5	7	6	2	6
13	4	5	4	7	5	7	6
14	5	1	1	8	6	9	5
15	5	5	6	6	8	6	6
16	8	5	6	6	7	6	5
17	2	5	3	2	8	8	8
18	8	8	8	8	8	9	8
19	2	3	6	6	5	4	3
20	4	1	6	2	8	9	9
21	2	1	7	9	5	5	5
22	5	5	5	7	6	6	6
23	1	1	1	2	3	8	5
24	7	2	6	8	8	8	8
25	7	3	8	8	8	9	4
26	6	7	6	7	6	6	4
27	2	5	6	9	9	5	1
28	4	6	5	2	8	8	5
29	5	5	4	7	5	6	5
30		2	1	1	3	9	7
31	7	6	6	7	6	7	4
32	5	5	4	3	2	3	3
33	5	5	6	7	8	4	6
34	5	4	6	6	7	7	4
35	5	5	6	7	6	5	6
36							
37	5	5	3	8	6	9	6
38	7	6	8	8	9	7	8
39	7	7	8	9	5	6	8
40	1	5	6	8	8	6	6
41	8	7	7	6	7	8	4
42	1	1	1	7	1	8	1
43	6	6	6	7	7	7	6
44	5	4	8	7	8	8	7
45	1	2	1	8	6	1	2
46	6	5	9	9	9	9	9
47	7	6	6	8	7	8	6
48	6	6	6	6	6	8	4

<b>ID</b>	<b>PFC_12</b>	<b>PFC_13</b>	<b>PFC_14</b>	<b>PFC_15</b>	<b>PFC_16</b>	<b>PFC_17</b>	<b>PFC_18r</b>
1	6	3	5	7	6	3	8
2	8	8	8	8	8	8	8
3	8	8	9	8	8	8	1
4	4	9	4	4	6	4	6
5	4	5	6	5	3	6	4
6	6	6	6	7	7	5	4
7	6	6	7	7	7	8	4
8	4	6	5	5	5	5	5
9	8	4	5	8	8	8	2
10	7	7	8	7	6	5	3
11	6	2	6	6	6	5	8
12	7	2	2	2	2	3	7
13	5	4	6	7	4	8	7
14	8	5	5	3	8	8	7
15	7	7	7	7	6	3	2
16	6	5	5	7	7	6	6
17	6	2	6	8	6	2	6
18	8	9	8	8	8	9	3
19	7	7	5	8	6	7	4
20	3	7	7	9	9	9	1
21	3	8	3	7	4	7	6
22	5	7	8	5	5	6	5
23	7	1	1	2	3	4	2
24	8	5	2	7	7	8	2
25	7	8	3	7	8	3	2
26	7	3	6	4	6	3	4
27	5	1	5	5	5	5	4
28	6	8	5	5	5	8	2
29	8	8	6	1	1	5	6
30	5	2	3	4	4	5	6
31	6	4	7	7	6	4	6
32	2	4	3	2	4	4	2
33	8	5	6	8	6	6	4
34	6	5	5	7	8	6	3
35	7	6	6	6	6	5	7
36							
37	8	6	8	5	6	8	3
38	9	8	9	8	8	5	1
39	8	7	8	5	7	7	6
40		8	8	6	6	8	5
41	6	2	5	6	6	3	3
42	2	8	1	1	1	8	1

<b>ID</b>	<b>PFC_12</b>	<b>PFC_13</b>	<b>PFC_14</b>	<b>PFC_15</b>	<b>PFC_16</b>	<b>PFC_17</b>	<b>PFC_18r</b>
43	6	8	6	7	7	6	3
44	5	4	6	7	7	3	2
45	8	6	6	3	3	2	8
46	9	8	8	9	9	8	2
47	7	6	6	7	7	7	2
48	4	4	4	7	5	5	4

