THE LANGUAGE OF PSYCHOPATHS: WARNING SIGNS FOR LAW **ENFORCEMENT**

by

Emily Smedley A Thesis Submitted to the **Graduate Faculty** of George Mason University in Partial Fulfillment of The Requirements for the Degree of Master of Arts

Criminology, Law and Society

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Date:	Spring Semester 2015 George Mason University Fairfax, VA

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A Thesis submitted in partial fulfillment of the requirements for the degree of Master in Criminology, Law and Society at George Mason University

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DEDICATION

Most of the people to whom this thesis is dedicated will never read beyond this page, and that is okay because without them the pages that follow would never have been written. This is the most important page in my thesis as the existence of the previous pages and the pages that follow was entirely dependent on these people. This page is also the hardest to write. I procrastinated writing the dedication until the last minute because I couldn't figure out how to say thank you in a manner that seemed sufficient relative to the level of support I received. Writing this now I realize the reason I struggled is because I cannot say thank you in a manner that is in anyway equivalent. So instead I ask that they accept this dedication as one of the thanks you's that I owe to them. Thank you, Mom; Thank you, Dad; Thank you, Curtis; Thank you, Adam. Go Team!

ACKNOWLEDGEMENTS

Many thanks to Professor Lum, Professor Bamford, and Professor Gill. I would like to thank Professor Lum for being the chair of my thesis committee and for her tireless effort in the production of my thesis. I also wish to thank Professor Gill and Professor Bamford whom together complete my thesis committee. I thank all of my professors and peers at George Mason University for their unwavering support and for creating a challenging and rewarding academic environment.

TABLE OF CONTENTS

C - C - C - C - C - C - C - C - C - C -	• •
List of Tables	
Abstract	
Chapter One	
Characterization of Psychopaths	
Diagnosing Psychopathy	4
Psychopath in the United States	5
Psychopaths, Crime, and Criminal Justice	7
Recidivism Rates	8
PCL-R Scores and Early Prison Release	9
Treatment	9
Chapter TWO	. 12
Statement of the Problem	. 12
The Language of Psychopaths	. 14
Psychopaths and Affective Word Processing.	. 15
Psychopaths' Sentence Completion Test	. 17
Psychopaths and Word Triads Section One	. 18
Figurative Language	. 20
Psychopaths and Figurative Language	. 22
Psychopaths and Metaphors	. 23
Identifying Psychopaths Through Language Cues	. 26
Research Question, Hypotheses and Objectives	. 29
Chapter THREE	. 32
Sequential Exploratory Strategy	
Psychopath Sample	. 36
Matched Pair Sample (Non-psychopaths)	
Interviews	

Data Collection	39
Limitations	41
Conclusions	43
Chapter FOUR	46
Description of Matched Pairs	47
Ted Bundy and Israel Keyes	47
John Wayne Gacy and Dennis Nilsen	50
Diane Downs and Shaquan Duley	53
Richard Kuklinski and Salvatore Gravano	56
Jeffrey MacDonald and Harold Shipman	59
Analysis of Matched Pairs	61
Ted Bundy and Israel Keyes	61
John Wayne Gacy and Dennis Nilsen	79
Diane Downs and Shaquan Duley	91
Richard Kuklinski and Salvatore Gravano	105
Jeffrey MacDonald and Harold Shipman	130
Chapter FIVE	144
Sample Summary and Discussion	144
Implications for Practice	153
Interrogation	154
Street Officer and Officer Safety	157
Appendix A: Literary Devices	162
Appendix B: Sample information	166
References	168
Riography	178

LIST OF TABLES

Table	Page
Table 1: Verb Tense	
Table 2: Figures of Speech Part A	75
Table 3: Figures of Speech Part B	
Table 4: Social Needs	85
Table 5: Cause and Effect Words	95
Table 6: Speech Disfluencies Part A	123
Table 7: Speech Disfluencies Part B	
Table 8: Speech Disfluencies Part C	
Table 9: Primal Needs	

ABSTRACT

THE LANGUAGE OF PSYCHOPATHS: WARNING SIGNS FOR LAW

ENFORCEMENT

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George Mason University, 2015

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The proposed research explores the language of psychopaths through their word choices,

references and usage of figures of speech. Results from the study may be used for

profiling purposes or in interrogation settings. Psychopaths' language is explored using

pre-recorded interviews and is compared to a matched sample's pre-recorded interviews.

All subjects in the study are murderers. The study utilizes a mixed methods design called

sequential exploratory strategy that allows the researcher to focus on qualitative data

while supporting findings with quantitative results and combine the two analyses. The

researcher has six hypotheses: 1) Psychopathic offenders will use more past tense lexical

verbs than the control 2) Psychopathic offenders will have a higher number of cause and

effect words than the control group 3) Psychopaths will refer more to primal needs than

the control 4) Psychopaths will make fewer references to social needs including family,

spiritual and religious references as compared to the control 5) Psychopaths'

narratives/interviews will include more disfluencies/speech fillers than the control group 6) Psychopaths will use fewer figures of speech than the control with the exception of sarcasm. The usage of 10 figures of speech will be collected: metaphors, similes, personification, analogies, cacophonies, chiasmuses, hyperboles, oxymorons, puns, and sarcasm. Results support hypotheses one, two, five, and hypothesis six not including the exception of sarcasm.

CHAPTER ONE

Characterization of Psychopaths

The word 'psychopath' means mental illness. 'Psyche' means mind and 'pathos' means disease (Hare, 1993). Contrary to the literal meaning of the word, psychopaths are not mentally ill. They do not experience the qualities categorized in other mental disorders, such as delusions or hallucinations. Psychopaths are rational people. They know what they are doing, and their actions result from choices they freely make. Thus the word 'psychopath' is not synonymous to the word 'psychotic.' Psychotic persons who commit crimes are deemed not guilty by reason of insanity in a court of law and are sent to hospitals. Psychopaths who commit the same crimes are considered sane and go to jail/prison (Hare, 1993). Psychopaths do not become psychotic unless they suffer from an additional mental illness or are using powerful drugs (Babiak et al., 2012).

To be clinically diagnosed as a psychopath is to be diagnosed with the most dangerous personality disorder. Personality is "an individual's characteristic patterns of thinking, feeling, and acting" (Lynam & Derefinko, 2006, p. 133) that result from a combination of nature and nurture (Babiak et al., 2012). Personalities characterize who a person is, define how one interacts with others, and how the person deals with problems. Personalities reveal how the person sees the world and how the person believes the rest of the world views him/her. Personalities grow and change until the individual has reached

his/her late twenties. Once a person is in his/her late twenties, personalities become static with no further changes or evolvement possible (Babiak et al., 2012).

Psychopathy is a mixture of "…interpersonal, affective, lifestyle, and antisocial traits and behaviors" (Babiak et al., 2012). The personality traits that make up the psychopathic diagnosis begin to manifest themselves in early childhood. Specifically, the psychopath may be deceptive, manipulative, irresponsible, impulsive, unable to control behavior, shallow, un-empathetic, guiltless, and remorseless (Babiak et al., 2012). Serial killer and psychopath Ted Bundy demonstrates this lack of guilt by saying,

Guilt? It's a mechanism we use to control people. It's an illusion. It's a kind of social control mechanism – and it's *very* unhealthy. It does terrible things to our bodies. And there are much better ways to control our behavior than that rather extraordinary use of guilt (Hare, 1993, p. 41).

Psychopaths may seek stimulation, have a cruel disregard for others, and display sexual promiscuity. The majority of psychopaths display no remorse for their "aggressive actions" whether the actions are violent or not and further display no empathy for victims of their actions (Babiak et al., 2012). Psychopaths' lack of empathy and remorse allows them to behave "in a cold-blooded manner" and to manipulate those around them for the achievement of goals and other needs and wants. One inmate serving time for stock fraud remarked in an interview, "I like to con people. I'm conning you now" (Hare, 1993, p. 49).

Psychopaths can be skilled conversationalists. They have been described as witty, eloquent speakers. They can quickly formulate a clever comeback and are entertaining to

converse with. However, some people see past the façade and describe psychopaths as superficial and slick (Hare, 1993). Research of psychopaths' language demonstrates that psychopaths are either incapable of or unwilling to "...process or use the deep semantic meanings of language" (Hare, 1996, p. 45). The linguist processes of psychopaths seem to be superficial. They are at a loss when it comes to understanding "the abstract meanings and nuances of language" (Hare, 1996, p. 45). In a study conducted by Gillstrom (1994), participants were asked to give meanings to a set of 12 proverbs, and psychopaths performed significantly worse than their non-psychopathic counterparts (as cited in Hare, 1996).

Due in part to their ability to charm and dazzle their audience, psychopaths are easily able to integrate into society (Babiak et al., 2012). They can become and are successful businessmen, CEOs, husbands, and wives. Yet, psychopaths lack a moral compass (Babiak et al., 2012). A conscience or moral compass is a compilation of gut reactions and feelings that come from, at least in part, the autonomic nervous system. As defined by Raine (2013) conscience is, "...a symphony of classical conditioning and autonomic reactions that inspire or dissuade us from taking antisocial actions" (p. 115). Put simply, a conscience is the nagging voice in one's head that prevents him/her from doing something he/she knows is wrong. Jiminy Cricket from the Walt Disney film *Pinocchio* (1940) is an example of an animated version of the nagging voice 99% of the world's population hears in their heads. Jiminy Cricket's job was to be Pinocchio's conscience and tell him right from wrong because Pinocchio was unable to differentiate between the two. Psychopaths lack a Jiminy Cricket. Unlike Pinocchio, psychopaths do

know the difference between right and wrong, but they may voluntarily choose to ignore this distinction.

Diagnosing Psychopathy

The most widely used and the most acceptable measurement of psychopathy is the Psychopathy Checklist – Revised (PCL-R). The PCL-R incorporates a semi-structured interview and case history into the psychopathy diagnosis. The PCL-R consists of a rating scale of 20 items. Each of the 20 items is rated using 0,1, or 2 based on the extent to which the trait does or does not apply to the person being diagnosed. 0 means the item does not apply. 1 applies somewhat and 2 definitely applies. Scores range from 0 to 40. Most researchers diagnosis a person as psychopathic if he/she earns a score of 30 or higher; however, some researchers and some countries use a score of 25 or higher for the diagnosis (Hare & Neumann, 2009). Between two and six hours are needed to complete the psychopath assessment tool. The subjects' history, both criminal and incarceration, are considered in the assessment tool (Kiehl & Hoffman, 2011).

According to Hare's assessment instruments, psychopaths are persons who score at least a 30 on the PCL-R (Kiehl & Hoffman, 2011). A correlation exists between scoring high on the assessment tool and being incarcerated. Prisoners in general whether or not they are classified as psychopathic, typically have higher scores on the PCL-R than their male counterparts who are not incarcerated. The non-incarcerated population scores around 6.6 on the tool while the average inmate scores 22.1 (Kiehl & Hoffman, 2011).

Psychopath in the United States

150,000 males in the United States meet the criteria for psychopathy (Kiehl & Hoffman, 2011). 93% of the male psychopaths in the United States are somewhere in the criminal justice system defined as "prison, jail, parole, or probation" (Kiehl & Hoffman, 2011, p. 356). As of 2008, there were 6,720,000 males in the criminal justice system. Of the males in the criminal justice system, 16% (1,075,000) are diagnosable as psychopaths (Kiehl & Hoffman, 2011). In federal correctional settings, about 15-25% of male offenders are diagnosable as psychopathic (Hancock et al., 2013).

Law enforcement officers have to contend with the ramifications of psychopathy both in the field and in the interrogation room, among other places. Law enforcement officers may believe they are expert interviewers due to training received and the quantity of interviews they have directed, yet interviewing psychopaths is different from interviewing a non-psychopathic offender. Typical interview techniques might not be useful. A different set of tools is needed to interview psychopaths. Reprimanding psychopaths is likely to be a waste of time. Appearing worried or nervous will be interpreted by the psychopath as a weakness. Explaining the seriousness of the crime and/or the consequences of the crime is useless. Objecting to statements made by psychopaths is also useless especially if the objections are made near the beginning of the interview. Rather the interviewer needs to change tactics in order to elicit relevant and truthful information from psychopaths (O'Toole, Logan, & Smith, 2012).

Logan (2012) presented a case study about the murder of four police officers by a psychopath to illustrate the dangerous aspect of psychopathy. Logan (2012) notes that across the world, law enforcement officers can list persons in their community who are

more likely to be dangerous to officers than other offenders due to a combination of variables, such as "severe substance abuse, mental illness, psychopathy, personality disorders, or a pattern of criminal behavior" (Logan, 2012, Officer Safety Initiative, para.

1). Most law enforcement departments lack a plan to contend with these types of persons. Logan (2012) concludes that the persons recently accused of murdering law enforcement officers (James Roszko, Maurice Clemmons, Johnny Simms, and Hydra Lacy, Jr.) share similar traits. Most notably for the current research, all four had personality disorders with psychopathic characteristics.

According to the FBI National Press Release, the 2013 preliminary statistics indicate "...that 27 law enforcement officers were feloniously killed in the line of duty in 2013" (FBI Releases, 2014). The preliminary statistics for 2013 show a decrease of over 44 percent of the number of officers feloniously killed in the line of duty as compared to 2012 when 49 officers were killed. In 2013, officers died from ambushes, injuries received when responding to 9-1-1 calls, tactical situations, injuries received while investigating persons of interest or suspicious circumstances, traffic stops, responding to robberies or pursuing suspects of robberies, and as a result of investigative activity (FBI Releases, 2014). The report does not provide any information on the characteristics of the offenders. While the preliminary statistics for 2013 seem to show that the number of law enforcement officers feloniously killed in the line of duty decreased, in 2014, 125 officers died in the line of duty. These 125 deaths have not yet been made into reports by the FBI and as such are not considered law enforcement officers who were feloniously killed in the line of duty. Chris Cosgriff, the founder of the Officer Down Memorial Page, remarks

"When a police officer is killed, it's not an agency that loses an officer, it's an entire nation" (Honoring Officers, 2014).

Law enforcement agencies and criminal justice actors worldwide need to be prepared to handle contact with psychopaths. In order to handle interactions with psychopaths, law enforcement first needs to realize when they are dealing with psychopaths before they can make the appropriate adaptations to their tactics. Being ill-prepared puts law enforcement at a disadvantage: A disadvantage that could result in something as simple a psychopath monopolizing an interview or manipulating the interviewer or a disadvantage so serious it could result in the officer being feloniously killed in the line of duty. Not suspecting a person is psychopathic puts law enforcement at a disadvantage in all types of situations including "...criminal investigations, undercover work, hostage negotiations, and interrogations...white-collar crime..." (Hare, 2012, Focus on Psychopathy, para. 3). Being able to identify psychopathic characteristics could save an officer's life or at the very least it could allow for a change in tactics to achieve the desired results (Hare, 2012).

Psychopaths, Crime, and Criminal Justice

Not all psychopaths are violent. The psychopaths who are violent and engage in sexually deviant behaviors are typically more dangerous than other violent offenders (Babiak et al., 2012). Hare (1993) claims that psychopaths are responsible for more than 50% of serious crimes though Kiehl & Sinnott-Armstrong (2013) state psychopaths are responsible for between 30% and 40% of violent crimes occurring in the United States. Violent psychopaths' recidivism rate is three times higher than the recidivism rate of non-

psychopathic offenders (Hare, 1993). Psychopaths have more extensive, more varied, and more serious criminal histories than their non-psychopathic counterparts. Psychopaths are also violent at a more consistent rate. Porter and Woodworth (2007) found that psychopaths' violence is more predatory in nature than violence by non-psychopaths. Psychopaths were significantly more likely to commit instrumental murders (purely goal-oriented murders) than non-psychopaths. There is no evidence of emotional or situation incitement/aggravation in instrumental murders. The homicide is premeditated, intentional, and motivated by external goals. An example of such a homicide would be a person intending to rob a bank and planning to kill the bank clerks and then executing the plan. Porter and Woodworth (2007) found that the psychopaths in their sample committed instrumental homicides 89% of the time while non-psychopathic murderers committed instrumental homicides 42.1% of the time.

Recidivism Rates

Canadian research is the most prominent in the area of psychopathic offenders' recidivism rates because Canada keeps statistics on national recidivism rates (Kiehl & Hoffman, 2011). Kiehl and Hoffman (2011) describe a study conducted by Rice and Harris in 1997 that retrospectively examined the recidivism rates of 288 convicted sex offenders over 20 years for violent crimes and 10 years for sexual crimes. In the first year after being released from prison, 25% offenders who scored high on the psychopathy assessment tool had been rearrested for a new violent crime. After a period of seven years, only 25% of offenders scoring high on the psychopathy assessment tool had not been rearrested for a subsequent violent crime. At the end of the study, 20 years later, the

violent recidivism rate of psychopathic offenders was 90% while offenders who had scored low on the assessment tool had a violent recidivism rate of 40%. Typically a psychopath goes to and is released from prison three times before a non-psychopathic offender who has the same sentence as the psychopath returns to prison once. Before reaching age 40, on average incarcerated psychopaths have been convicted of four violent offenses (Kiehl & Hoffman, 2011).

PCL-R Scores and Early Prison Release

According to Kiehl and Hoffman (2011), a study conducted by Porter and colleagues on male inmates in one Canadian prison found that of the 310 offenders in the study, 90 of them were psychopaths. Porter also found that the psychopathic inmates were about 2.5 times more likely to be released early from prison than their non-psychopathic counterparts. Porter credited this statistic to psychopaths' ability to use detection along with manipulation to persuade prison officials to allow them to be released early (Kiehl & Hoffman, 2011).

Treatment

Beliefs about the possible treatment and the effectiveness of treatment on psychopaths differ from offering a glimpse of hope to arguing no treatment is effective. Hare (1993) writes that it appears as if nothing works for the treatment of psychopathy. As Hare (1993) explains, one of the essential assumptions required for psychotherapy is that the patient has to need or want help. Furthermore, successful therapy demands that the patient have an active role together with the therapist in the search for resolutions. The patient has to realize there is a problem and has to want to fix it. The problem is,

"Psychopaths don't feel they have psychological or emotional problems, and they see no reason to change their behavior to conform to societal standards with which they do not agree" (Hare, 1993, p. 195). Psychopaths do not see anything wrong with their behavior, in fact, quite the opposite, they enjoy their behavior because it allows them to reap the benefits of being powerful contenders in a world that is in a competition for power and other resources. They do not perceive a problem with using deceit and manipulation to obtain what is "rightfully" theirs (Hare, 1993).

Kiehl and Hoffman (2011) mention research conducted by Caldwell and Rybroek (2001) in which they designed a treatment program for psychopathic youth called the "decompression treatment." The purpose of the program is to slowly rebuild social connections that psychopaths are missing. After conducting the study several times, the developers/researchers concluded the treatment was effective for the reduction of recidivism with a few caveats: 1) the treatment had to be long-term 2) the treatment was only successful for juveniles who had scored less than a 31 on the Psychopathy Checklist: Youth Version (PCL-YV) (Kiehl & Hoffman, 2011).