<b>ID</b>	<b>NBS_1r</b>	<b>NBS_2</b>	<b>NBS_3</b>	<b>NBS_4</b>	<b>NBS_5</b>	<b>NBS_6</b>	<b>NBS_7r</b>
1	2	3	4	4	4	2	4
2	1	5	2	5	5	4	2
3	3	4	2	4	5	3	4
4	4	2	3	4	3	5	4
5	2	2	2	5	4	3	2
6	3	4	4	4	4	3	4
7	4	2	3	4	4	4	2
8	5	3	3	3	3	4	4
9	4	4	4	4	4	4	3
10	2	4	2	4	4	4	3
11	3	3	3	4	4	4	3
12	4	2	4	4	3	5	4
13	2	3	2	3	3	2	4
14	2	2	2	5	5	4	4
15	3	4	1	4	5	3	3
16	2	2	2	4	4	4	2
17	4	2	4	4	4	2	3
18	2	4	2	5	4	3	4
19	4	4	3	4	4	4	4
20	4	2	4	3	2	1	5
21	1	5	1	5	5	2	4
22	2	4	2	4	4	4	2
23	4	2	4	5	4	4	4
24	4	4	5	5	5	5	2
25	4	4	2	4	2	2	2
26	4	4	4	2	4	2	4
27	3	3	3	5	4	3	3
28	3	3	4	4	3	4	2
29	5	1	2	4	2	2	5
30	4	2	4	4	4	4	3
31	4	4	4	4	3	2	2
32	1	2	2	4	4	1	1
33	4	4	2	4	4	1	4
34	4	1	3	5	4	4	2
35	2	4	2	4	5	3	3



<b>ID</b>	<b>NBS_1r</b>	<b>NBS_2</b>	<b>NBS_3</b>	<b>NBS_4</b>	<b>NBS_5</b>	<b>NBS_6</b>	<b>NBS_7r</b>
36							
37	2	4	2	5	4	2	2
38	3	5	5	5	5	5	3
39	2	4	2	5	4	3	4
40	5	1	4	4	3	3	2
41	2	4	2	4	4	3	5
42	5	1	5	1	1	1	5
43	4	4	2	3	4	4	2
44	5	3	5	4	3	1	4
45	4	4	2	5	5	1	4
46	5	3	3	5	5	5	2
47	4	1	5	4	4	2	4
48	1	5	3	3	5	2	4

<b>ID</b>	<b>NBS_8</b>	<b>NBS_9</b>	<b>NBS_10</b>	<b>SD3_1</b>	<b>SD3_2</b>	<b>SD3_3</b>	<b>SD3_4</b>
1	5	4	2	4	2	4	4
2	4	4	5	2	4	4	4
3	5	5	5	5	5	5	5
4	4	2	2	3	2	2	2
5	4	5	4	1	4	3	4
6	3	4	3	4	2	2	4
7	3	3	3	4	2	3	3
8	2	3	1	5	4	3	4
9	3	2	2	2	4	3	4
10	4	4	4	4	3	4	4
11	4	2	2	2	4	3	3
12	3	2	2	3		4	2
13	3	4	4	5	4	4	3
14	3	4	4	3	3	3	4
15	4	3	3	3	5	3	3
16	4	4	4	4	4	2	2
17	3	4	2	4	2	2	3
18	4	4	4	2	2	2	4
19	4	2	3	5	4	3	2
20	2	4	1	4	2	4	4
21	5	5	5	5	4	4	4
22	4	3	3	4	3	3	3
23	4	2	2	4	1	3	3
24	4	5	4	4	4	3	4
25	2	4	4	4	2	3	2
26	3	2	2	5	4	3	4
27	4	3	2	4	5	4	3
28	1	2	2	1	2	3	4

<b>ID</b>	<b>NBS_8</b>	<b>NBS_9</b>	<b>NBS_10</b>	<b>SD3_1</b>	<b>SD3_2</b>	<b>SD3_3</b>	<b>SD3_4</b>
29	1	1	1	4	2	2	2
30	2	3	3	3	4	4	2
31	3	2	2	2	4	4	4
32	4	4	1	2	1	5	4
33	4	2	4	5	4	4	4
34	3	4	4	3	4	4	3
35	4	4	3	5	4	4	3
36							
37	4	4	4	4	3	2	3
38	5	5	5	5	3	4	5
39	3	4	4	5	4	3	2
40	2	3	1	5	3	4	3
41	3	3	4	4	5	4	2
42	1	1	1	4	4	1	4
43	3	3	2	4	3	3	3
44	2	2	2	5	1	4	4
45	2	3	4	5	2	4	5
46	5	3	2	3	4	4	1
47	3	3	1	4	3	4	2
48	3	1	2	4	4	2	3

<b>ID</b>	<b>SD3_5</b>	<b>SD3_6</b>	<b>SD3_7</b>	<b>SD3_8</b>	<b>SD3_9</b>	<b>SD3_10</b>	<b>SD3_11</b>
1	3	2	5	2	2	2	4
2	4	3	4	2	3	1	2
3	4	4	5	5	3	3	5
4	1	1	4	1	1	1	4
5	1	1	4	2	3	2	3
6	1	1	2	1	1	1	4
7	3	3	4	3	2	1	4
8	5	3	4	4	4	4	3
9	2	2	4	2	2	2	3
10	3	3	4	2	2	2	3
11	2	3	3	2	2	1	3
12	2	2	5	4	4	2	2
13	4	3	4	3	3	2	3
14	3	4	5	2	3	1	3
15	4	3	3	4	3	1	3
16	2	2	2	2	2	2	4
17	2	4	2	4	2	2	3
18	1	1	4	2	2	1	3
19	2	3	4	5	4	1	3
20	1	1	4	3	2	1	5
21	4	4	5	4	4	2	3

<b>ID</b>	<b>SD3_5</b>	<b>SD3_6</b>	<b>SD3_7</b>	<b>SD3_8</b>	<b>SD3_9</b>	<b>SD3_10</b>	<b>SD3_11</b>
22	3	3	3	4	3	1	2
23	1	1	5	2	3	2	3
24	2	2	4	2	2	1	4
25	2	1	4	2	2	2	2
26	4	4	4	4	4	1	4
27	3	2	5	5	3	1	5
28	3	4	4	2	4	1	4
29	2	3	4	5	4	1	3
30	1	1	2	3	4	4	3
31	3	3	4	3	2	2	3
32	5	4	5	5	3	4	2
33	2	3	5	4	2	2	5
34	3	2	4	3	1	1	3
35	3	2	5	2	2	2	3
36							
37	4	1	2	3	3	5	2
38	3	1	4	3	1	1	3
39	1	4	5	5	4	3	4
40	4	4	4	3	2	2	4
41	2	1	2	3	2	1	3
42	5	5	4	5	3	2	1
43	2	3	3	2	3	2	4
44	4	2	5	5	4	4	4
45	2	4	5	5	2	1	2
46	3	3	3	2	4	1	5
47	2	1	3	2	2	5	5
48	3	3	3	2	2	4	4

<b>ID</b>	<b>SD3_12</b>	<b>SD3_13r</b>	<b>SD3_14</b>	<b>SD3_15</b>	<b>SD3_16r</b>	<b>SD3_17</b>	<b>SD3_18r</b>
1	4	5	2	4	4	4	5
2	1	2	2	3	2	2	2
3	4	4	1	5	5	3	5
4	5	1	1	4	3	1	1
5	3	2	2	3	2	2	1
6	4	2	4	3	4	2	3
7	4	3	3	4	4	3	3
8	2	4	3	3	2	4	4
9	2	2	4	4	2	2	2
10	1	2	2	4	2	1	2
11	3	3	3	3	4	3	2
12	2	2	3	4	2	2	2
13	3	3	2	4	2	4	2

<b>ID</b>	<b>SD3_12</b>	<b>SD3_13r</b>	<b>SD3_14</b>	<b>SD3_15</b>	<b>SD3_16r</b>	<b>SD3_17</b>	<b>SD3_18r</b>
14	4	2	1	3	2	1	2
15	4	3	3	3	3	3	2
16	2	2	2	4	2	2	2
17	2	4	4	4	4	2	4
18	2	2	2	2	1	2	2
19	3	3	3	5	4	2	2
20	3	5	3	3	5	5	5
21	2	2	3	2	1	4	1
22	1	2	3	3	1	2	3
23	3	4	3	3	4	1	5
24	4	3	3	4	2	4	2
25	2	2	2	4	4	2	2
26	3	3	3	4	4	2	2
27	1	1	1	5	3	1	3
28	2	2	2	4	4	2	2
29	1	1	1	3	2	1	1
30	2	3	3	5	2	2	3
31	2	3	3	4	2	2	3
32	4	2	3	2	5	4	3
33	4	4	3	4	4	4	2
34	2	2	2	4	2	2	2
35	4	2	2	4	2	1	2
36							
37	5	2	1	2	5	1	3
38	3	1	1	4	3	3	1
39	4	1	2	2	2	1	2
40	2	3	3	4	5	1	3
41	2	2	2	4	2	1	2
42	1	4	1	1	2	1	2
43	4	3	3	3	4	2	2
44	1	2	2	3	4	3	4
45	4	2	2	4	2	4	1
46	4	3	4	5	4	4	3
47	3	3	3	5	4	2	1
48	4	3	3	3	4	3	3