Salekin (2001) conducted a meta-analysis of studies on the treatment of psychopaths to estimate the strength of the connection between treatment and results from treatments. Due to the limited number of studies conducted on the treatment of psychopathy, Salekin (2001) used research in the meta-analysis that did not have control groups and included case studies. The majority of the studies used in the meta-analysis used a psychoanalytic approach to treatment. The majority of the studies interpreted psychopathy using a Clecklian approach (based on Hervey Cleckley's description of

psychopathy) while only 4 % used the approach suggested by Hare. The average age of treatment for the psychopathic individuals was 22.4, and 91% of the persons treated were male (Salekin, 2001).

Intensive individual psychotherapy (therapy that meets for about four sessions per week for a period of a year or more) had a 91% success rate (Salekin, 2001). Psychoanalytic therapy seemed to be effective: This conclusion derives from 17 studies with 88 psychopathic persons with an average success rate of 59%. Cognitive-behavioral therapy was successful 62% of the time, making it slightly more effective than psychoanalytic therapy; however, the difference between the two types of therapy is minimal. Therapeutic communities seemed to be the least effective types of therapy averaging a success rate of 25%. Two small studies used pharmacotherapy to address psychopathic traits and had a success rate of 70%. Studies that defined psychopathy with a Checklian approach using psychotherapy were more successful than approaches using Hare's PCL-R definition. Youth psychopaths benefited more than adult psychopaths from psychotherapy. 91% of persons who participated in treatment for longer than one year were found to have benefited from treatment. While there are limitations to Salekin (2001)'s study, the meta-analysis does give scientific hope for the possible treatment of psychopaths.

CHAPTER TWO

Statement of the Problem

About one percent of the population is clinically diagnosable as psychopathic. There are about 7 billion people in the world; thus, there are about 70,000,000 psychopaths in the world, which translates into one person out of one hundred (Brewer, 2014). Psychopaths comprise almost a quarter of the male offenders in United States federal correctional settings (Hancock et al., 2013). Psychopathic offenders have a recidivism rate that is double the rate of non-psychopathic offenders, and psychopathic offenders have a violent recidivism rate that is triple the rate of non-psychopathic offenders (Hare, 1993). Most murders committed by psychopaths are cold-blooded killings (Porter & Woodworth, 2007). A 1992 Federal Bureau of Investigation (FBI) study concluded that nearly half of the persons convicted of killing law enforcement officers in the line of duty had personality traits and characteristics that closely resembled psychopathic characteristics (Hare, 1996).

The ease with which psychopaths implement themselves into the other 99%'s lives and partake in violence warrants research. Psychopaths are always dangerous even if they are not always violent. Violent psychopaths' brains operate differently than the brains of people who have a conscience with the primary difference between them being the prefrontal cortex (Raine, 2013). Dysfunctional brain areas can predispose a person to violence: areas, such as "the dorsal and ventral regions of the prefrontal cortex...the

amygdala, the hippocampus, the angular gyrus, and the temporal cortex" (Raine, 2013, p. 99). The conscience is located on the amygdala and the prefrontal cortex. Raine (2013) labels these two areas as places that can predispose a person to violence if they malfunction. The conscience converts the cognitive recognition that the action is wrong into inhibiting the behavior (Raine, 2013). Psychopaths lack a conscience (Babiak et al., 2012), which translates into a lack of behavioral inhibition.

Language provides insight into the mind – language from a psychopath provides insight to a mind that the rest of society struggles to understand. Valuable insight into the psychopath's way of thinking via their language and word choices would be beneficial to law enforcement because law enforcement is the frontline in the battle against crime. Given the use of language as a portal into the mind and the importance of psychopaths in regards to law enforcement, violent crimes, recidivism rates, cost to society, and a seeming lack of treatment, the current study examines psychopaths' language relative to a control sample through prerecorded interviews to assist law enforcement. Law enforcement may be assisted in their interrogation tactics or possibly the study may be used for profiling. The below literary analysis details previous research on psychopaths' word choices, word processing, sentence-completion tests, word triads, figurative language, metaphors, and the connections of the previous research to the current study. Lastly, this section suggests the possibility for research opportunities in identifying psychopaths via their language cues.

The Language of Psychopaths

Language is one of the best gateways into an individual's mind and thoughts. Words can expose glimpses into the person's psychological functioning, such as depression, personality, and deception (Hancock et al., 2013).

A growing set of research suggests that subtle patterns in word choice can reveal underlying cognitive and emotional processes, largely because of the automatic and non-conscious operation of language production that is tightly coupled with basic psychological states and dynamics (Hancock et al., 2013, p. 102).

One study conducted by Oxman, Rosenberg, Schnurr, and Tucker (1988) demonstrated that patients could be diagnosed more accurately with major depression, paranoia, and somatization disorder by analyzing their speech than with a clinician's analysis (as cited in Hancock et al., 2013). For example, a narcissist's language should contain more pronouns, such as "I," "me," and "my" than a control's language (Woodworth et al., 2012).

Psychopaths are different from the other 99% of the population because of their personalities, namely their lack of a conscience. Even though psychopaths can be skilled conversationalists with the ability to manipulate others, a few studies have shown that psychopaths' language is self-contradictory and less cohesive than when compared to non-psychopaths (Hancock et al., 2013).

Hancock et al. (2013) analyzed crime narratives of psychopaths and non-psychopaths and found three main results. One, psychopaths used an increased number of rational cause-and-effect words (because, since). Their narratives focused more on material needs, such as food and money and did not contain as many references to social needs (family and religion). Two, psychopaths used 33% more speech disfluencies ('uh'

and 'um') than the non-psychopaths. Three, psychopaths' language consisted more of past tense lexical verbs (raped) than present tense lexical verbs (rape). They also used more articles (the). Taken together, these results indicate that psychopaths show a greater psychological detachment (distancing from the crime and a lack of responsibility for the crime) than do controls (Hancock et al., 2013). The researchers conclude that psychopaths think about their crimes in a detached way: The crime took place in the past with no relevance to the present or to the future with the exception of the crime "...being practically cumbersome" (Hancock et al., 2013, p. 110). In other words, "...psychopaths operate on a primitive but rational level" (Hancock et al., 2013, p. 112).

Psychopaths and Affective Word Processing

Cleckley (1976) argued that psychopaths had a semantic disorder "...in which meaning-related associative and elaborative processes are missing" (as cited in Williamson et al., 1991, p. 260). To cover for this deficiency, psychopaths had a high-functioning "expressive and receptive process." Cleckley believed that if psychopathy was not a language based disorder then at the very least it would be visible in the "language process." Cleckely (1976) asserted, "[the psychopath] cannot be taught awareness of significance which he fails to feel" (as cited in Williamson et al., 1991, p. 260). A psychopath can use normal words, and if the psychopath is smart he/she can use "extraordinarily vivid and eloquent words" to converse with people. However, the psychopath only understands the dictionary level meaning of the words: Psychopaths cannot "analyze, appreciate, or use the affective components of language" (Williamson et al., 1991, p. 260).

A study conducted by Williamson et al. (1991) examined the lexical effect between psychopaths and non-psychopaths by presenting them with a lexical decision task. Participants were separated into two groups using the Psychopathy Checklist (PCL) developed by Hare (1980). The lexical decision participants were making was whether or not the string of letters they were shown made up a word. Researchers measured their reaction time in making this decision. Also measured was their behavioral response to the string of letters. Participants were male inmates from a prison in British Columbia. Using the PCL, participants with scores of 33 or higher were considered psychopaths. Participants with scores below 25 constituted the non-psychopathic group. There were eight offenders in each group. The study used three types of words with thirteen of each type. The categories of words were "affectively positive, affectively negative, neutral" plus 39 strings of letters that were pronounceable but were not words. Researchers found that psychopaths took longer to respond to emotional words (affectively positive and affectively negative) than they did to neutral words. Non-psychopathic participants responded more quickly to emotional words than to neutral words. The researchers concluded that psychopaths likely do not attach a similar emotional meaning to the affective words that non-psychopaths do (Williamson et al., 1991).

In relation to the current study, the results from Williamson et al. (1991) appear to support the sixth hypothesis that psychopaths will use fewer figures of speech than the controls because as is explained in the section "Figurative Language," one of the purposes of figurative language is to convey a message, point, or a meaning that is deeper than what is literally being said. Conveying a deep message may be difficult when

psychopaths respond more quickly to emotionally neutral words than to affectively positive or negative words. The results from Williamson et al. (1991) may also lend support to hypothesis five, which is a partial replication from Hancock et al.'s (2013) study, that psychopaths will use more speech fillers than controls because speech fillers would presumably be classified as emotionally neutral words. Even though Williamson et al. (1991) was observing the reaction rate to words, it is possible a higher reaction rate is related to a higher usage rate or vice versa.

Psychopaths' Sentence Completion Test

Using sentence-completion tests (SCTs), Endres (2004) studied a sample of German high-security prisoners' possibility of being diagnosed as psychopaths using the Psychopathy Checklist-Revised (PCL-R). An advantage to SCTs is that subjects can respond to statements without being confined by yes/no dichotomous answers.

Additionally, SCTs prompt subjects for a quick response, reduce interviewer effects, and allow for quick changes in topic. The Washington University Sentence Completion Test (WUSCT) was used in the Endres' (2004) research because the purpose of the WUSCT was to measure the development of egos. Prisoners completed the PCL-R and an interview. The SCT consisted of 21 categories thought to be associated with psychopathy. The 21 categories were part of three more broadly defined groups: 1) motivational 2) cognitive-behavioral and 3) linguistic. The researcher coded results for each sentence deciding which category the completed sentence best fell under. The result was frequency data for each subject depicting the number of occurrences of the 21 categories in their overall SCTs (Endres, 2004).

The number of occurrences for each category was compared to scores on the PCL-R. Endres (2004) found a significant correlation between two subcategories and PCL-R scores. The two subcategories were 1) concerns about self-power and 2) concerns about the power of others and being able to overcome that power. Also positively correlated with psychopathy was the use of foul language and stating dissatisfaction without supplying a reason or a cause for the dissatisfaction. Negatively correlated with psychopathy was skipping questions/blank answers, meaning that psychopaths either had less trouble supplying a response or they were not as reluctant to answer. Endres (2004) concludes that while diagnosing psychopathy on the basis of SCT is not possible, the SCT may help identify non-psychopathic people.

Endres (2004) study supplies the current research with a backup plan: should the current research produce statistically insignificant results for the sixth hypothesis then possibly the use of figures of speech could assist in identifying people who are probably not psychopaths. Hypotheses one through five are not included in this backup plan because they are in part a replication of the results from Hancock et al. (2013)'s research. SCT could be included in future research to measure whether people scoring high on the PCL-R are more likely to use figures of speech in their SCTs or during a PCL-R interview. Research of this nature may be useful when biographical information is unavailable.

Psychopaths and Word Triads Section One

Hare, Williamson, and Harpur (1988) designed a study to observe how psychopaths differ from non-psychopaths in determining the denotative and connotative

meanings of words. Using Brownell et al. (1984)'s procedure of displaying word triads to a subject and asking the subject to determine which two words are most similar in meaning, Hare et al. (1988) gathered inmates and split them into two groups (high scoring PCL group and low scoring PCL group). Participants had 56 word triads that displayed all combinations of the words, "warm, cold, deep, shallow, loving, hateful, wise, foolish" (p.80). Each combination of the pairs of words was shown once. Hare et al., (1988) calculated a similarity score for each possible pair. The similarity score was calculated by counting the number of times a pair of words were circled, so scores could range from zero to six. Following Brownell et al. (1984)'s procedure, there were six different relationships of words: antonyms, domain, metaphors, polarity, pairs with both domain and polarity, and pairs that were not related. Domain pairs were connected to the human being domain, i.e. loving and foolish and had factual meanings as did antonym pairs. Metaphor pairs had connotative meanings. Pairs with both domain and polarity were based on both the literal and connotative meanings.

Psychopaths paired words based on the denotative meaning whereas non-psychopaths paired words based on the connotative meanings. Psychopaths focused more heavily on antonyms and less so on polarity and polarity and domain. Hare et al. (1988) conclude by noting their results may suggest that psychopaths focus more on denotative meanings than connotative.

The results seem to further imply that while psychopaths understand the literal/factual/denotative meanings, they struggle to grasp the implied/connotative meanings, such as the ones used in figurative language. Hare et al. (1988) could further

supplement the current researcher's prediction in hypothesis six because presumably it would be difficult to use that which one does not understand, and Hare et al. (1988)'s results indicate a lack of comprehension.

Figurative Language

Occasionally what people say is not reflective of what they actually (literally) mean. The language used can be vague, exaggerated, or the language could be factually false descriptions used to convey a point, message, emotion or a deeper meaning etcetera. Language that is literally false is figurative language. Part of what a listener has to do is determine when what the speaker says is literally true or false, and if the language is literally false then the listener must determine what is actually meant by the false language (Kao et al., 2014). For example, when a person says he/she was stuck in traffic for 45 minutes then the listener interprets this statement as the person sat in traffic for 45 minutes — the literal meaning of the statement is true. However, when a person says he/she sat in traffic forever (a hyperbole) then the person listening would likely interpret this statement to mean that the person sat in traffic for a long time but less than forever, so the literal meaning of the statement is false.

Figurative language is expressed through various types of figures of speech, such as oxymorons, personification, sarcasm, and irony etcetera. The purpose of figurative language is to produce an effect. Purposes can also include to enhance the beauty of the literature, strengthen emotional aspects, or to give listeners a comparison of one familiar thing to another (Nezami, 2012). Figures of speech are to conversation what salt is to food (an analogy). The main purpose of figures of speech, and salt, is to enhance the

favor, whatever the flavor may be. Figures of speech capture and engage the mind (Devlin, 2004). Figures of speech are not confined to the English language rather they are used in all languages. The Greeks were the first to use figures of speech referring to them as "schema" (Nezami, 2012). Longinous, the first Greek critic, thought the overuse of figures of speech was detrimental to the literary work of art. While figurative language is commonly thought of in association with poems and literature, figures of speech are used in colloquial conversations as well (Nezami, 2012).

Figures of speech can be classified by what they are based on. Metaphor, personification, and simile are all centered on resemblance (Nezami, 2012). Metaphors make a comparison between two unlike things. For example, life is a journey, the 800pound gorilla, a heart of gold, cabin fever, cold feet, domino effect, fork in the road, and smoking gun all are metaphors (List, n.d.). Personification gives inanimate objects human characteristics: the wind was howling, justice is blind, the city that never sleeps, technology hates me, and opportunity knocked. A simile also makes a comparison between two unlike things using the words "like" or "as" and is typically used to create an emotional effect: heavy as lead, strong as an ox, as cold as ice, as easy as A.B.C., drink like a fish, and eat like a horse. Oxymorons are based on contrasts. An oxymoron puts together two words that are opposite in meaning: jumbo-shrimp, paid volunteer, open secret, clearly confused, simply impossible, minor crisis, and pretty ugly (Nordquist, n.d.). A pun is a take on words that allows for a double meaning where usually one meaning is amusing and the second is serious. For example, the past, present, and future walked into a bar: it was tense or words, phrases, and punctuation kept

appearing in court to be sentenced. A hyperbole is based on an overstatement: it was so cold, the polar bears had on jackets. Cacophony is centered on music and sounds (Nezami, 2012): she sells seashells by the seashore. Sarcasm is a type of irony. A sarcastic statement presents a juxtaposition: a sarcastic statement is meant to be both negative and humorous at the same time (Caucci & Kreuz, 2012). According to Caucci and Kreuz (2012), almost ninety-five percent of their sample thought the purpose of sarcasm was meant to be negative, and over half thought sarcasm was supposed to be funny. An example is a person telling someone who is mad or upset, "Aren't you just a ray of sunshine?" Chiasmus are statements that are parallel but inverted. An example of a chiasums is "You forget what you want to remember, and you remember what you want to forget" (McCarthy, 2006, p. 10). Another example is the popular Band-Aid advertising jingle, "I'm stuck on Band-Aid brand cause Band-Aid's stuck on me..." (Band-Aid, n.d.). An analogy compares two things and presents a new idea: fire is to hot as ice is to cold or figures of speech are to conversation what salt is to food. More detailed descriptions of the figures of speech used in the current study and examples can be found in Appendix A.

Psychopaths and Figurative Language

Since psychopaths experience no intellectual deficiencies (Hancock et al., 2013) and because they struggle with the nuances of language (Hare, 1996) even though they are often described as eloquent speakers, the current researcher will examine their use of 10 figures of speech: metaphors, similes, personification, analogies, cacophonies, chiasmuses, hyperboles, oxymorons, puns, and sarcasm. These devices were chosen due

to their extensive use. Metaphors, similes, personification, puns, and sarcasm are some of the most commonly used figures of speech in everyday conversation. Psychopaths may have trouble using and understanding these figures of speech because as with sarcasm, for example, the person listening to the sarcasm must have "a theory of mind" in that he/she has to think past the dictionary meaning of the words in order to understand the speaker's point (Chin, 2011). Conversely, psychopaths might be able to use sarcasm as effectively as non-psychopaths because sarcasm is a lie: the speaker says something that is not what he/she literally means. Psychopaths typically enjoy lying and lie for the sake of lying – a phenomenon labeled the "duping delight" by Ekman (1985) (Lilienfeld & Fowler, 2006).

Psychopaths and Metaphors

Psychopaths do not understand completely "the emotional and abstract nuances of language" (Hervé et al., 2003, p.1498). Limited research has been conducted on the more complicated aspects of psychopaths' language. The purpose of Hervé et al. (2003)'s study was to examine psychopaths' comprehension of both the factual (literal) and emotional implications of metaphors. Metaphors are used in everyday language, and they are the foundation for different figures of speech, including similes, analogies, slang etcetera. Metaphors have two meanings "denotative/literal and connotative/affective" (Hervé et al., 2003).

To measure psychopaths' comprehension of metaphors (literal and emotional), the researchers made an Emotional Metaphor Q-Sort. The sort had 60 metaphors – 30 negative and 30 positive. Participants were 32 inmates from a federal prison. Each inmate

completed the PCL-R, and inmates were divided into groups based on their scores: the high group scored at least a 30 and the low group scored at least a 22. Understanding and interpreting metaphors could be related to age, reading level, and years of education, so researchers compared the groups on those variables. No significant differences between the groups were observed. Inmates were asked to divide the metaphors into a negative metaphor pile and a positive metaphor pile. Afterwards, they selected the two most positive metaphors and placed them in a bin. They then selected the nine next most positive metaphors and placed them in a separate bin. The rest of the positive metaphors were placed in a different bin. The same process was repeated for the negative metaphors. The entire process was timed. Ten metaphors, five of each emotional polarity, were selected and read out loud to the inmate who verbally described the meaning of the ten metaphorical statements (Hervé et al., 2003).

There was no correlation between scores on the PCL-R and the ability to give the meaning of the metaphors. Psychopaths did not struggle with the interpretation task. High scoring inmates on the PCL-R had difficulties in determining the emotional polarity of the metaphorical statements (determining whether the statement was negative or positive). They experienced difficulties in putting negative metaphors in the very or extremely positive pile (large negative errors) and putting positive metaphors in the very or extremely negative pile (large positive errors). For example, one psychopathic inmate decided the metaphor "the sea is the mother of life" was very negative, and the metaphor "memory is a dog that bites when you least expect it" was very positive (Hervé et al., 2003).

Hervé et al. (2003) interpreted their results to mean that the skills needed to correctly interpret metaphors do not necessarily require one to understand the metaphor's emotional polarity. Psychopaths knew what the metaphors meant and could correctly interpret them on the surface level, but they did not understand whether the metaphor's meaning was good or bad. One of the psychopathic inmates translated the metaphor "sleep is a doctor that heals daily wounds" to mean that "sleep helps you heal your body" (Hervé et al., 2003). The psychopath was correct in the interpretation but then decided that the metaphor had a negative polarity. Citing Hare (1998b), the authors explain that psychopaths frequently use figurative language to dazzle, charm, confuse, and manipulate people. However, the use of such language is for a purpose rather than to express feelings: there is a gap between what psychopaths say and their actions. In the words of Hare (1998b) when psychopaths talk about emotional themes with deep semantic meanings, they are "pulling words from an overcoat pocket" (Hare, 1998b, p. 124 as cited in Hervé et al., 2003).

Overall this study adds support to the research insisting that psychopaths experience difficulties in understanding the emotional aspects of language. Hervé et al. (2003) research suggests that psychopaths may use figurative language; however, the question of whether psychopaths use figurative language more or less frequently than non-psychopaths remains unanswered. The present researcher disagrees with the interpretation of Hervé et al.'s (2003) results. If psychopaths interpret a negative metaphor to be positive or a positive metaphor to be negative then the present researcher argues that the psychopaths do not fully understand the meaning of the metaphor. If

metaphors have two meanings (literal and affective) as Hervé et al. (2003) claim and if psychopaths only comprehend the literal meaning of the metaphor as Hervé et al. (2003)'s results indicate then they have failed to fully comprehend what the speaker was trying to communicate, which the present researcher argues means they have failed to correctly interpret the metaphor. Hervé et al. (2003) argues the results mean psychopaths understand the literal but not the affective meaning, which could mean psychopaths only understand half of the speaker's point. Drawing back to the figures of speech and salt analogy (figures of speech are to conversation what salt is to food), if the metaphor's polarity is interpreted incorrectly by the listener then the metaphor is no longer what salt is to food because the wrongly interpreted metaphor no longer enhances the conversation/flavor rather it has changed the conversation/flavor entirely. Hervé et al. (2003) research supports the idea that psychopaths will use metaphors, and potentially other figures of speech as well, but as mentioned above, the question of whether psychopaths use them more or less often than non-psychopaths remains unanswered.

Identifying Psychopaths Through Language Cues

Law enforcement agencies worldwide use criminal profiling techniques to identify potential offenders (Snook et al., 2007). While the current research is not proposing profiling psychopaths via the normal profiling procedures, the current research is proposing profiling psychopaths through their language cues. This section is important because it explains the standard process of criminal profiling and the research conducted on criminal profiling techniques. The results of the research conducted on criminal

profiling techniques may or may not apply to profiling using language cues. There is no research on profiling using language cues, leaving only speculation.

Criminal profiling is the name of a process in which the purpose is to identify an unknown offender through the examination of the crime scene and characteristics of the victim. The process of criminal profiling is used in cases of serial murder, sexual assault, and arson. Criminal profiling is also referred to as "psychological profiling" and "offender profiling." The Crime Classification Manual as developed by the Federal Bureau of Investigation (FBI) describes different subgroups of crimes, presents the term "criminal investigative analysis" and describes the process of a criminal investigative analysis that allows for the end compilation of a profile (Devery, 2010). The process of doing a criminal investigative analysis involves seven steps:

"1. Evaluation of the criminal act itself; 2. Comprehensive evaluation of the specifics of the crime scene(s); 3. Comprehensive analysis of the victim; 4. Evaluation of preliminary police reports; 5. Evaluation of the medical examiner's autopsy protocol; 6. Development of the profile, with critical offender characteristics; 7. Investigative suggestions predicated on construction of the profile" (Douglas et al., 1992, p. 310 as cited in Devery, 2010, p. 401).

Douglas et al. (1992) describe the process as being similar to the process medical staff use to make a diagnosis and proscribe a treatment plan while at the same time admitting there are no scientific efforts to authenticate the profiles that result from a criminal investigative analysis (Devery, 2010).

Snook et al. (2007) describe two processes of interpreting crime scene data: 1) clinical and 2) statistical. Clinical profiling uses information from the profiler, such as knowledge, field experience, training, and gut feelings to make predictions about the unknown offender. Statistical profiling uses descriptive and inferential statistics based on the examination of attributes of offenders of similar crimes (Snook et al., 2007).

In conducting a narrative review of the research on criminal profiling, Snook et al. (2007) found that arguments for the use of criminal profiling were largely commonsensical arguments, which were used 58% more than scientific arguments to support the use of the technique. Articles penned by law enforcement were more likely to be commonsense based and to use the clinical process of crime scene data analysis while articles penned by scholars were more likely to be scientific arguments and to use the statistical process of data analysis. In their meta-analysis of the accuracy of a selfdeclared profiler and the investigative-experienced-profilers as compared to the comparison group (students), Snook et al. (2007) found that self-declared profilers and investigative experienced profilers' predictions were not more accurate than the control. Snook et al. (2007) contended that experts, no matter the field in which the persons are experts in, should perform decisively better than non-experts rather than only outperforming them in a few areas or having no difference between the groups. Snook et al. (2007) branded criminal profiling a "pseudoscientific technique" that will remain as such until experts can decisively outperform the non-experts by predicting with higher degrees of accuracy the offender characteristics.

Conversely, Douglas et al. (1986) argue for the use of criminal profiling saying, "Criminal profiling has proven to be a useful tool to law enforcement in solving violent, apparently motiveless crimes. The process has aided significantly in the solution of many cases over the past decade" (Douglas et al., 1986, p. 17). Yet, Douglas et al. (1986) do not provide any empirical evidence to support their claims. The one example given to show the usefulness of profiling dated back to 1957.

To the current researcher's knowledge, very limited research exists on the profiling of psychopaths. Additionally, to the current researcher's knowledge, no research exists in relation to the use of figures of speech to profile psychopaths or for using figures of speech for profiling in general. Furthermore, very little is known about profiling and the affects profiling has on police decision-making (Snook et al., 2007). While profiling in the academic field is typically regarded as a pseudoscientific technique, the type of profiling proposed in the current article varies from the type of profiling normally studied. This article proposes profiling based solely on speech and word choices and does not include any analysis of characteristics of the victim or analysis of crime scene data etcetera. The only prediction being made is whether or not the offender is a psychopath – no other characteristics are examined.

Research Question, Hypotheses and Objectives

The main question of interest is "Which linguistic cues indicate that the person law enforcement is interacting with is likely a psychopath?" The purpose of the proposed study is to provide a technique to law enforcement to be used in an interrogation setting allowing law enforcement to quickly ascertain which personality traits are likely

indicative of psychopathy. Law enforcement tactics might be altered depending on who they are dealing with. Crime is more easily fought when the officers know who they are fighting (Hare, 2012). While the PCL-R is the most reliable, valid tool available to diagnosis psychopathy, it is not practical for a quick assessment or a field assessment. The purpose study is to direct officers on what words they should listen for, what phrases they should focus on, and what might be missing from a person's speech.

There are six hypotheses in the psychopath thesis proposal: 1) Psychopathic offenders will use more past tense lexical verbs than the control 2) Psychopathic offenders will have a higher number of cause and effect words than the control group 3) Psychopaths will refer more to primal needs than the control 4) Psychopaths will make fewer references to social needs including family, spiritual and religious references 5) Psychopaths' narratives/interviews will include more disfluencies/speech fillers than the control group 6) Psychopaths will use fewer figures of speech in their speech than the control with the exception of sarcasm. The usage of 10 figures of speech will be collected: metaphors, similes, personification, analogies, cacophonies, chiasmuses, hyperboles, oxymorons, puns, and sarcasm. The first five hypotheses are a replication of Hancock et al. (2013) study with the difference of using pre-recorded interviews verses conducting the interview. Hypothesis six is drawn from a review of the literature.

Hervé et al. (2003)'s research demonstrates that psychopaths use metaphors and can interpret their literal meanings without understanding the polarity of the metaphor, which the current researcher argues means psychopaths miss the meaning of the metaphor. If one does not understand a metaphor, meaning he/she does not understand

the literal meaning and the polarity of the metaphor, it may make metaphors harder to use in conversation. Hare et al. (1988) emphasize that while psychopaths can grasp the denotative meanings, it is difficult for them to understand connotative meanings. Metaphors have connotative meanings, which should make them difficult for psychopaths to understand and presumably more difficult to use. To the current researcher's knowledge, research does not exist that examines the psychopaths' understanding of the other figures of speech used in this study. Thus, in hypothesis six, the researcher proposes that since psychopaths appear to have a greater understanding of the literal/denotative meanings of metaphors than the connotative meanings, they will use the other figures of speech less often than the control groups because the figures of speech can be interpreted using the literal meaning (which is literally false) and the connotative meaning (what the speaker actually means). Connotative meanings are harder for psychopaths to comprehend, so it seems likely they would use figures of speech less often. The researcher proposes that psychopaths will use sarcasm at the same rate as the control group because sarcasm is a lie and psychopaths enjoy lying. The null hypothesis is that the transcriptions of psychopathic offenders will not differ from the transcriptions of the control offenders in terms of the sixth hypothesis.

CHAPTER THREE

The proposed study uses a sequential exploratory strategy divided into two phases: qualitative data collection and analysis followed by quantifying the qualitative data and a subsequent combined analysis. Two samples of murderer interviews available on the Internet will be selected for participation in the study. Psychopathic offenders were chosen using purposive sampling, and the control group will be matched to the psychopaths. Only offenders who are murderers will be used in the study. The researcher will transcribe the interviews. The researcher will record all uses of past/present tense verbs, cause and effect words/phrases, disfluencies, references to social needs, references to primal needs, and the ten figures of speech related to the six hypotheses. A volunteer will check one of the researcher's transcriptions and coding of the interview. The usage rates of the above variables for the two samples of offenders will be compared to determine if any are possible indicators of psychopathy.

The study is used to both explore a new phenomenon (figures of speech used for identifying psychopaths) and to replicate a previous study: Hancock et al. (2013). The study deviates from the general description of a sequential exploratory strategy in that new quantitative data will not be collected in the second phase instead qualitative data from the first phase will be quantified.

The limitation of extended data collection time for the two phases of the strategy does not apply because no new data will be collected in the second phase. Extra time will be spent quantifying findings and merging the results from the two phases. Nor does the limitation regarding deciding which qualitative findings to quantify apply because the researcher will quantify all qualitative findings that can be quantified instead of limiting the second phase of analysis. This study is limited in that no random sampling is used rather for reasons explained below the researcher has chosen to use purposive sampling and matched pair sampling. It is possible there are psychopaths in the non-psychopath control sample. It is also possible that the experts are wrong about people being psychopaths. The experts might be labeling offenders psychopaths who are not actually psychopaths. Since no information is provided on the psychopaths' diagnosis, such as their scores on the PCL-R, the current researcher has to believe the experts.

Sequential Exploratory Strategy

The proposed study will exercise a sequential exploratory strategy. The sequential exploratory strategy features a two-part data collection and analysis design. In the first phase, qualitative data is collected and analyzed. The main focus of the research is on the qualitative data results and analysis. Part two of the strategy is the quantitative data analysis phase. The purpose of the quantitative data collection and analysis is to supplement findings from the qualitative phase. The sequential exploratory strategy is a mixed method design because it features the mixing of quantitative and qualitative data and their respective analyses (Creswell, 2009). The sequential exploratory strategy can be used when researchers are exploring a phenomenon or when researchers are developing a

new instrument. Researchers could collect and interpret qualitative data and use their conclusions to devise an instrument that they could then distribute (Creswell, 2009). The general advantages to a sequential exploratory strategy include easy implementation and ease of reporting findings. The design is good for phenomenon exploration and for the development of new instruments.

General limitations include length of time required to collect qualitative and quantitative data. Additionally, the researcher has to make decisions about what qualitative findings should be analyzed in the quantitative phase (Creswell, 2009). The design has a moderate level of transferability (external validity). The responsibility of transferability belongs to the person attempting to generalize the results. However, different types of psychopathic murderers (males/females, sexual preferences etcetera) were used in the study, which should allow for a higher level of transferability.

Phase One of the proposed study is the qualitative data collection and analysis.

Qualitative data will be recorded interviews or transcriptions of interviews available on the Internet. The qualitative portion will allow for a greater understanding of the language of psychopaths via previously recorded interviews. Secondary analysis of data will be used because of its efficiency. The other reason for using secondary analysis is due to feasibility for the researcher as some of the psychopath offenders who will be used in the study are no longer living. Trochim (2005) states the most important reason for using secondary analysis and one of the least used purposes of secondary analysis is the replication of prior research. Data results and analysis will emphasize the qualitative portion; however, quantitative measures will be used to supplement the conclusions.

The proposed research is in part a replication of Hancock's et al. (2013) study conducted to increase the reliability of the previous study's results. The first five hypotheses pertain to the attempted replication of Hancock's et al. (2013) findings. While the proposed study is partially a replication of Hancock's et al. (2013) study, it differs from Hancock et al. (2013)'s research in two important manners: 1) Samples will be obtained via the Internet rather than in-person open-ended interviews 2) The sixth hypothesis (divided into 10 parts) is not a replication of Hancock et al. (2013)'s study.

Using the program Atlas.ti, the researcher will tally the number of references to the words, phrases, or figures of speech described in the hypotheses that occur in the interview. The recorded interviews or transcriptions of interviews must contain detailed references to at least one murder that the offender committed. Offenders must have committed at least one murder in an attempt to keep the type of crime committed a control variable. Many of the offenders have committed other crimes as well; however, the similarity between them is that they have all committed at least one murder. When all the words/phrases described in the six hypotheses are counted, the usage of each will be compared between the psychopath and his/her matched pair and then two groups.

The second phase of the research design will focus on the quantitative data analysis. The researcher will not collect additional data for the quantitative phase but rather will quantify previously collected qualitative data from phase one. As described above, the purpose of the second phase is to provide additional support for conclusions drawn from the first phase.

Psychopath Sample

Two samples will be taken for the study. The first sample will be a sample of psychopaths. The researcher used purposive sampling to obtain a sample of psychopathic offenders' interviews because the researcher needed a sample of offenders who have been diagnosed by experts in the field, such as Dr. Robert Hare, as psychopaths because the current researcher is not qualified to diagnosis persons as psychopaths. The researcher obtained a sample of psychopaths using the list of psychopaths found in Without Conscience (Hare, 1993). Using the list provided by Hare (1993), the researcher searched the Internet to ensure there were interviews available for offenders on the list. The researcher obtained interviews of five psychopathic offenders. The second reason for using purposive sampling is because the proposal requires the first-person account of the criminal event in order to count and compare word choices. Descriptions of criminal activities of psychopaths by a third-party are ineffective for these purposes. The researcher will use interviews with 1) Jeffrey MacDonald 2) Ted Bundy 3) John Gacy 4) Diane Downs 5) Richard Kuklinski. These offenders were chosen because the experts in the field have labeled them psychopaths and because each had interviews available on the Internet. Names one through four were obtained from Hare (1993). Hare (1993) presented other names that were excluded from the study due to the lack of available interviews or interviews that were ill suited for the study as most of the video footage was documentary. Haycock (2014) described Richard Kuklinski as a psychopath.

Matched Pair Sample (Non-psychopaths)

The second sample for the study will be the matched pair sample. To obtain the sample, the researcher will resort to the Internet. The researcher will use search engines,

such as Google to scavenge the Internet for interviews of convicted murderers. Phrases, such as "interviews with serial killer" or "interview with mom who kills her kids" will be used. The researcher will further investigate the offenders' whose interviews appear in the search results to ensure that they have not been clinically diagnosed as psychopaths. The researcher will conduct a diligent and through search Internet based search for information using, for example, the offender's name plus the word 'psychopath' to ensure none of the matched pairs have been clinically diagnosed as psychopaths. The researcher will not take into account references to the person being called a psychopath from noncredible sources, including blogs, comments from viewers about an article or piece of research, persons without the proper credentials (i.e. doctoral degree or other such titles that would allow them to make such a determination), or other sites that do not appear to be academic, well-researched sources. The researcher presumes that offenders are not psychopaths unless they have been diagnosed as such by the experts. Because of the importance of a diagnosis to the study the researcher estimates that the researcher examined 20 or more sites for each offender before concluding a diagnosis did not exist. To the extent the researcher found any seemingly credible information indicating an aberration for any of the offenders, the researcher made note of it in this paper. Offenders who match the names of offenders identified by the experts as psychopaths will be excluded from the study. Some of the offenders used in the matched pair sample could be psychopaths who have not yet been diagnosed. If there are psychopaths in the control, their linguistics should more closely match the psychopathic sample. Since the pairs will be matched to the psychopaths, there are five murderers in this sample as well. Ted

Bundy is matched to Israel Keyes; Richard Kuklinski is matched to Salvatore Gravano; Diane Downs is matched to Shaquan Duley; Jeffrey MacDonald is matched to Harold Shipman; and John Wayne Gacy is matched to Dennis Nilsen (Appendix B). Offenders are matched on a variety of characteristic, including type of murder, victims, gender, age, and method of killing amongst others. The pairs are not matched on all of the characteristics listed because the researcher is limited by the Internet availability of interviews. The researcher acknowledges that there are better-suited matches for some of the psychopaths, but they were not used because of lack of availability (Appendix B). The researcher notes that the Martens and Palermo (2005) allude to idea that Nilsen might have antisocial personality disorder (ASPD) by drawing from circumstances of his life but do not provide any mention of an official diagnosis or any reference to another source on point. The researcher concluded this reference to ASPD was undocumented and unofficial speculation.

Interviews

The average length of time for the psychopath interviews is 32 minutes and 9 seconds. The average length of time for the matched pair interviews is 46 minutes and 1 second. These statistics do not include Jeffrey MacDonald or Harold Shipman's interview because their interviews were found already formatted into a transcript with no video version available. Interviews for both groups will be transcribed if they have not been already. The purpose of transcribing the interviews is to increase efficiency and accuracy in data collection. Once the researcher has transcribed the interviews, the researcher will proceed to data collection.

Parts of interviews for both the psychopath and the matched pair sample that include the interviewer, victim statements, statements by the offender's parents, police, detectives, or other researchers/experts will not be included in the transcript, but a note will be made that someone other than the offender spoke. The note will indicate that the person spoke and the length of time he/she spoke, but actual statements will not be transcribed because accounts of third party individuals are irrelevant to the measuring of word choices (language) of the offender. Interviews that have already been transcribed courtesy of the network from which they are available will be checked for accuracy if the original video of the interview is available.