<b>ID</b>	<b>SD3_19</b>	<b>SD3_20</b>	<b>SD3_21r</b>	<b>SD3_22</b>	<b>SD3_23</b>	<b>SD3_24</b>
1	4	1	2	2	2	3
2	3	2	2	2	2	2
3	3	2	2	3	1	4
4	3	1	2	1	1	1
5	3	1	2	1	1	1
6	3	1	4	1	1	1

<b>ID</b>	<b>SD3_19</b>	<b>SD3_20</b>	<b>SD3_21</b>	<b>SD3_22</b>	<b>SD3_23</b>	<b>SD3_24</b>
7	3	3	3	2	2	2
8	3	3	4	2	3	5
9	4	2	2	1	2	2
10	3	2	2	2	2	4
11	2	2	3	2	2	2
12	3	2	4	2	2	4
13	3	3	2	4	2	3
14	4	1	1	1	4	3
15	3	3	2	2	2	2
16	2	2	3	2	2	2
17	4	2	3	2	2	4
18	2	1	1	2	1	2
19	4	2	3	2	3	4
20	1	1	3	1	1	1
21	2	3	4	4	4	5
22	5	3	2	3	2	2
23	3	1	1	1	1	1
24	4	2	4	2	4	4
25	3	2	2	2	4	4
26	3	3	4	2	2	2
27	5	1	3	3	4	5
28	4	2		2	1	4
29	4	1	1	3	1	1
30	2	1	3	1	1	2
31	4	2	2	3	2	2
32	1	1	3	3	3	1
33	4	1	1	1	2	4
34	4	2	3	1	2	3
35	3	1	5	1	1	2
36						
37	4	1	5	2	1	4
38	5	1	1	1	1	3
39	4	2	2	1	1	4
40	4	1	2	1	1	4
41	5	1	1	1	1	4
42	3	4	5	5	1	5
43	2	1	2	2	2	2
44	4	2	1	2	1	1
45	5	1	1	2	1	1
46	3	1	4	3	1	4
47	5	1	3	1	1	1
48	3	1	4	1	1	1

<b>ID</b>	<b>SD3_25</b>	<b>SD3_26</b>	<b>SD3_27</b>	<b>SD3_28</b>
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2	2	3	2	2
3	5	1	1	4
4	1	2	1	1
5	3	1	1	1
6	1	1	1	1
7	2	3	1	1
8	4	1	1	5
9	2	2	2	2
10	2	1	1	3
11	3	1	1	1
12	2	2	1	2
13	4	2	1	2
14	1	1	1	1
15	2	1	1	1
16	2	2	2	2
17	2	2	2	2
18	1	1	1	2
19	3	2	1	3
20	1	1	1	1
21	4	4	3	5
22	2	1	1	3
23	1	1	1	1
24	2	1	1	2
25	2	4	2	2
26	3	2	1	2
27	3	5	1	2
28	4	1	1	2
29	1	1	1	1
30	4	1	1	1
31	3	1	1	2
32	3	3	3	3
33	1	1	1	1
34	4	2	1	2
35	2	5	2	2
36				
37	2	5	1	
38	1	1	1	1
39	4	4	1	1
40	2	3	1	3
41	2	1	2	3
42	4	1	1	4
43	2	2	1	2
44	2	1	1	1
45	1	2	1	2

<b>ID</b>	<b>SD3_25</b>	<b>SD3_26</b>	<b>SD3_27</b>	<b>SD3_28</b>
46	4	1	1	1
47	1	4	1	1
48	1	5	1	1