Data Collection

Data will be collected on each offender's use of verbs (past and present tense) to describe different events, cause and effect words or phrases, references to primal needs, references to social needs (family, spiritual or religious), disfluencies (speech fillers), and figures of speech. Past tense verbs are verbs that describe actions or states as if in the past while present tense verbs express actions or states as if in the present (Past tense and Present tense, n.d.). An example of a past tense verb is murdered and the present tense of the verb is murder. Each individual instance of the use of a past tense or present tense verb is not coded. Rather the researcher will code the number of contexts in which the interviewee speaks in the past or present tense. For example, if an interviewee talks about murder A in the past tense and then talks about murder B in the past tense that will be coded as two contexts in which the past tense was used. Cause and effect words/phrases show a relationship between two or more events/things such that one causes or results in

the other(s) (Cause-and-effect, n.d.). Examples of cause and effect words/phrases are so, because, since, therefore, if/then, due to, consequently, hence etcetera. Primal needs will be defined by Maslow's hierarchy of needs. The bottom two levels, physiological and safety needs, of Maslow's pyramid will be included. Physiological needs are air, food, drink, sleep etcetera while safety needs include employment, health, and other resources (Maslow's Hierarchy, n.d.). References to social needs include references to family members, friends, acquaintances, religion or indicators of spirituality. Speech fillers include words and sounds, such as 'uh,' 'um,' 'like,' 'you know,' 'whatever,' 'huh,' 'hmm,' 'ah,' and 'er.' The figures of speech will be metaphors, similes, personification, analogies, cacophonies, chiasmuses, hyperboles, oxymorons, puns, and sarcasm.

Definitions and examples of the figures of speech can be found in Appendix A and in the current paper under the heading *Figurative Language*. The definitions of the figures of speech provided under *Figurative Language* and in Appendix A are the definitions used for the operationalization of the figures of speech variables.

Sarcasm varies from the rest of the figures of speech in that whether or not someone is being sarcastic is subjective. In deciding whether one is being sarcastic one might consider the tone of voice, the context in which the statement/question is said, the people involved in conversation, and body language. When the researcher coded a statement as sarcastic, the researcher considered the definitions of sarcasm provided in the current paper (Appendix A), the speaker's tone of voice, context, the people involved, and body language. Since the interpretation of sarcasm can be subjective, others may differ in their opinions about what they consider sarcastic.

References to any of the above variables will be coded on Atlas.ti. Coding for each of the interviews will be reviewed by the researcher four times. According to Hancock et al.'s (2013) study, the reduced usage of present tense verbs and social needs would be coded as possible indicators of psychopathy. Increased references to or usage of primal needs, speech disfluencies, and cause and effect words/phrases would also be indicators of psychopathy.

Limitations

There are several important limitations in the methods of this study. The first limitation in the study is that two types of nonprobability sampling are used; thus, there is no random sampling. The psychopath sample is a compilation of persons who are deemed or diagnosed as psychopaths by the experts on psychopaths. The non-psychopathic sample is matched to the psychopath sample as closely as was possible. Quantitative data is used to support the findings from qualitative data analysis, but the quantitative data is not the main focus of the study. Another limitation is that there could be psychopaths in the non-psychopath sample who have not yet been diagnosed as psychopaths. However, if there are psychopaths in the non-psychopathic sample then their usages of and references to the words, phrase and figures of speech should more closely match the psychopathic sample. The experts could be wrong about labeling offenders as psychopaths; thus, there could be non-psychopaths in the psychopath sample. Since the researcher does not have access to PCL-R scores for the offenders or access to any assessment tools the experts may or may not have used to diagnosis the offenders, the current researcher has to follow the experts' diagnoses. Five offenders in each group is a

small sample size, but due to feasibility for the researcher the small sample size is necessary. The interviews being used in the study are pre-recorded interviews, and therefore the researcher cannot distribute a survey or ask any additional follow-up questions. Usage of figures of speech could be indicators of the level of education achieved or the level of intelligence of the offender. Information about offenders in both samples will be investigated by the researcher in an attempt to control these extraneous variables but since the data is secondary, the researcher may not find information on these demographic variables. Interview length is also a limitation. The longer a person has to talk, the more time they have to use figures of speech: Offenders with longer interviews may have higher usage rates of figures of speech than offenders with shorter interviews because of interview length. Lastly, triangulation in coding is not realistic for this research project. A volunteer will review one score sheet but will not review the rest of the score sheets. Thus the coding approach will be confirmed in the review of a single score sheet, but triangulation will not be achieved.

There are also analytic limitations in qualitative research. Parts of the interviews transcribed by the researcher were unintelligible and were coded in the transcription as such. The research listened to each interview and reviewed the transcription at least four times for each interview. Sections of all interviews and other entire interviews were reviewed as many times as was found necessary to determine that the transcription is as accurate as possible without using advanced computer software and a team of researchers. Coding for each interview was reviewed four times by the researcher to the best of the researcher's ability; however, it is possible that the researcher did not code for

each instance in which the participant used one of the variables. Qualitative programs, such as ATLAS.ti, assist researchers but do not result in the errorless coding of data nor do they have the capacity to provide a qualitative analysis in that they cannot evaluate overarching themes of data or interpret what those themes might mean (Weitzman, 1999).

Conclusions

The purpose of the proposed research is to find support for the six hypotheses defined in the study and to translate those results into a technique for law enforcement to use during interrogations or for profiling. The six hypotheses are 1) Psychopathic offenders will use more past tense lexical verbs than the control 2) Psychopathic offenders will have a higher number of cause and effect words than the control group 3) Psychopaths will refer more to primal needs than the control 4) Psychopaths will make fewer references to social needs including family, spiritual and religious references 5) Psychopaths' narratives/interviews will include more disfluencies/speech fillers than the control group 6) Psychopaths will use fewer figures of speech in their speech than the control: metaphors, similes, personification, analogies, cacophonies, chiasmuses, hyperboles, oxymorons, and puns with the exception of sarcasm. The first five hypotheses are a partial replication of Hancock et al.'s (2013) study. The sixth hypothesis is not a replication of Hancock et al. (2013).

The researcher expects to replicate results from Hancock et al.'s (2013) research.

Additionally, the researcher expects that psychopaths will use fewer figures of speech

(except for sarcasm) than non-psychopathic offenders. The researcher expects

psychopaths will use fewer figures of speech with the exception of sarcasm because even

though psychopaths are frequently described as eloquent and witty conversationalists (Hare, 1993), research appears to support the idea that psychopaths understand the face value of words and not the deeper meanings (Hare, 1996). One purpose of figurative language is to convey an idea, thought, or point without saying what the person literally means thus it is conveying a deeper meaning than what is said. Presumably it would be difficult to use that which one does not understand and logically it should mean that psychopaths do not use figures of speech as often as people who do understand the deeper, semantic meanings.

Psychopaths should use metaphors less often because while Hervé et al. (2003) demonstrate that psychopaths can translate the literal meaning of metaphors, they often confuse whether the metaphor was intended to be positive or negative, which the current researcher argues means psychopaths misinterpreted the metaphor. Hervé et al.'s (2003) research does not provide the answers to questions about the usage of metaphors, but again, if psychopaths cannot fully interpret the metaphor (translation and polarity), they should be less likely to use them.

Research does not exist on psychopaths and the usage of similes, personification, analogies, cacophonies, chiasmuses, hyperboles, oxymorons, puns, and sarcasm.

However, based on psychopaths' inability to grasp the nuances and deeper semantics of language and based on Hervé et al.'s (2003) research one may speculate that the same concept applies to other figures of speech. Psychopaths might understand the translation of the figures of speech, but they may not be able to translate the polarity of the meaning of the figure of speech. The current researcher argues that the ability to understand

figures of speech requires both correct interpretation and knowledge of the intended polarity otherwise the meaning of the figures of speech will likely be lost in translation. The researcher reasons that psychopaths will use sarcasm as frequently as non-psychopaths because sarcasm is a lie (Chin, 2011) and psychopaths enjoy lying for the sake of lying (Lilienfeld & Fowler, 2006). Since psychopaths enjoy lying, and since sarcasm is a lie, it follows that psychopaths would use sarcasm.

The overarching purpose of the research is to provide law enforcement with a technique that allows them to identify persons with psychopathic characteristics for purposes of interrogation so that law enforcement have an increased chance of meeting their goal e.g. a confession from a guilty suspect. While the technique will be specifically tailored to law enforcement, any criminal justice actor could use the technique. The technique could also be used for profiling. Too many law enforcement officers are being feloniously killed in the line of duty. The intent behind using the instrument for profiling is to reduce the number of slain officers by providing them with a resource that allows them to ascertain who they are interacting with, which in turn allows the officers to adjust their behavior and tactics accordingly.

CHAPTER FOUR

The below analysis examines linguistic cues that might be indicative of psychopathy. The study is in part a replication of Hancock et al. (2013) with the present researcher's added linguistic cue, figures of speech. The purpose of examining linguistic cues is because word choice provides a pathway into the mind (Hancock et al., 2013). The psychopath's mind is examined using linguistic cues because of the quantity and quality of damage, both violent and non-violent, psychopaths are capable of inflicting without a conscious thought. Linguistic cues include the use of past tense verbs to refer to an increased number of events, more references to primal needs, fewer references to social needs, increased usage of cause and effect words, higher frequency of speech disfluencies (Hancock et al., 2013), and a lower usage of figures of speech. The analysis of data begins with a brief description of all participants in the sample and their matched pairs. Following each description of pairs is an analysis of the pair's compatibility. The next section relays the results and analysis from each matched pair in terms of the above linguistic cues. Chapter 5 provides the overall results and analysis for the psychopath group as compared to the non-psychopathic group for each of the linguistic cues. Chapter 5 then delves into the implications for practice, limitations, and suggestions for future research.

Description of Matched Pairs

Ted Bundy and Israel Keyes

Ted Bundy, also known as the "All-American" serial killer (Hare, 1993) sexually violated and brutally murdered over 30 women (Geberth, 2010). Bundy focused on having control and complete domination during his attacks. He engaged in sadistic fantasies coupled with sex and violence. He played the dominate male and his victim, the frightened and submissive female. Bundy raped all of his victims. He killed most of his victims, the exceptions being those who managed to escape. Bundy performed necrophilia on several of his victims. FBI Agent Bill Hagmaier, a Ted Bundy expert, commented that Bundy considered himself a predator: he enjoyed the hunt as much as he enjoyed the kill. Bundy chose what he referred to as "worthy prey" whom he defined as "attractive, intelligent young women with good backgrounds" (Geberth, 2010, p.726). After three trials, two successful escape attempts during one of which he committed additional murders, his eventual recapture, and many appeals over the course of a decade, Bundy was executed on January 24, 1989. Bundy's body was cremated and his ashes were spread around the mountain in Washington State that he once used as his favorite graveyard for his victims (CI, n.d.).

Israel Keyes, an Alaskan resident, confessed to the murders of three people: a married couple and young female barista. He told authorities he killed five other people but refused to identify the victims or give the exact locations of their bodies. Keyes murdered the barista in Alaska, the married couple in Vermont, and according to Keyes four persons in Washington State and additional person on the East Coast. Both the married woman and the barista were sexually assaulted and strangled to death ("Alaska

serial killer kept," 2012). Keyes shot the husband before raping and murdering his wife (Anderson, 2012). Keyes buried what have been called murder kits across the United States. These kits included money, weapons, and other items used for disposal of bodies, (Smith & Cuevas, 2013) such as Drano ("Alaska serial killer kept," 2012). Recently, federal agents have announced they have been able to connect Keyes to 11 murders and are busy searching for connections between Keyes and international murders (Smith & Cuevas, 2013). Keyes' final body count remains unknown. On December 2, 2012 Keyes committed suicide in his cell while awaiting trial for the murder of the barista. The investigation is ongoing (Andrews, 2012).

One of the main reasons for matching Bundy and Keyes is because Keyes said he studied Ted Bundy in addition to other serial killers because "he recognized himself in them" ("Alaska serial killer researched," 2012). The men were about the same age (late 20s-early 30s) during their murder spree and both were Non-Hispanic. Both men sexually assaulted their female victims before murdering them. Keyes killed the known female victims using strangulation while Bundy used blunt force trauma and occasionally used strangulation. Neither murderer seemed overly concerned about burying or hiding bodies. Both liked to have power over their victims and neither had any known connections to their victims. Some of each of their victims survived their acts. Keyes explained that he let his first victim who he sexually assaulted go ("Alaska serial killer researched," 2012) while victims who managed to survive Bundy escaped (CI, n.d.). Both dismembered some of their victims. Bundy severed the heads of some of his victims and dismembered them. Investigators know of one instance in which Keyes dismembered a victim. Bundy

and Keyes would have continued to murder if they had not been caught. Keyes told investigators he would have continued to murder people if he had not been arrested ("Alaska serial killer kept," 2012). Bundy may not have confessed that he would have continued murdering, but during his second escape from incarceration, Bundy fled to Florida where he killed three more young women before his recapture and sexually assaulted two others who lived (CI, n.d.), indicating that he had no intention of stopping. As they explained in their interviews, both murderers were concerned about the impact of their crimes on their children. Bundy and Keyes were methodical in their murderers. Bundy developed a scheme where he pretended to be injured, asked his potential victim to assist him with putting something in his car, before hitting her and placing her in his car. Keyes buried murder kits across the country in predetermined locations that contained everything needed to kill someone. In the end, both murderers became sloppy in their methods as their acts become more brutal, and their sloppiness lead to both of their arrests. In addition to being murderers, Bundy and Keyes committed other crimes. Bundy confessed to stealing when he was younger (Lawson et al., n.d.) When Bundy escaped from prison the second time, he turned to petty theft to make money (CI, n.d.). Authorities believe Keyes is responsible for several bank robberies, two of which he confessed to (Andrews, 2012).

Keyes and Bundy differ in that Keyes killed a man with a gun whereas Bundy neither confessed to nor was connected to the murder of a man. Bundy did not murder any of his victims with a gun. Bundy targeted specific victims that fit his definition of "worthy prey." If there is a connection between Keyes and his victims, the connection

remains unknown. Bundy performed necrophilia on some of his victims whereas Keyes did not confess to performing necrophilia on his victims but again the majority of his victims are unknown.

John Wayne Gacy and Dennis Nilsen

Gacy, dubbed the "Killer Clown" is referred to as "one of the most notorious serial killers of the twentieth century" (Ebrite, 2005, p. 686) charged with "33 counts of murder, one count of deviate sexual assault, one count of indecent liberties with a child, and one count of aggravated kidnaping" (People v. Gacy, 1984). Jurors found him guilty of all charges except for aggravated kidnaping and sentenced him to the death penalty for 12 of the murders and to natural life for the rest of the murderers (People v. Gacy, 1984). Gacy admitted to the murders of 30 persons. Authorities recovered the bodies of 33 victims. His victims, all males, ranged in age from 14-24 (Sirkel et al., n.d.). Victims who lived recounted stories of "bondage, rape, and suffocation" (Ebrite, 2005, p. 686). Most of the recovered bodies either had ropes around their necks or items jammed down their throats (Ebrite, 2005). In court, Gacy tried unsuccessfully to use an insanity defense; however, experts for the People all concluded that Gacy had a personality defect but that he was not psychotic and as such was legally responsible for his actions. Gacy claimed there were four Johns and a doctor for the People accused Gacy of pretending to be crazy and feigning a multiple personality disorder. Jurors agreed with the doctor and rejected Gacy's insanity defense: Gacy was executed via lethal injection on May 9, 1994 (Ebrite, 2005).

Nilsen, a British murderer, known as the 'Muswell Hill Murderer' was charged with the murders of 12 persons and given multiple life sentences ("1993: British police," n.d.). Nilsen encountered all of his victims in a pub and after inviting them back to his home, he strangled them ("1983: Nilsen strangled," n.d.). All of Nilsen's victims were male and most were homosexual. The majority were also homeless and without jobs. He described talking with the bodies of his victims after killing them and watching TV with the bodies as his company (Martens & Palermo, 2005). Nilsen also disclosed that he had performed sexual acts with his victims' bodies. Afterwards, Nilsen hid the bodies underneath the floorboards in his flat. In one instance, Nilsen cut up the victim's body and attempted to flush pieces down the toilet ("1983: Nilsen strangled," n.d.). His backyard garden served as a space to build bonfires used to burn the bodies of his victims after he removed them from under his floorboards and dismembered them (Charlton, 2013). He described pitching the innards of his victims over his backyard fence for the wildlife to eat (Charlton, 2013) because as he explained in his interview, he decided it was mostly the innards that made the bodies inside his home smell ("Interview with Dennis," 1993). Currently, Nilsen is serving his sentence in Yorkshire at a maximumsecurity prison (Charlton, 2013).

Gacy and Nilsen were both homosexual and killed young men. Nilsen killed mostly homosexual men, and Gacy murdered a mix of heterosexual and homosexual young men. Both also buried their victims in their homes. Nilsen chose to bury his victims underneath the floorboards, with the one exception of flushing pieces of the body down the toilet, and Gacy buried bodies in the crawlspace under his house. Gacy deviated

from his normal routine of burying bodies in his crawlspace when he threw the bodies into the river. They both strangled their victims; although, Gacy occasionally stabbed and beat his victims. Nilsen and Gacy had sex with their victims prior to killing them. Gacy placed objects in the rectums of some of his victims. Nilsen was a necrophile: Gacy was not. Gacy and Nilsen both picked up their victims and brought them back to their respective homes. Both murderers took care to cover the smell in their homes. Nilsen covered the smell by disposing of the innards and eventually burning the bodies. Gacy poured acid in his crawlspace to quicken decomposition and lime to help cover the smell (People v. Gacy, 1984). Gacy blamed the foul smell on his house having a sump pump. Despite their efforts to disguise the odor, Gacy and Nilsen were caught because of the smell in their homes. Nilsen and other tenants complained to the landlord about a foul smell in the drains. When a plumber arrived, he discovered body parts in the drain leading to the arrest of Nilsen. Gacy's arrest came about because he invited police officers into his home (Madhnai, 2014). The officers noticed a putrefying smell and obtained a search warrant (Madhnai, 2014), but in his interview Gacy insisted the smell was due to the house having a sump pump ("John claims did not commit," 1992). The search warrant and the subsequent search lead to his arrest (Madhnai, 2014).

A difference between the two lies in their nationalities and the location of their crimes. Gacy was an American and committed his crimes in America, but Nilsen was born in Scotland and committed crimes in England. Another difference is in their personalities. The community admired Gacy, but Nilsen was a loner. Nilsen cut up the bodies to dispose of them in his bonfire and tried to flush pieces of one down the toilet.

Gacy did not dismember any bodies as he left them all buried in his crawlspace with the exception of the four he threw in the river. Nilsen claimed to be an alcoholic. There is no record of Gacy abusing alcohol. Gacy had what psychiatrists agreed was a personality defect. Nilsen was a loner. Martens and Palermo (2005) speculate he could have had antisocial personality disorder. During Nilsen's trail several physiatrists testified some claiming he had a mental disorder and others saying he did not. The judge had the final say when he stated to the jury, "a mind can be evil without being abnormal" ("Dennis Andrew Nilsen," n.d.) and with that statement the judge, "dispens[ed] with all the psychiatric jargon" ("Dennis Andrew Nilsen," n.d.). Thus Nilsen has no official diagnosis of a disorder. Gacy was executed for his crimes, but Nilsen is serving life in prison.

Diane Downs and Shaquan Duley

Downs, 28, deemed 'Princess Di' due to her looks reassembling Princess Diana, was found guilty of "murder, attempted murder, and assault" (Elizabeth v. Sonia, 2000). She was found guilty of murdering her seven-year-old daughter, Cheryl. She attempted to murder her other two children, Christie (eight-years-old) and Danny (three-years-old). Downs claimed she was driving her children home from visiting a friend when a "bushy-haired stranger" flagged her down on a deserted road. Downs argues she pulled the car over to see if she could assist the man when he reached threw the car window and began shooting her children. Downs raced her children, all with life-threatening gunshot wounds, to the hospital. Cheryl died before doctors could attempt to help her. Christie and Danny survived the attack (Bovsun, 2014). Christie recovered enough to testify against her mother in court, telling the courtroom that her mom shot her siblings and her.

Christie described her mother stopping the car, removing the gun from the trunk and shooting her three children (Elizabeth v. Sonia, 2000). Ballistic experts swore that the empty bullet casings found in Downs' home matched the empty bullet casings discovered at the scene of the crime. The marks on the casings came from a .22 caliber Ruger semiautomatic pistol, which was the same type of pistol Downs was known to own and use though the murder weapon was never found (Elizabeth v. Sonia, 2000). A psychologist diagnosed Downs with deviant and sociopathic qualities. Downs was given a life sentence and an additional 50 years. Downs continues to maintain her innocence despite losing her last chance for parole in 2010 (Boysun, 2014).

Duley, 29, murdered two of her children. She plead guilty to the two charges and was given a 35 year sentence for each of the charges to be served concurrently. Duley confessed to murdering Devean (two-years-old) and Ja'van (18-months-old) by suffocating them with her hands at a hotel. Her daughter, five-years-old, was not present when Duley murdered her two sons ("S.C. mother," 2012). After killing them, she placed her sons' bodies in her car, drove to a boat ramp, placed the car in neutral and let it drive into the river (Caula, 2012). She first claimed she had a car accident and that the car had rolled into the water. She said she walked for a mile until she asked a motorist for help. Authorities and divers responded to a call for help about a car accident ("Sheriff woman," 2010), and tried to rescue her sons, not realizing the children were already dead (Caula, 2010). Duley later recanted her story about having a car accident and confessed to committing the murders herself. In her interview, Duley claims she was in the car with the bodies when it went into the river, but the validity of that statement is unclear.

Authorities believe Duley murdered her children because of an argument she had earlier in the day with her mother about not taking proper care of her children ("S.C. mother," 2012). Duley initially entered a not guilty by reason of insanity plea but withdrew the plea and replaced it with a guilty one. Her attorney argued she was depressed and was not in her right state of mind during the murders; however, the first circuit solicitor explained her psychiatric evaluation showed she was mentally stable with borderline personality traits. She was sentenced to two concurrent 35 years sentences (Caula, 2012).

Downs and Duley were both convicted of murdering their children. They also both had three children. Downs had two girls and one boy. Duley had two boys and one girl. Downs was convicted of attempting to murder all three of her children and was successful in the murdering of one. Duley successfully murdered two of her children and did not attempt to murder the third for reasons unknown other than her daughter was not present at the time of the murders of the two boys. Both mothers were about the same age at the time of their crimes. Downs was 28 years old and Duley was 29 years old. At first, both mothers claimed they did not murder their children and fabricated a cover story. Duley claimed she had a car accident and her car flipped into the river while Diane placed the blame on a "bushy-haired stranger" (Bovsun, 2014).

The biggest differences between the two are their race as Downs is Non-Hispanic and Duley is African-American and that Downs maintains her innocence and continues to blame the stranger, despite the testimony from her surviving daughter, while Duley confessed to the crimes. Their methods of murder also varied. Duley suffocated her children, but Downs was found guilty of shooting her children. There are also differences

in their sentences. Downs was a given a life sentence plus an additional 50 years while Duley is serving two concurrent 35 year sentences. Lastly, Downs did not attempt to hide the bodies of her children probably because she claims she is innocent. Duley allowed her car to drive into the river with the bodies of her sons, which could be construed as an attempt to hide their bodies since the boys were already dead.

Richard Kuklinski and Salvatore Gravano

Kuklinski, known as the 'Iceman' because of his method of disguising the victim's time of death by placing the body in an industrial freezer prior to disposing the body (Singh, 2013), claims to have killed between 100 and 200 people (Anderson, 2014). Kuklinski was a contract killer making his first kill at 13 and venturing into contract killing between 1950 and 1960 (Singh, 2013) making around \$50,000 per contract (Walker, 2005). Unlike the majority of serial killers, Kuklinski varied his lethal methods ranging from "shooting, strangling, and sometimes even by brutal beating 'for some exercise" (Singh, 2013). He also used knifes, chainsaws, on one occasion a crossbow (Walker, 2005), "ice picks; hand grenade;...and a bomb attached to a remote-control toy car" (Martin, 2006). His favorite method of killing was cyanide; however, he varied his methods of using cyanide as well. He laced victims' food with cyanide when they went to the restroom, sprayed others with a cyanide mist, (Zugibe & Costello, 1993) and injected a cyanide filled needle into another victim (Walker, 2005). Kuklisnki used an array of methods of disposal apart from the freezer method that gave him his nickname: he also dismembered victims and threw their body parts into the river. He put oil and the body in a large drum and burned it. Sometimes the body and the drum were buried together.

Other times he put the victims in the trunk of a car and had the car crushed at a junkyard, his favorite disposal method (Singh, 2013). A series of careless errors and the work of an undercover agent lead to the arrest of Kuklinski in December of 1986 (Walker, 2005). Despite claiming to have killed between 100 and 200 people, Kuklinski was found guilty of murdering five and was given a life sentence for each murder count to be served consecutively in 1988. Later in 2003, Kuklinski was found guilty of murdering a police detective and was sentenced to an additional 30 years. Without the extra sentence, Kuklinski would not have been eligible for parole until he turned 110 years old (Singh, 2013). Kuklinski died in a hospital's prison wing at age 70 in 2006 (Martin, 2006).

Sammy "the Bull" Gravano was hitman for the Mafia (Cart, 2000). Gravano confessed to killing 19 men (Walker, 2005). He was an underboss for the head of the New York Mafia, John Gotti ("Sammy," n.d.). Gravano's testimony against Gotti helped incarcerate his former boss for life. Police had been trying unsuccessfully to prosecute Gotti for many years. Gravano's testimony was the last piece of evidence they need to secure a conviction ("Sammy," n.d.). In exchange for his testimony, Gravano was sentenced to five years, yet he was tied to 19 murders (Goldman, 1994). Gravano confessed to murdering his brother-in-law on Gotti's orders ("Sammy," n.d.). In his testimony, Gravano described working with a crew of hitmen to kill Paul Castellano, the boss of the Gambino crime family (Goldman, 1994). After serving his time, with the help of the Witness Protection Program, Gravano vanished ("Sammy," n.d.). Gravano's testimony helped convict an additional 38 persons affiliated with the Mafia (Newman, 2002). Gravano resurfaced in 1997 to conduct an interview with Diana Sawyer before

disappearing. Gravano emerged again in 2000 when he was arrested for buying and selling Ecstasy (Newman, 2002). Taking into account Gravano's history, the judge gave Gravano a 20-year sentence. Should he happen to outlive his sentence, the judge has ordered he spend the rest of his life on supervised release (Newman, 2002). Prosecutors in New Jersey state that they will prosecute Gravano with a murder charge that he was tied to in 1980 should he be released ("Sammy," n.d.).

The biggest connection between Kuklinski and Gravano is that they were both hitmen and they both worked for the Mafia. Kuklinski claims to have killed far more people than Gravano even though he was only convicted of five murders. Another tie between the two is that Kuklinski alleges Gravano paid him to kill New York Police Detective Peter Calabro. Kuklinski states, "I shot and killed the officer with a shotgun provided by Sammy Gravano" (Walker, 2005). Gravano disputes this. Regardless, both men worked for the Mafia. Kuklinski had a hand in robbing, extortion, and debt collection in addition to contract kills. Gravano "was a burglar, bank robber, car thief, extortionist, loan shark, intimidator" and a hitman (Westlake, 1997). Both men tell tales of turning to the Mafia and contract killing for the money. It is unknown why Kuklinski was not prosecuted for additional murders. Gravano received a lightened sentenced in exchange for his condemning testimony; although, he was returned to prison not long after he was released for drug crimes with threats of more charges should he be released. Less is known about the methods of Gravano's murders and the disposal of the bodies.

Jeffrey MacDonald and Harold Shipman

MacDonald was an Army Doctor and captain in the Army Medical Corps (U.S. v. Jeffrey, 1978). MacDonald and his family lived at Fort Bragg, North Carolina. MacDonald was convicted of the murders of his two daughters and his pregnant wife for which he was given three life sentences (Zucchino, 2012). MacDonald continues to maintain his innocence. He claims that four intruders overpowered him, leaving him unconscious while they murdered his family. One of the intruders he claims was a woman wearing a floppy hat who repeated "Acid is groovy, kill the pigs" (Zucchino, 2012). MacDonald sustained contusions and stab wounds plus a collapsed lung. Prosecutors at his original trial maintain that either MacDonald's wounds were selfinflicted or were from fighting with his wife and the murder scene was a cover up. Coletee, MacDonald's wife, was stabbed 37 times with an ice pick and a knife. She had also been beaten. Both her arms were broken and her skull was fractured. The five-yearold, Kimberly, skull was fractured. She was stabbed between eight to 10 times. Kristen, two-years-old, had been stabbed 27 times (Brooks, 2014). Since his conviction of his family's murders, MacDonald has tried unsuccessfully many times to overturn or challenge his conviction ("Court denies Jeffrey," 2014). No motive for the killings is discussed in the articles.

Shipman, a general practitioner in Greater Manchester and West Yorkshire ("Shipman's career," 2004) was convicted of killing 15 persons ("How many," 2000). Shipman was serving 15 concurrent life sentences when he committed suicide in his cell in 2004 ("Harold shipman," 2004). Most of Shipman's victims were elderly women who were living alone but did not have serious illnesses ("Shipman's career," 2004). The 15

murders he was convicted of he committed by administering lethal amounts of diamorphine (heroin) ("Shipman's career," 2004). Presumably Shipman lied to the victims about the reason they needed an injection as none of the victims' bodies displayed signs of a fight ("How many," 2000). Shipman had a three-month trial. He never said he was guilty nor did he ever provide a motive for his killings ("Shipman's career," 2004). In addition to being found guilty of the murders of 15 people, Shipman was also found guilty of forging one of his victim's will ("Shipman's career," 2004). His attempt to forge Kathleen Grundy's will resulted in Shipman's arrest and the discovery of the rest of his crimes. His attempt to forge a will is the only known instance in which Shipman tried to obtain a monetary benefit from his murders ("How many," 2000). An official report from High Court judge Dame Janet Smith states that Shipman actually murdered "between 215 and 260 people over a 23-year period" ("Harold shipman," 2004). "Of the 215 victims 171 were women and 44 were men" (Shipman's career, 2004). His victims ranged in age between 41 and 93 ("Shipman's career," 2004). It is unknown when his murder spree began ("How many," 2000).

MacDonald was convicted of murders in the United States, and Shipman was convicted of murders in England. MacDonald and Shipman were medical professionals: They both graduated from top ranked universities. MacDonald graduated from Princeton University, an Ivy League university, as an undergraduate student and then completed an internship at Columbia Presbyterian Medical Center in New York, which is highly ranked by physicians (Harder, 2014). He was also a Green Beret in the Army (Newcomb, 2012). Shipman graduated from University of Leeds in England, one of the world's top 100

universities by QS World University Rankings 2014/2015 ("QS Word," 2014/2015), where he studied medicine. Each was convicted of multiple murders, and both doctors continued to maintain their innocence. Shipman never admitted guilt to any of the crimes he was accused of. MacDonald continues to fight for his freedom in court while proclaiming his innocence and relaying his story of four intruders (one women and three males) committing the murders. Neither doctor had any known motive for the murders. In only one instance, Shipman tried to obtain money from his murders. Articles portraying MacDonald's crimes lack any explanation for the murders.

One of the main differences is MacDonald was convicted of killing his family while Shipman was convicted of killing his patients. The two also differed on the number of victims they murdered. MacDonald was convicted of killing three persons, including his pregnant wife. Shipman was convicted of 15 murders but is suspected of killing many more, between 215 and 260 people. The victim's in MacDonald's case all suffered stab wounds and fractured skulls. Shipman killed using lethal doses of heroine. MacDonald tries to cast the blame on four intruders while none of the articles mention if Shipman attempted to blame others for the crimes he was convicted of. Shipman committed suicide in prison, and MacDonald continues to fight for his freedom.

Analysis of Matched Pairs

Ted Bundy and Israel Keyes

Keyes referred to more primal needs than Bundy (Table 9). Bundy talked about a greater number of social needs than Keyes (Table 4). Keyes used more cause and effect

words (Table 5), speech fillers (Tables 6 through 8), and figures of speech (Tables 2 and 3) than Bundy. Bundy talked about more events in the past tense than Keyes (Table 1).

As show below in Table 1, Bundy describes 14 different events in the present tense while Keyes describes 12 events using the present tense.

Table 1: Verb Tense

Verb Tense	Past	Present	Total
Psychopaths			
Kuklinski	33	16	49
Bundy	19	14	33
Downs	6	2	8
MacDonald	20	9	29
Gacy	6	8	14
Total:	84	49	133
Non-Psychopaths			
Gravano	17	16	33
Keyes	10	12	22
Duley	19	3	22
Shipman	19	22	41
Nilsen	6	5	11
Total:	71	58	129

Bundy talks about a girl whose head he severed, which bodies the police have and have not found, and the girl he drug into a grove of trees. The girl's whose head he severed may or may not be the same girl as the one he drug into the grove of trees, but it is unclear from the interview whether the two are the same person; thus, they are counted

as two different contexts in which the past tense was used. Bundy explains that he buried some people and did not bury others. Those whom he buried the police have not found while those whom Bundy did not bury the police have found: "I mean there's no question that almost without question that those who have been found were not and those haven't been found were buried" ("Ted Part 2," n.d.). Bundy uses the past and present tense in this sentence. He uses the present tense to say that "there's no question" meaning that even now what he is saying is true. Bundy talks in the past tense about the burials. When Bundy is describing the location of a body he does so in the present tense, "Well, she's up in the mountains" ("Ted Part 2," n.d.) indicating that the body is currently in the mountains. As he describes the burial site, he said that the body is there but the head is not: "It's nowhere...Well I don't where I'm not trying to be flippant it's just it's just it's nowhere. It's it's it a category by itself " ("Ted Part 2," n.d.). He then goes onto explain that the head is not there because it was incinerated. He speaks about the head in the present tense meaning currently it is nowhere.

Keyes uses the present tense to talk with the investigators about a thumbprint, a knife, a lake, and digging a hole. Keyes dismisses the topic of conversation investigators chose by saying, "Yeah, no. That's this is all ancient history stuff" ("Israel," 2012). Keyes talks repeatedly about a knife that he used in one of the crimes in the past and present tense. The usage of past tense in the sentences that follow is discussed in the paragraph below. "Well it's a folding knife so I don't know if you took it apart you might..." ("Israel," 2012). In this circumstance Keyes refers to the knife in the present tense. Below, however, Keyes talks about the same knife using 'was.' He talks briefly

about the blood on the knife in the present tense. "No the blood's not from a long time ago but I haven't..." ("Israel," 2012). In the above sentence Keyes refers to the blood on the knife in the present tense while he continues to switch tenses when talking about the knife. He speaks of a lake that has a body in it in the present tense, "That's one of the lakes" ("Israel," 2012) indicating that now there is a body in the lake. Bundy provides specific details and talks about some of the same events using the past and the present tense. Keyes continues to toy with investigators providing bits and pieces of information about different events. He talks repeatedly about a knife that investigators have not found as of the date of the interview using both the past and present tense.

Bundy speaks in the past tense 19 times in different contexts (see Table 1). He uses the past tense to refer to a girl whose head he severed and incinerated, to describe which bodies the police have and have not found, a girl he drug into a grove of trees, going back to a crime scene, and the beginning of his crime spree. Again, the girl whose head was severed and the girl taken into the grove of trees are counted as two separated events. When speaking of the head Bundy said, "The head however the the skull it wouldn't be there [Interviewer]...Well it was incinerated and it was just ah an exception ah a strange exception but ah... " ("Ted Part 2," n.d.). The use of the passive voice ("was incinerated") shifts attention away from the doer of the action (Bundy) and toward the receiver (the head). Bundy uses the past tense in the passive voice to again refer to the severed head: "Okay, I just wrote like I said that the Hawkins girl's head was severed and taken up the road about [5 second pause] ah twenty-five to fifty yards" ("Ted Part 1," n.d.). Using the past tense Bundy acknowledges that what he has done in the past is

wrong in the last part of the following sentence: "I mean that's the ah the I don't think anybody doubts the that I've done some bad things" ("Ted Part 2," n.d.). He refers to the girl he strangled in the grove of trees in the past tense:

Anyway the long and short of it I mean well I'm going I'm going to try to make this ah get the right degrees the long and short of was that I again knocked her unconscious and strangled her and drug her into ah [3 second pause] about ten yards into the ah small grove of trees that was there ("Ted Part 1," n.d.).

In the above sentence Bundy talks about the girl and his actions in the past tense but using the active voice meaning that Bundy (the subject of the sentence) now does the action rather than receiving it. Keyes uses the past tense in 10 different contexts to talk about a gravesite, a shooting, a knife, guns, and a fire-pit (See Table 1). In reference to a gravesite he made Keyes notes, "Well I was kind of in a hurry I guess. Whatever. [3 second pause] I'm too lazy to even dig a hole for that one just piled rocks on top of it" ("Israel," 2012). In these two statements Keyes switches from present tense to past tense in reference to the same event. By saying that "I'm too lazy," Keyes is saying that he is presently too lazy to do that instead of using the past tense and saying I was too lazy. Using the past tense he says, "just piled rocks on top of it" ("Israel," 2012). Keyes states in the past tense using the active voice that he only shot one person: "No the only person I ever shot was, uh, Bill Currier" ("Israel," 2012). He also confesses to hitting someone using the past tense and active voice:

Wow. Uh, I hit somebody in the head so [trails off]" ("Israel," 2012). In another part of the conversation Keyes is talking about a knife that might have blood on it, "Yeah, I don't know what happened to that knife. It was a Tanto. Cold Steel Tanto...It had a [4 second pause] it was a four four and a half inch folding blade" ("Israel," 2012).

Keyes talks about the knife in a different part of the conversation again using the past tense, "The knife that would been on the boat was well there was a folding knife.

From years and years ago" ("Israel," 2012). Bundy speaks specifically about either one or two girls he murdered and of burying people. Keyes teases and taunts investigators with vague information about a couple people he killed and a weapon he claims he used but that investigators cannot find.

Bundy uses a total of 12 cause and effect words (Table 5). The word he uses the most is some form of the word 'because.' Keyes uses 20 cause and effect words and his most used word is also 'because' (Table 5). Bundy uses the word 'because' seven times to explain why he was worried, why he would not tell the interviewer the names of some of his victims, and to talk about incinerating a woman's head. When speaking of the woman's head, he explained why he never planned on telling that particular story:

I never wanna tell this. I promised myself I'd never tell this because it would ah I thought that of all of the things that I did to Liz this is probably the one that she is least likely to forgive me for ("Ted Part 2," n.d.).

He also uses 'because' to explain why some remains were identified while others were not. "Well, there were 3 uh remains of 3 individuals found 2 identified one not.

'Cause of the [3 second pause] the the uh the so few the kinds of remains that were found were so few and unidentifiable" ("Ted Part 1," n.d.). Keyes used 'because' 15 times to explain why he does not want to give the investigators anymore information, to talk about a body in the lake, blood in a boat, and why investigators' original plan of having him help locate a body would have worked. In the following sentence Keyes is asking about whether there was still blood in the boat. He was not sure if there would be because the boat had been there awhile. "I wasn't sure how long 'cause it's been sitting there in the rain for so long. I was curious if there was I mean I know there [trails off] [Interviewer] was when I parked it" ("Israel," 2012). In two instances using 'because' Keyes explains why he no longer wants to give information:

"I have no reason to suspect that at this point that any information and any further information I give is gonna be used or portrayed to the media in the way that I'm told it will be, or won't be. Just because that's the way it's played out so far ("Israel," 2012).

Later in the interview he explains again,

"I'm just saying, yeah, you've gotta go by your playbook but I refuse to except that there weren't ways that you couldn't have been more discreet or more, you know, that's just my impression. I have nothing to go on other than what I see and my gut feeling on stuff at this point because I feel like I get the trickle down bullshit from all parties involved so you know, that may or may not be the case but that's just where I feel like I'm at right now" ("Israel," 2012).

Bundy is mostly talking about crimes. Keyes mentions a couple crimes but is largely talking about other things.

Bundy used the cause and effect word 'so' five times. Keyes also used the cause and effect word 'so' five times. Bundy used 'so' in the context of talking about going back to a crime scene to retrieve items and being tired. Keyes refers to the whole legal situation taking longer than he planned, his kids, his lawyer, and his legal situation in general. When talking about going back to the crime scene, Bundy said he realized he left the victim's shoe and earring in the parking lot where he abducted her and returned the following day to retrieve the items even though the police were already there.

Someone may have seen it something was found there that might connect me, so I went back to that parking lot and I found both pierced earr- the pierced earrings and the shoe laying in the parking lot. That have been about 5 in the afternoon, so I surreptitiously gathered them up ("Ted Part 2," n.d.).

Keyes talks about how his lawyer, Rich, gave the investigators copies of documents and how he should have asked for copies of the documents as well. "Rich mentioned that they gave you all [chuckles] that stuff [chuckles], so [3 second pause] I should have asked him to give me copies so I'd know which ones you have" ("Israel," 2012). Keyes demonstrates his diminishing interest in the legal process in the following statement:

From my perspective though even if they were to officially charge me at this point it's not, uh, not like it would be real breaking news anyway [Interviewer] Right. It would just be confirmation of everyone's current speculation [Interviewer interrupts] is all I'm saying. So I I I don't I'm not interested in it from that point. I was just interested in it from a logistics point where do they have to fly me to Vermont if they're gonna charge me or [trails off] ("Israel," 2012).

Bundy speaks mostly of going back to the crime scene and Keyes talks about his lack of interest in the legal aspect of his case and his interest in the logistics of the case.

Neither Bundy nor Keyes makes any references to money (Table 9). Bundy refers to his health once when he tells the interviewer that, "I won't beat around the bush with you anymore 'cause I'm just tired and I just want to get back and go to sleep" ("Ted Part 2," n.d.). Keyes does not mention his health. Keyes talks about his place of employment once when mentions that he was in the army. Bundy does not talk about his actual place of employment though he does lie to a victim about his employment by telling her he works at the Olympia Sports store. Keyes turns down food from the investigators four times. Even though his turning down food four times does not pertain directly to the murders, it is interesting nonetheless because it appears from the context clues provided in the interview that Keyes did not use to turn down food, especially Snickers. This seems unusual because three days after this interview took place Keyes committed suicide in his jail cell. There may or may not be a connection between Keyes suddenly turning down food and his committing suicide, but the timeline between the two suggests that there might be. Bundy does not mention food in his interview. Neither murderer mentions many primal needs (Table 9).

Bundy talks about his family twice (Table 4). In the first instance, he is concerned about his stepson who realized that his stepfather did commit the crimes that the stepson wanted to believe his stepfather had not done.

You see I saw the look on my stepson's eyes yesterday. After he had been told for the first time that. You see he's always believed in his heart I mean he always wanted to believe that I'd never done anything like this. As hard as it may be for you to believe that there are people who do believe that, Mike, and there are people close to me who believe that. And to see the look in his eyes ah confirm my worst fears see could ya he was just absolutely astounded. He couldn't understand. He was writing me questions just furiously writing questions I could see that you know he that he was you know how really bewildered he was. And I need to give him a chance to know and others a chance to know what those what was really going on what it was really like for me ("Ted Part 2," n.d.).

The next time he mentions his family is in the context of burning a severed head in his girlfriend's fireplace. Bundy explains that it was hard to accomplish this task because the kids were questioning why there was a fire in the fireplace when the weather was too warm for that. He also explains that he thinks this action might be the one that Liz, his girlfriend, will not be able to forgive him for:

I never wanna tell this. I promised myself I'd never tell this because it would ah I thought that of all of the things that I did to Liz this is probably the one that she is least likely to forgive me for. Poor Liz [Interviewer] in

her fireplace. Uh its really not that humorous but ah in the fireplace at that house [Interviewer] Down to the last ash and then uh it's a twist [Interviewer interrupts] it's a twist and then uh it's a lot of work in in certainly very risky so under the circumstances. I mean the kids come home from school and said why are you burning a fire in the fireplace it's warm outside ("Ted Part 2," n.d.).

Keyes mentions his family once (Table 4). He, like Bundy, was concerned about his children and the gossip they were hearing about what their father did.

And then, you know, I'm not I'm no longer in touch with all the different I I don't even know what's being said um, in the media or what has been said about the stories. I see little snippets here and there but, um, that's my concern is that, you know, it could it some i- i- if something else were to get out and if especially in a different area or something. Then, uh, [3 second pause] you know and and now there's the whole Neah Bay aspect of it now too, you know, it's like my kids living in Neah Bay now and gossip is the [3 second pause] is the town past time. So that's my concern right now is it doesn't even have to be I feel like at at this point it doesn't even have to be something that was confirmed, it could just be a rumor and [trails off] ("Israel," 2012).

Both appear to be worried about their children and how they are being affected by their father's actions. Bundy was also worried about his children discovering what he was doing with the fireplace.

Bundy used a total of 250 speech disfluencies (Tables 6 through 8). Keyes used a total of 310 speech disfluencies (Tables 6 through 8). Bundy's most used speech filler was a false start. Bundy falsely started a thought 69 times (Table 8). Keyes' most used speech filler was also a false start. Keyes falsely started a thought 66 times. One example of Bundy falsely starting a thought is when he said, "and we'll have to get back to it sometime but I don't feel- I just- it's too hard for me to talk about right now" in the context of refusing to discuss a subject with the interviewer ("Ted Part 1," n.d.). In that thought, Bundy falsely started to say something twice. Another example is when he was talking about seeing his son in court, "And to see the look in his eyes ah confirm my worst fears- see could- he was just absolutely astounded" ("Ted Part 2," n.d.). Bundy again falsely started to say something twice. Keyes falsely started to speak when he began by saying, "And then, you know, I'm not-I'm no longer in touch with all the different- I I don't even know what's being said" ("Israel," 2012) in the context of explaining he does not know what is going on in the world outside of prison life. When describing where he was on the lake when disposing of a body Keyes said, "No, I wasn't-I was in a- I was near the edge but, you know, thirty feet out from the bank on that lake it goes it drops down to fifty, sixty feet already. And I was- So anyway- [trails off]" ("Israel," 2012).

Bundy used the speech filler 'ah' 47 times in his interview (Table 6). Keyes uses 'ah' once when he is thinking about giving investigators a clue to a murder. "But I have to I ah [3 second pause] I'll have to think about it" ("Israel," 2012). Bundy says 'huh' once in his interview near the beginning of his sentence (Table 6). Keyes says 'huh' six

times and splits the placement of the word between near the beginning of the sentence and the end of the sentence. Bundy says 'oh' three times all at the beginning of a sentence (Table 6). Keyes says 'oh' five times also all at the beginning of a sentence. Bundy uses the speech filler 'so' twice once when he is talking about a crime scene and once when he is referring to luring a woman to his car (Table 6). Keyes says 'so' as a speech filler 22 times. Almost all of the times that he says 'so' as a speech filler occur at the end of the sentence. When he is refusing to give investigators more information he says,

Um, so essentially [4 second pause] what can happen is [4 second pause] you know, the this is it becomes a one way street until I see what comes out the other end on some of these other issues ("Israel," 2012).

Bundy says 'uh' 26 times in his interview (Table 6). Most of the times Bundy said 'uh' were towards the beginning or the middle of a sentence. There are four instances in which he says 'uh' twice in the same sentence. Bundy describes where he burned the severed head: "Uh it's really not that humorous but ah in the fireplace at that house" ("Ted Part 2," n.d.). Keyes says 'uh' 20 times. The placement of Keyes' uh's is scattered through his sentences. Unlike Bundy, he does not say 'uh' twice in the same sentence. Bundy used the speech filler 'um' six times while Keyes used it 13 (Table 6).

Bundy used the speech filler 'well' 21 times and almost all of the times were near the beginning of a sentence (Table 7). Keyes used 'well' 32 times and almost all of the times he used it was near the beginning of a sentence. Bundy said 'whatever' once and Keyes used it twice (Table 7). Bundy said 'you know' 11 times (Table 7). In three instances Bundy said 'you know' twice in the same sentence. Keyes said 'you know' 19

times. Most of the times Keyes said it was at the beginning of a sentence. Bundy stuttered seven times on the first syllable of a word (Table 8). Keyes stuttered eight times on the first syllable of a word. Bundy repeated a word 13 times (Table 8). For example, "I mean I suppose this this I I well I am sure there are bits and pieces that will come back to me" ("Ted Part 2," n.d.). Another instance of when Bundy repeated words is, "but because ah the the um it's the most bizarre thing I've ever ever been associated with and I've been associated with some bizarre shit" ("Ted Part 2," n.d.). Most of the words Bundy repeated were between two and three letters long. Keyes repeated a word 31 times. Most of the words were short. He also repeated a version of 'I' many times. However, Keyes also repeated some longer words. "Before before we do this" ("Israel," 2012). Another example is, "Your motivation or the FBI whoever's whoever s-sanctioned that they're motivation for doing it and the way that they did it" ("Israel," 2012). Both Bundy and Keyes repeated a phrase of words 13 times. When asked how he got the woman in his car Bundy explained, "And then uh there was some there was some handcuffs there along with the crowbar" ("Ted Part 1," n.d.). An example from Keyes's interview is, "I'm just I'm just saying you have I think you have a lot of background on me at this point" ("Israel," 2012). Bundy paused 24 times in his interview with an average pause of 3.83 seconds (Table 7). Keyes paused 64 times in his interview with an average pause of 5.45 seconds. Keyes said 'like' as a speech filler eight times (Table 6). Bundy did not use 'like' as a speech filler.

Bundy used two similes in his speech (Table 2). One of Bundy's similes made a comparison using like and the other one used as. The simile using like was, "I mean that

night is like is like some kind of dream, you know, very blurry very nightmarish" ("Ted Part 2," n.d.). What Bundy means by "that night" is unclear. The simile was said in the context of talking about where a body is located, so presumably Bundy is talking about the night of the murder. The second simile Bundy said was, "but after after the Hawkins thing I was you know just paranoid as hell" ("Ted Part 2," n.d.). Hawkins' is the girl whose head he severed. He was paranoid because sometimes women would refuse to help him walk to his car, and he was worried they would connect him to the Hawkins' murder. Keyes used three similes; all of his similes used the word 'like' (Table 2). The first simile Keyes said was, "Oh yeah, yeah. Every time I'm back there I go by [Interviewer interrupts] but I I mean all the stuff that's there is this is like childhood memories (chuckles)" ("Israel," 2012).

Table 2: Figures of Speech Part A

Figures of Speech	Simile	Analogy	Cacophony	Chiasmus	Hyperbole	Metaphor
Psychopaths						
Kuklinski	3	0	1	0	0	1
Bundy	2	0	0	0	0	0
Downs	0	0	0	0	0	0
MacDonald	0	0	0	0	0	0
Gacy	1	0	0	0	0	0
Total:	6	0	1	0	0	1
Non-Psychopaths						
Gravano	2	2	0	0	1	0
Keyes	3	0	0	0	0	0
Duley	2	0	0	0	0	0
Shipman	0	0	0	0	0	0

Nilsen	1	0	0	0	0	0
Total:	8	2	0	0	1	0

Keyes is comparing information that the investigators are sharing with him to being as old as childhood memories. The second simile is, "Yeah, and then it's like one of those oh shit moments" ("Israel," 2012). In this figure of speech Keyes is comparing the investigators opening a cache to having an "oh shit moment" because he cannot remember what is in it ("Israel," 2012). The last simile Keyes says is, "I think. I don't remember. I just know if you've been to the lake you would see what I'm talking about. It it, you know, drops down like a V so [Interviewer interrupts]" ("Israel," 2012). In this instance Keyes is comparing the layout of the lake to the letter 'V' ("Israel," 2012). Both of the smiles Bundy said were directly related to murder. Keyes' similes were indirectly related to murder.

Keyes uses a sarcastic tone three times in his interview (Table 3).

Table 3: Figures of Speech Part B

Figures of Speech	Oxymoron	Personification	Pun	Sarcasm	Total
Psychopaths					
Kuklinski	0	0	0	0	5
Bundy	0	0	0	0	2
Downs	0	0	0	0	0
MacDonald	0	0	0	0	0
Gacy	0	0	0	0	1
Total:	0	0	0	0	8

Non-Psychopaths					
Gravano	0	0	0	1	6
Keyes	0	0	0	3	6
Duley	0	0	0	0	2
Shipman	0	0	0	0	0
Nilsen	0	0	0	0	1
Total:	0	0	0	4	15

Once he responds to an interviewer who claims they found his thumbprint on a gun and says, "Yeah, right" ("Israel," 2012). Another time Keyes' sarcastically describes his basement as an indoor pool due to the amount of water in in. "That's an indoor swimming pool" ("Israel," 2012). Lastly, he sarcastically jokes that, "Yeah, those stairs were pretty safe" ("Israel," 2012). The police officers entering his house had to go in through a window because the stairs were not safe. Bundy did not use any sarcasm in his interview.

Bundy spoke using the past and present tense more often than Keyes (Table 1). Keyes used more cause and effect words (Table 5) and referenced more primal needs (Table 9). Bundy described a greater number of social needs (Table 4). Keyes' speech was more disfluent than Bundy's (Tables 6 through 8), and Keyes used a greater number of figures of speech (Tables 2 and 3).

Bundy refers to more events using the past tense than Keyes (Table 1). While which voice the speaker used is not a variable in the study, it is worth nothing that Bundy uses the passive voice to talk about some the more heinous aspects of the crimes he committed. Whether the passive voice was an intentional choice or not is unknown, but

because of the nature of the passive voice, using it detracts attention from the doer of the action and places an emphasis on the receiver. Attention is moved away from Bundy and placed on the receiver of his actions. The following is not a quote from the interview, but for example, it seems Bundy would be more inclined to say, "The woman was murdered" rather than "I murdered the woman." Both statements are past tense, but the first statement is passive voice and the second is active voice. Whether by conscious choice or not, Keyes used the past tense in the active voice to talk about the murders he committed, and he used the past tense to describe fewer events than Bundy.

Keyes does not speak as in depth about the murders he committed probably because he planned to commit suicide three days after the interview. Keyes appeared to be controlling in his interview, teasing investigators with bits and pieces of information. His last chance to be controlling was to withhold information before killing himself thereby leaving investigators to solve the mystery on their own. Bundy talks about two more events in the present tense than Keyes. Keyes used more speech disfluencies than Bundy (310 to 250); however, Keyes' interview was also almost an hour longer. Keyes used more cause and effect words (Table 5).

The most used cause and effect word for each of them was 'because.' They referenced about the same number of social needs as each talked about their family (Table 4). Keyes talked about more primal needs than Bundy because the interviewers kept offering Keyes food, which he continuously declined (Table 9). Subtracting the number of times Keyes talked about food they each mentioned primal needs once: Keyes spoke of his employment and Bundy talked about his health. Keyes used more figures of

speech than Bundy (Tables 2 and 3). Keyes responded sarcastically to interviewers three times. Keyes used three similes. Bundy used two similes. All of the similes Keyes and Bundy used compared two things using the word 'like' expect for one.

Bundy referenced the third highest number of events using the past tense from the psychopath sample (Table 1). He referenced the second highest number of events using the present tense from the psychopath sample ranking behind Kuklinski. Keyes also talked about the third highest number of events using the past tense and the present tense from the non-psychopathic sample. Bundy used the second highest number of figures of speech in the psychopath sample while Keyes tied with Gravano for the highest number of figures of speech (Tables 2 and 3). Bundy talked about the fewest number of social needs in the psychopath group (Table 4). Keyes tied with Nilsen for the third highest number of references to social needs with each having referred to one. Out of the psychopath sample, Bundy used the fewest cause and effect words (Table 5). Keyes used the second highest number of cause and effect words from the matched pair sample. From the psychopath sample, Bundy used the second highest number of speech disfluencies (Tables 6 through 8). Keyes speech was the most disfluent when looking at the non-psychopathic group. Bundy and Downs tied for the fewest number of references to primal needs in the psychopath sample (Table 9). Keyes talked about the third highest number of primal needs from the matched pairs group.

John Wayne Gacy and Dennis Nilsen

Gacy spoke of more primal needs and social needs than Nilsen (Tables 9 and 4).

Gacy used more cause and effect words (Table 5) and speech disfluencies (Tables 6

through 8). Each used one simile and no other figures of speech (Tables 2 and 3). They spoke of the same number of events in the past tense, but Gacy spoke of more events using the present tense than Nilsen (Table 1).

Gacy and Nilsen both used the past tense to talk about events in six different contexts (Table 1). Gacy talks about two men he says he did not kill. Nilsen talks about the number of victims he killed, that he made up three of the victims, the smell of the bodies, and his power and his victim's passivity. In regards to one of the individuals Gacy claims he did not kill he says, "Robert Peace was killed by another individual in my home [Interviewer] Ah he was transported to the house by another [Interviewer] I believe he was strangled" ("John claims misunderstood," 1992). Gacy describes this event using the past tense and in the passive voice ("was killed," "was transported," and "was strangled") reflecting attention away from himself. In the present and past tense Gacy claims that he took a truth serum, the results of which concluded that, "...I have no knowledge of the crime whatsoever. Never had had" ("John claims did not commit," 1992). "I have no knowledge" is present tense while "Never had had" is past tense, indicating that Gacy currently has no knowledge of the crime and in the past did not have knowledge of the crime. In the past tense Nilsen tells the interviewer how many victims he killed, "There were 12. It wasn't 15 or 15" ("Interview with Dennis," 1993). He further explains, "Now 3 3 of those victims were invented just to compliment the continuity of the evidence to the police because uh to keep them happy" ("Interview with Dennis," 1993). In that statement "were invented" is past tense and in the passive voice. "Was not" is also past tense.

Gacy speaks about eight events in the present tense (Table 1). Nilsen speaks about five events in the present tense (Table 1). Gacy uses the present tense to argue that he has no knowledge of the crime, other people were involved in the murders, he is not completely innocent, and his house did not have an odor. When talking about the murders Gacy said,

The five that I know about just take it that I didn't. Butkovitch is not one that I killed so I don't know nothing about him. Th-the little bit that I know about him is that he was an employee of mine ("John claims did not commit," 1992).

In this statement Gacy claims in the present tense that he knows about five of the bodies, he did not kill Butkovitch, and he does not know anything about Butkovitch other than Butkovitch used to work for Gacy. After describing what happened to the body of Robert Peace, Gacy said, "I've always I've always consented don't look at me as an innocent babe of the woods" ("John claims misunderstood," 1992). In this statement, Gacy is saying that he is not innocent even though right before that he claimed he did not kill Robert Peace and spoke about what happened to him. His statement might be interpreted to mean that he is saying he did kill some people. Nilsen uses the present tense to talk about the dissection process and the bodies. After relaying how he dissected bodies on the kitchen floor and vomited in his garden, Nilsen mutters, almost unintelligibly, "It's awesome [unintelligible] [Interviewer]" (Interview with Dennis, 1993). The interviewer questions him about how messy dissection is and Nilsen replies in the present tense, "No, it doesn't leave a mess" ("Interview with Dennis," 1993). Nilsen talked about the bodies

and how the bodies are him, "But he he is now me. He is now my body in the fantasies" ("Interview with Dennis," 1993). Using the present tense, Nilsen described how the bodies of the people he killed become him. In his last statement in the interview he says, "There is nothing left. But I still feel in a spiritual communion with these people" ("Interview with Dennis," 1993). Despite the fact that Nilsen is in prison, he still feels a connection to the bodies.

Gacy uses a total of 17 cause and effect words (Table 5). Nilsen uses eight cause and effect words (Table 5). Gacy uses 'because' the most often for a total of 12 times and Nilsen uses 'so' the most for a total of five times. Gacy uses 'because' to talk about Jeffery Dahmer, vengeance, to differentiate himself from his dad, to explain that he is a victim in the situation, and to explain why he did not say anything when he saw a dead person on his couch. He justifies not doing anything when he saw a dead person on his couch by saying, "Why didn't I say something about it? Because it wasn't my business and I stayed out of other people's business" ("John claims accomplices," 1992). He refuses to comment about Jeffery Dahmer because,

I have no comment on Jeffrey Dahmer because I'm not Jeffrey Dahmer and I would not ah whether it's it's Beracwitis or whether its Bundy or whether it's it's ah William ah Wayne Williams down in Atlanta or any of the others or Charlie Manson see. See I I don't comment about other cases for the simple fact is that I wasn't there ("John speaks," 1992).

Nilsen uses 'because' three times. He talks about giving the police a certain number of victims because he was cooperating, and he uses because to explain why he put cellophane on bodies. As he was explaining, he made up three victims and he stuck with his story that included the three made up victims because,

When I was at the back of the police car heading to the police station on the morning of my arrest they asked me how many there where and I didn't realize I just gave them a figure and uh 'cause I was cooperating with the police and I decided I'll stick with it, ya know? ("Interview with Dennis," 1993).

He justifies placing cellophane on the bodies by saying, "Aw at some ah why fronts in cellophane and ah I've actually I've put that on him because it enhanced his appearance in some way" ("Interview with Dennis," 1993).

Gacy used 'so' five times as a cause and effect word. He used so to explain that he did not kill Butkovitch, and why he marked a 'X' in his garage. He also used 'so' to explain why he showed police how to make a Tourniquet knot, to talk about his paintings, and his clown named Pogo. He marked a 'X' in his garage because,

Ah in regards to going out into the garage, yes, I know I went to the house and yes I know I walked into the garage and they asked me where the last section of concrete was poured. Okay. I said there's the last section where the last section of concrete was poured. Okay they are the ones that took the orange can of paint and said here put a mark there, so I put an 'X' there ("John claims misunderstood," 1992).

Nilsen uses the word 'so' five times to explain dissection, undressing the bodies, and being somebody else. He explains why he used to dissect the bodies:

I thought what would cause the smell more than anything else and I came to the conclusion it was the innards th-th-the soft parts of the body. The organs and stuff like that, so on the weekend I would sort of pull up the floorboards, and I found it totally unpleasant and would get blinding drunk, so I could face it and start dissection on the kitchen floor ("Interview with Dennis," 1993).

Gacy does not use the cause and effect words to talk about murder rather he seems to be trying to make himself look better. Nilsen uses the words to talk about lying to the police and dissecting the bodies.

Gacy and Nilsen each spoke once about their health (Table 9). Gacy talked about taking Valium to relieve the pressure he felt from work:

No I started taking- back in 1984 I started taking 10 milligram of valium and by the time 1978 [sic] come around I was doing 130 milligram of valium but then I was moving 80 jobs a year and I was working 15-18 hour days and I I just had to have something to take the pressure off ("John claims accomplices," 1992).

One may notice that the timetable Gacy gives is impossible in that he cannot have started taking 10 milligrams in 1984 and then increased to 130 milligrams in 1978. Nilsen speaks about his health in the context of vomiting in his garden after dissecting bodies in his kitchen: "Once you know I got I've gotten pretty sick outside in the garden" ("Interview with Dennis," 1993). He says that, "And I found it totally unpleasant and would get

blinding drunk. So I could face it and start dissection on the kitchen floor" ("Interview with Dennis," 1993).

Gacy also talks about his employment and food (Table 9). He speaks of his employment twice: once when he talks about the pressure of the job and working 80 jobs per year and then again when he talked about clowning. He talks about his clowning volunteer work:

To me, clowning ah was a way of relaxation for me. You regressed into childhood you were able to relax and you could be ah goofy if you wanted to and still you had the facade of your face being covered ("John portrait," 1992).

He mentions food once as he is telling the interviewer that he records everything that happens to him in prison: "I can tell you everything that I can tell you what's the first meal they served me here because I do it daily" ("John portrait," 1992).

In regards to social needs, Gacy and Nilsen both talk about spiritual and religious aspects (Table 4). Nilsen speaks of one spiritual element and does not make any other references to social needs.

Table 4: Social Needs

Social Needs	Family	Friends	Spiritual	Belongingness	Lack of	Total
Psychopaths						
Kuklinski	14	6	3	0	2	25
Bundy	2	0	0	0	0	2
Downs	8	3	0	0	0	11
MacDonald	12	5	0	3	0	20

Gacy	4	1	10	1	0	16
Total:	40	15	13	4	2	74
Non-Psychopaths	S					
Gravano	15	4	2	4	1	26
Keyes	1	0	0	0	0	1
Duley	7	0	5	1	1	14
Shipman	0	0	0	0	0	0
Nilsen	0	0	1	0	0	1
Total:	23	4	8	5	2	42

Gacy talks about the church 10 times. Gacy quotes the Bible Romans 12:19 in his explanation of his innocence,

People will wanna know the truth and the honesty of it if they want to be convinced or brainwashed into what they believe then fine go ahead and kill me but vengeance is mine sayeth the Lord because you'll have executed somebody that didn't commit the crime ("John claims did not commit," 1992).

He clarifies why he thinks the church is breaking down,

And now a days you realize by 1993 that 50 percent of of the American families will be single-parented and that shows the breakdown in the church in not being able to hold families together and for this reason children runaway from home and seek love in other places ("John speaks," 1992).

Gacy makes clear that he is comfortable with God, he always carries a rosary, and that he attends church. He narrates his view of Christ while talking about a picture he painted, "This is Christ as I see him in myself and its monolithic because Christ to me is monolithic he he's all things to all people" ("John portrait," 1992). He despises being placed in the same category with killers, such as Jeffery Dahmer and Ted Bundy. Using religious words as curse words, he talks about his feelings about Jeffrey Dahmer and other serials killers,

but I'll I'll tell you this that's a good example as to why insanity doesn't belong in the courtroom because if Jeffrey Dahmer doesn't meet the uh the requirements for insanity then I'd hate like hell to run into the guy that does...No, god I hate hate that when they put me in the same club with them ("John speaks," 1992).

Nilsen talks about having a spiritual connection with the bodies of people he murdered. "The bodies are all gone. Everything is gone. There is nothing left. But I still feel in a spiritual communion with these people" ("Interview with Dennis," 1993).

Gacy discusses his family, his mentor, and a sense of belonging to the community (Table 4). He calls Walt Disney a mentor. In terms of his family, Gacy describes himself as a father using the words, "loving and caring" ("John claims did not commit," 1992). He talks about his father and how even though his father drank and hit him, Gacy "…loved him for what he stood for" ("John claims did not commit," 1992). He then mentions that he is a victim of the situation as are the families,

I'm not only the victim here I'm I'm I'm maybe the 34th victim but there other victims of this crime and that is the family because if I know that I didn't commit the crime then I have been given the injustice and so has the family and nobody gives a damn about the families ("John speaks," 1992).

Whether he is including his own family in the statement above is unclear. Lastly, he talks about giving back to the community thereby indicating a sense of belonging. Gacy talks about many more social needs than Nilsen.

Gacy uses 121 speech disfluencies, and Nilsen uses 35 (Tables 6 through 8). Gacy says 'ah' 33 times whereas Nilsen says 'ah' four times (Table 6). Gacy says 'uh' seven times in his interview (Table 6). Nilsen says 'uh' four times. Gacy says 'well' six times (Table 7). Four of them are said at the beginning of a sentence. Nilsen says 'well' twice and both are towards the beginning of a sentence. Gacy says 'you know' six times and Nilsen says it twice (Table 7). Gacy falsely starts a sentence 24 times (Table 8). Two times he falsely starts a sentence twice in the same sentence. Once he falsely started a sentence three times. Nilsen falsely started to speak 10 times. One time he falsely started one sentence three times. An example of Nilsen falsely starting a sentence is, "The making myself look dead- or it has nothing to do with death itself. It is making myself look as different from me as it was possible to imagine so I could really be convincing as being somebody else" ("Interview with Dennis," 1993). Gacy repeated a word 28 times (Table 8). Mostly he repeated three letter words and a few longer words. Nilsen repeated a word six times. For the most part, Nilsen repeated short words. Twice he repeated a word that had four or more letters. An example from his interview is, "You you haul the

body up from under the floorboards put in on the sheet and then cut it up" ("Interview with Dennis," 1993). Gacy repeated phrases of words seven times while Nilsen did so once (Table 8). An example of a phrase Gacy repeated is, "you know I don't I don't sit around worrying about the death penalty or things like that, no" ("John claims accomplices," 1992). Gacy stuttered six times. Nilsen stuttered twice.

Gacy used 'like' as a speech filler once (Table 6). He also used 'oh' twice and 'so' once (Table 6). Nilsen did not use any of those as speech fillers. However, Nilsen did say 'aw' once at the beginning of a sentence and he said 'eh' three times (Table 6). Nilsen is the only person in the sample to say 'eh,' which might be a reflection of his nationality.

Gacy and Nilsen each use one simile (Tables 2 and 3). Gacy is explaining his house to the interview and describes the kitchen: "The kitchen was more like a ah ah a fast food kitchen" ("John claims accomplices," 1992). Nilsen uses a simile to compare his dissection of bodies in the kitchen to a butcher shop: "It [the blood] congeals inside and forms part of the flesh and bones and becomes slightly like a butcher shop" ("Interview with Dennis," 1993). Both similes use the word 'like' and both refer to the kitchen.

Gacy and Nilsen used the past tense to reference the same number of events (Table 1). Gacy used the present tense to describe more events than Nilsen (Table 1). Gacy's speech included more cause and effect words (Table 5). He narrated a greater number of social needs (Table 4) and primal needs (Table 9). Gacy's speech contained

more speech fillers (Tables 6 through Table 8). Gacy and Nilsen used the same number of figures of speech (Tables 2 and 3).

Gacy and Nilsen referenced the same number of events in the past tense, but Gacy referenced more events in the present tense (Table 1). On a couple occasions each uses the passive voice to talk about the murders or in Gacy's case to claim he did not kill that particular person. Gacy talks more about his primal needs than Nilsen, who talks about his health once (Table 9). Gacy mentions more social needs as well, mostly in reference to religion (Table 4). Gacy uses more speech disfluencies (Tables 6 through Table 8). However, Nilsen's interview was about 20 minutes shorter than Gacy's allowing Gacy more time to talk about any of the variables in the study. Both used one simile to talk about their kitchens (Tables 2 and 3). Gacy compared his kitchen to a fast food kitchen while Nilsen compared his to a butcher shop. Each used the word 'like' to make their comparisons.

Gacy and Downs talked about the fewest number of events in the past tense from the psychopath sample (Table 1). Gacy used the present tense to talk about the third highest number of events in the psychopath sample. Nilsen talked about the fewest number of events in the past tense and the fourth highest number of events in the present tense in the matched pair sample. Gacy and Nilsen each used the third highest number of figures of speech from the psychopath and matched pair sample, respectively (Tables 2 and 3). Gacy referred to the third highest number of social needs (Table 4) and primal needs in the psychopath group (Table 9). Nilsen tied with Keyes for the third highest number of references to social needs in the non-psychopathic sample. Nilsen used the

fourth highest number of references to primal needs in the matched pair sample. In the psychopath sample, Gacy used the fourth highest number of cause and effect words (Table 5). Nilsen the fewest number of cause and effect words in the non-psychopathic sample. Gacy's speech was the third most disfluent speech from the psychopath sample (Tables 6 through 8). Nilsen's speech was the fourth most disfluent speech from the matched pair sample.

Diane Downs and Shaquan Duley

Downs mentions one primal need while Duley speaks of ten, mostly related to her health (Table 9). Duley also speaks of more social needs (Table 4). Downs uses more cause and effect words than Duley (Table 5). Duley uses more speech disfluencies than Downs (Tables 6 through 8).

Downs spoke twice in the present tense when she was talking about speaking to the police about the attack (Table 1). Duley spoke three times in the present tense about murdering her sons. Downs said,

After my children and I were attacked the police kept saying Diane you must have lapses in your memory because there's holes in this you could drive a semi truck through. None of this makes sense. Um you're forgetting something (Diane Downs, n.d.).

After this statement she uses cause and effect words to explain how she knows she is forgetting something. Using the past and present tense in addition to a cause and effect word (so), Downs explains that she thinks the attacker is someone she knew. "The police said strangers don't shoot strangers for no reason, so I believe this had to be

somebody who knew me" (Diane Downs, n.d.). Her use of the present tense here demonstrates that she still believes the attacker is someone she knew. Duley uses the present tense to say that she adores her children and because she adores them, she had to kill them.

I just really felt that [3 second pause] I wanted them with me no matter where I was because [3 second pause] I felt like [3 second pause] nobody else was going to be able to be mommy to them because like I say my boys adore me and I adore them ("Shaquan suicidal," 2012).

In this statement, Duley speaks as though her children are still alive when she says, "my boys adore me" ("Shaquan suicidal," 2012). Even though she murdered her two sons she still adores them: "I adore them" ("Shaquan suicidal," 2012). In another statement made in the present tense Duley says, "I I got to [4 second pause] I gotta end my life and I got to bring them with me" ("Shaquan recounts," 2012). The researcher recorded Duley's statement in the speaker's dialect; however, if one converts the statement to grammatically correct, proper English then it would read, "I I have to [4 second pause] I have to end my life and I have to bring them with me." Duley is talking in the present tense about ending her life.

Downs uses the past tense six times to talk about the attack, the events after the attack and the police. Duley spoke in the past tense 19 times about wanting to die and wanting to take her sons with her. Downs describes the attack on her family:

Somebody in the road flagged us down I stopped and got out got outta my car and he said something to the effect of I want your car and I laughed at

him and I said you gotta be kidding because in my mind those kinds of things don't happen in Arizona those things don't happen. I don't know about Oregon but in Arizona those things don't happen and so he jumped into the car leaned into the car and started firing the weapon and it happened so quickly that by the time he stood up and faced me [4 second pause] it was over. I mean it was just that fast. I he said something about the car again and I struggled with him. The gun discharged, he fell back, I jumped in the car put the keys in the ignition and took off the car door shut by itself that's it and I went to the hospital (Diane Downs, n.d.).

Downs relays the events of the attack entirely in past tense. She further explains that when she went to the hospital with her children, two of her children were still crying. She claims that she did not commit the crimes in past tense and maintains her innocence in the present tense: "Absolutely, I didn't commit them and I still maintain my innocence" (Diane Downs, n.d.). Duley uses the past tense to explain that something was controlling her when she was suffocating her children: "and I felt like something else was controlling me at that point" ("Shaquan confesses," 2012). Duley describes how she murdered her sons in past tense:

I was just driving and eventually uh I went to a gas station and I went and got something to drink for me and the boys and I bought some um pain relievers that had a um a sleep medicine in it [Interviewer not to Duley]. I bought it with the intentions of taking it in the hopes of overdosing on it.

Um I took [3 second pause] 12 of them...I left the gas station um that's

went I went to the hotel...when I got in there um basically just hoping that the medicine would take effect and that it would kill me ("Shaquan suicidal," 2012).

When she got to the hotel, the medicine had not killed her and instead she decided to suffocate her children. In the moment when she was suffocating one of her children, Duley explains, "I I I just felt numb" ("Shaquan recounts," 2012). When speaking of the sentence that the judge might give her Duley notes, "I know whatever time the judge you know gives me I mean I have no choice but to consider that fair you know because of what's happened" ("Shaquan hopes," 2012). While the first part of the sentence is spoken in the present tense, the very last part is spoken in the past tense. If one translates from Duley's dialect to proper English the last part of the sentence would read, 'what has happened' ("Shaquan hopes," 2012). Not only did Duley call her murdering her children something that happened, but she also described the event using the passive voice thereby inferring that she (the subject of the sentence) received the action instead of using the active voice in which case she (the subject of the sentence) would have done the action. Whether intentionally or not, by using the passive voice Duley attempted to move attention away from the fact that she committed the murders, so instead she became the receiver of the action.

Downs uses cause and effect words 35 times in her interview. Duley uses a total of nine (see Table 2).

Table 5: Cause and Effect Words

Cause and Effect	Because	If	If/then	Since	So	Therefore	Total
Psychopaths							
Kuklinski	27	19	0	1	21	1	69
Bundy	7	0	0	0	5	0	12
Downs	11	4	1	0	19	0	35
MacDonald	15	2	0	0	9	0	26
Gacy	12	0	0	0	5	0	17
Total:	72	25	1	1	59	1	159
Non-Psychopaths							
Gravano	7	21	1	0	4	0	33
Keyes	15	0	0	0	5	0	20
Duley	6	1	0	0	2	0	9
Shipman	4	1	1	0	5	1	12
Nilsen	3	0	0	0	5	0	8
Total:	35	23	2	0	21	1	82

Downs uses the word 'because' 11 times to explain her lapses in memory, to talk about the attack, to tell why she stopped at her friend's house, and to talk about court and the police. Downs describes laughing at the person who attacked her children,

Somebody in the road flagged us down I stopped and got out got outta my car and he said something to the effect of I want your car and I laughed at him and I said you gotta be kidding because in my mind those kinds of things don't happen in Arizona those things don't happen. I don't know about Oregon but in Arizona those things don't happen (Diane Downs, n.d.).

Downs talks about the police telling her she has lapses in her memory about the attack because there were too many holes in her story. She says she believed the police because she believes police officers.

After my children and I were attacked the police kept saying Diane you must have lapses in your memory because there's holes in this you could drive a semi truck through. None of this makes sense. Um you're forgetting something. I believed because I've never had any dealings with authorities and I believe the authorities and so I thought they did. That I had lapses in memory (Diane Downs, n.d.).

Duley uses the word 'because' to explain why she killed her children. Duley explains, "even if I tried to stop it was like I I couldn't because I just knew I had to go ahead and get this over with. I I got to [4 second pause] I gotta end my life and I got to bring them with me" ("Shaquan recounts," 2012). Downs uses the word 'because' to explain a myriad of circumstances, but Duley uses because to explain why she killed her children.

Downs uses the cause and effect word 'if' four times while Duley uses it once.

Downs claims she did not kill her children and that it was absurd and insulting to her intelligence to suggest that she did.

The state says I that I was the one that shot them and that I wanted them dead. If that was the case I would not have taken them to the hospital still crying. There are so many other ways to accomplish such a horrific deed if I was going to do it. I'm certainly bright enough to figure out another way

besides some way that looks so absolutely insane and hokey that nobody would believe it. I'm not dumb (Diane Downs, n.d.).

She also uses the word 'if' to explain that she told the prosecutor she will not testify against her ex-husband and she uses it when talking about the police. Downs recalls refusing to testify that her ex-husband was the person behind the attack despite the alleged urging of the prosecutor:

I said how do you know Steve Downs my ex-husband? How do you know Steve Downs did this? Give me the evidence. He [the prosecutor] said don't worry about the evidence just be willing to testify. I said if you can't prove to me he did it. He's not the one that fired the gun. He said but he was behind it. I said I cannot testify against somebody unless you can prove to me that he did this (Diane Downs, n.d.).

Duley uses the word 'if' once to explain that if she is going to die then she has to kill her children. "So I I figured if I'm going to die, I gotta take them with me" ("Shaquan suicidal," 2012). 'If' is used by Duley to justify killing her children while Downs uses it to explain that she did not kill her children and to explain why she would not testify against her ex-husband.

Downs uses 'so' to explain a cause and effect 19 times. Duley uses it twice.

Downs explains that she does not know how the towel got around her arm. She talks about not seeing her kids again, visiting Heather's horse, lapses in her memory, and the police. To explain that she does have lapses in her memory of the attack Downs says, "I can't tell you how the towel around my arm so I know from my own personal experience

that I did have at least that much of a lapse of memory" (Diane Downs, n.d.). According to Downs, the police argue that Downs kept changing her story. To explain to the parole board why her story kept changing Downs said,

I wasn't changing my story. I was trying to help. The police kept saying I had lapses in memory. People were calling me and telling me things that I thought well maybe this is what happened I don't know and so I would tell the police believing that I was helping them investigate. They didn't tell anybody that these are reports that I was giving them reports from other people they would simply say we say Diane came in and said such-and-such (Diane Downs, n.d.).

Duley used the word 'so' once to explain that when she was suffocating her sons they were not facing her, so she was unaware of whether they woke up and realized it was their mom killing them. "He he was face down on the bed, so I really didn't see his face" (Shaquan recounts, n.d.). The second time she uses 'so' is to explain she had to kill her sons because she was the only person capable of caring for them. Downs uses 'so' for explanation after explanation. Duley uses it twice to talk about killing her sons.

Neither Downs nor Duley refer to money in their interviews (Table 9). Both women refer to employment once (Table 9). Duley wants to be released from prison so she can rejoin society as a productive citizen. "If there was ever an opportunity that I could be set free to become uh a productive citizen you know again you know that would be fine" ("Shaquan hopes," 2012). Downs makes one reference to her employment when

she talks about working on the postal service. Allegedly people would stop her on her mail route to give her details about the person who attacked her children and her.

People would stop me on my mail route. They would. I worked in Cottage Grove and people would drive all the way to Cottage Grove just to meet me on my mail route and tell me these kinds of things (Diane Downs, n.d.).

Duley talks about her health in nine instances mostly in the context of wanting to kill herself (Table 9). Duley spoke of wanting to kill herself either by drowning herself or overdosing on over-the-counter medication. For example, "I was really serious about wantin' to die. I was very serious about it" ("Shaquan confesses," 2012). In regards to overdosing, Duley said, "I bought it with the intentions of taking it in the hopes of overdosing on it" ("Shaquan suicidal," 2012). She claims she wanted to die because she saw dying as a way to, "En-end to the hurt, end to the pain, end to depression uh end to just feeling like nobody cared about me or them" ("Shaquan suicidal," 2012).

Downs talks about her family eight times during the discussion with the parole board (Table 4). She refutes the idea that her ex-husband attacked them. She spoke of the prosecutor adopting her two surviving children, how she was not allowed to see her children again, and the last visit she made to the hospital to see her oldest daughter, Christie.

I went to see Christie for 15 minutes 'cause that's all I was allowed. I left and he Doug Welch] was standing there. He goes I'm not playing Diane and I said prove to me Steve [Down's ex-husband] did this. He says let us

worry about the proof and I said I can't testify against him unless you can prove to me he did this and I left the next day I did not see my children ever ever again until court and that was it and so I believed. I believed with the police I thought the police believed (Diane Downs, n.d.).

Yet out of all the times Downs refers to her children, she never displays any sense of sadness or despair over the loss of one of her children and the life-threatening injuries the other two sustained. Duley talks about her two sons seven times. She mostly talks about how she wanted to die and since she wanted to die, she had to kill her sons in order to bring them with her. "That they just. I wanted to die. I didn't want to leave my sons behind" ("Shaquan suicidal," 2012). She also comments, "So I I figured if I'm going to die, I gotta take them with me" ("Shaquan suicidal," 2012).

Downs talks about her friends three times (Table 4). Duley does not mention any friends. Downs spoke of her boyfriend, her friend Heather, and an unnamed person she talked about speaking on the phone with. She claims she left her house the night of the accident because someone called her and asked her to stop by and pick up pictures that her boyfriend, Rick, needed. On her way to pick up the pictures she and her children stopped by Heather's house because Heather had recently bought a horse. She and her children visited the horse. When they were back driving someone flagged them down, which is when the attack began. Downs never mentions anything else about the pictures. Downs described talking to someone on the phone about the attack because she was,

I was talking to somebody on the phone and I was trying to and I was sharing this dream this thought with somebody trying to understand in the

same way that you would talk to a psychologist or psychiatrist so that you can because if you talk maybe you can reach something maybe you can find something that's inside you that's locked off and so I was sharing this with somebody else...(Diane Downs, n.d.).

Thus the references Downs makes to her friends are in the context of leading up to the attack and then later talking about the attack.

One statement Duley made appeared to be her wanting to belong to something (Table 4). She explains that she wants to take her experience and speak to others about it in order to help people who might be experiencing something similar.

But just to be able to to talk to people even one on one to share face to face with someone the feelings and the things you know that I been going through just to be able to help somebody else that would be wonderful but like I said I don't know you know what's gonna happen" ("Shaquan hopes," 2012).

Through this statement and the one she made about wanting to be a productive citizen again it seems as though Duley longs to be part of society again. Conversely, one statement by Duley suggests that she did not feel that she was a part of society prior to committing the murders: "En-end to the hurt, end to the pain, end to depression uh end to just feeling like nobody cared about me or them" ("Shaquan suicidal," 2012). Downs never makes any direct statements nor alludes to wanting to return and be a part of society.

Duley talks about her religion five times in her interview (Table 4). She explains that wherever she ends up after death would be better than being alive. If she killed her kids and herself then they would be happy. She also talked of how something was controlling her when she was murdering her children and that God was not present with her then: "I didn't feel like he was there with me at that point" ("Shaquan confesses," 2012). God's angles appeared with her when she tried to drown herself with her dead sons in the car. Since the angels appeared, she managed to escape out of the vehicle. Duley explains, "That's something I'm still. O-Other than you know the angels of God being there with me I don't know how" ("Shaquan confesses," 2012). Downs make no spiritual or religious references.

Downs used 57 speech disfluencies in her plea to the parole board (Tables 6 through 8). Duley uses 61 in her interview. Duley used the speech filler 'ah' one time (Table 6). Downs used it twice. Downs said 'um' four times when talking about her neighbor, her children, and lapses in her memory (Table 6). One example of Downs saying 'um' is, "um the nurses reported that they were still crying" (Diane Downs, n.d.). Duley said 'um' ten times. She said 'um' in the context of talking about painkillers, killing herself and court. For example, "Um I took [3 second pause] 12 of them" ("Shaquan suicidal," 2012). Downs said 'uh' twice (Table 6). Both times she said 'uh' she said it near the beginning of a sentence. Duley said 'uh' six times. Two instances of when she said 'uh' occurred in the same sentence. "Well all I know is in my particular situation um 'cause of I've plead guilty um" ("Shaquan hopes," 2012). Downs said 'well' three times once at the beginning of a sentence and twice in the middle of a sentence

(Table 7). Duley said 'well' once at the beginning of a sentence. Downs started a thought falsely 37 times while Duley falsely began a thought 11 times (Table 8). An example of Downs falsely starting a sentence is, "I wasn't [ha] to me it was just all. It was just dating but I received a phone call..." (Diane Downs, n.d.). An instance of Duley falsely starting a sentence is when she said, "That's something I'm still. O-Other than you know the angels of God being there with me I don't know how" ("Shaquan confesses," 2012).

Downs repeated a single word four times (Table 8). Three times the word she repeated was 'I.' One time she repeated the word 'he.' Duley repeated a word seven times. Five times she repeated the word 'I' and twice she repeated the word 'he.' Downs stuttered once on the first syllable of a word (Table 8). Duley stuttered three times on the first syllable of a word. Downs paused once in her interview for 4 seconds. Duley paused 11 times during her interview with an average pause of 4.55 seconds (Table 7). One example of Duley pausing is, "um [5 second pause] I knew that I couldn't leave them. I couldn't leave them behind" ("Shaquan suicidal," 2012).

Downs and Duley differed in their use of speech disfluencies in that Downs repeated phrases and said 'aw,' and 'so' one time each (Table 6). Duley did not say 'aw' or 'so,' but she did say 'you know' (Table 7). Downs did not say 'you know.' Duley used the speech filler 'you know' 11 times. She mostly used this phrase in the middle of a sentence, but sometimes she used it toward the end of a sentence. For example, Duley said, "I understand how you know that looks or how it seems to everybody else but…" ("Shaquan confesses," 2012). Downs repeated a phrase one time when she said,

"Somebody in the road flagged us down I stopped and got out got outta my car" (Diane Downs, n.d.). Duley did not repeat any phrases of words (Table 8).

Duley used one figure of speech (Tables 2 and 3). She used a simile to compare sitting in her car in the river with her dead sons and the water rushing in to coming out of a trance. "It felt like I was coming out of the a trance or something almost like waking up so to speak the…" ("Shaquan confesses," 2012). Downs did not use any figures of speech.

Duley spoke more using the past tense and the present tense than did Downs (Table 1). Duley used more figures of speech (Tables 2 and 3). Downs did not use any figures of speech. Duley referenced a higher number of primal needs (Table 9) and social needs (Table 4) than Downs. Duley's speech was more diffluent than Down's (Tables 6 through 8).

Both Downs and Duley are convicted of killing at least one of their children, yet neither Downs nor Duley had the highest number of references to their family (Table 4). Downs' interview is a plea to the parole board thus she spends the interview desperately attempting to convince the board of her innocence. Downs had the fourth highest number of references to social needs and the third highest number of references to family in the psychopath group. Duley confessed to killing her sons and as such spends the interview trying to persuade viewers that her suicidal intentions caused her to kill her children. In the non-psychopathic sample, Duley has the second highest number of social needs behind Gravano, who as explained above consistently refers to the Mafia as his family. Duley has the highest number of spiritual or religious references out of the matched

sample while her counterpart has none. Duley also references more primal needs than Downs (Table 9). Downs mentions one primal need, her employment, in the context of explaining what happened the night of the attack and murder. Duley talks about 10 primal needs most of them relating to her health and suicidal intentions the night she killed her children. Duley has the second highest number of primal need references out of the matched pair sample. Downs is tied with Bundy for the lowest number of primal needs in the psychopath sample. Downs does not use any figures of speech, but Duley uses one simile to explain why she got of the car that she was using to try to drown herself in again highlighting her alleged suicidal intentions (Tables 2 and 3). They use about the same number of speech fillers with false starts being the most used disfluencies (Tables 6 through 8). Downs referenced the fewest number of events in the present tense out of the entire sample (Table 1). Duley is tied with Shipman for the highest usage of past tense verbs while Downs is tied with Gacy for the lowest usage of past tense verbs.

Richard Kuklinski and Salvatore Gravano

Gravano referenced more primal needs (Table 9) and social needs (Table 4) than Kuklinski. Kuklinski used more cause and effect words (Table 5) and speech disfluencies (Tables 6 through 8). Kuklinski spoke about more events using the past tense (Table 1). They used the same number of figures of speech (Tables 2 and 3) and talked about the same number of events in the present tense (Table 1).

Kuklinski speaks in the present tense in 16 different contexts to refer to murder, to talk in-depth about some of his contract kills, and to call himself an expediter (Table 1). He talks about killing a man that was a personal kill. "Didn't do anything. But I I mean I

did feel him die" ("Greatest," n.d.). When the interview asks him about using chainsaws, Kuklinski remarks,

See chainsaws are messy. All you get is little all over me I have these little pieces of meat. Now that's a pain in the neck. If I use chainsaws. Now would I wanna ruin a good shirt with a chainsaw? That would be down right stupid. And I definitely have the wrong I don't think I could walk around with bits of meat hanging off me or bits of pieces of somebody's body hanging off me. I would probably smell a little bit bad also at that point ("Greatest," n.d.).

In that blurb, Kuklinski speaks as though he currently has bits of meat hanging off his shirt and then proceeds to switch tenses to the future tense to talk about how using chainsaws would be stupid (future tense) because chainsaws are messy (present tense). Recounting a contract kill that took place in a nightclub Kuklinski explains, "So anyway I'm trying to get close to this guy. So I'm doing this crazy thing. I'm acting real switchy. I guess that's what you would call it" ("Greatest," n.d.). He then switches to past tense to tell how he killed the man with a needle. Gravano speaks in the present tense in 16 different contexts as well to talk about himself, his plans to kill people, one contract kill, and to speculate about what the Mafia might do to him. Gravano describes how he had to lure the person he was supposed to kill into his death trap while explaining to the interviewer that luring people into traps is, "...the way we kill in the mob" ("Sammy," n.d.). Gravano speaks as though he is still part of the mob. He partially refutes the interviewer's idea that the mob is similar to high school: "Yeah, but the only thing is that

ah in high school you could throw ah ah a spitball somebody, we use bullets" ("Sammy," n.d.). He also talks about how he went house shopping with his wife describing how she would be looking at the house and he was looking at the house from the perspective of a hitman. "She looks for the furniture. I look for the hit" ("Sammy," n.d.). In one instance using both present and past tense Gravano talks about his nickname and how he is still the same person he was when he was given the nickname. "No, I I I am Sammy the Bull. I was that then I am now and I'm this I'm this basically the same person but I've changed direction" ("Sammy," n.d.). He explains the amount of freedom he currently has to kill. "I'm freer now I think than I've ever been to kill somebody. The only way you can put me in the situation is with the hitman when they come. I c- its gonna be me or them" ("Sammy," n.d.). Kuklinski mainly uses the present tense to talk about his contract kills, but Gravano uses the present tense to talk about a myriad of topics related to killing but not necessarily the actual killing itself. Both men use the present tense to explain who they are: Kuklinski is an expediter and Gravano is 'Sammy the Bull.'

As shown in Table 1 Kuklinski speaks in the past tense in 33 different contexts. Kuklinski uses the past tense to talk about contract kills, experimental killing, using chainsaws, and killing cats. He also uses the past tense to talk about how killing people did not bother him and to label himself again. Gravano uses the past tense in 17 different contexts to describe killing his brother-in-law and other people. In addition he uses the past tense to talk about his plans to kill people and to label himself. Kuklinski explains that he killed someone as an experiment because he wanted to see if using a crossbow would work. "Crossbows I just popped the guy in the forehead with it. Actually it was

just ha to seein' if it would worked... I just wanted to see if this thing would work...Sure did. Went halfway into his head" ("Greatest," n.d.). He talks about how he killed a friend who threatened to hurt his family. "And I shot him five times" ("Greatest," n.d.).

Describing what he did when he was younger Kuklinski adds,

I killed basically more ah than 100 people when I was a young man before I even knew anybody. Too much. One part of my life I killed people for nothing just for someone to look at me wrong I would kill them ("Greatest," n.d.).

Using past tense to explain another kill, Kuklinski comments,

I beat a guy to death one time I had blood in my shoes his blood in my shoes. Just goes on that way. Had to throw all my clothes away. Here I was driving a big Lincoln town car with butt naked. Had a sheet wrapped around me ("Greatest," n.d.).

In video footage of Kuklinski in court Kuklinski tells the judge, "I ah shot him once in the back of the head...' cause it was due to business" ("Greatest," n.d.). Kuklinski labels himself a bad person using both the present tense and the past tense, "I was a nasty son of a gun. I am a nasty son of a gun" ("Greatest," n.d.). He expresses his surprise when he killed a man with a shotgun and the shot decapitated him:

At a red light. We were following this fella [3 second pause] He pulled up at a ah [4 second pause] at a red light came along side of him and shot the shotgun and took his head off he never saw the green light. As a matter of fact when it happened it surprised me. I I expected the ah the man to ah

die but it ah really surprised me when it when it took his head off. It was ah something I didn't expect ("Greatest," n.d.).

When speaking of the men he killed in Georgia with a 357 with a hair trigger, Kuklinski simply explains, "They all died [5 second pause] and I didn't even know them" ("Greatest," n.d.). Gravano uses the past tense to talk about killing his brother-in-law and not telling his wife, "No. W-w-what do you want me to do? Go home and tell them I just killed your son or your brother? No, of course not" ("Sammy," n.d.). He also speaks of letting his partner live for as long as he could before killing him on Gravano's boss's orders:

But they don't always kill their partners. I wouldn't kill my partner for that. Louis Milito got killed because he betrayed our group. I saved his life. Let him live for a while until John said that enough was enough ("Sammy," n.d.).

He killed another person who disobeyed orders explaining that it was time: "He's not showing up when the boss uhh calls him. He robbed us in business. He's running amuck all over the place. Time to go" ("Sammy," n.d.). He also explains using the present and past tense that he is a hitman and that he was good at his job: "As far as being a hitman I w- I I actually was good at it" ("Sammy," n.d.). Kuklinski uses the past tense to talk almost exclusively about killing. Gravano uses the past tense to talk about killing three people and to explain that he was tired of the mob.

Kuklinski uses a total of 69 cause and effect words. Gravano uses 29 (Table 5). Kuklinski mainly uses cause and effect words to explain or justify murdering someone.

Gravano uses the words for a myriad of reasons, including explaining about the Mafia, expressing emotions, describing the level of protection he is willing to exert, and when explaining how the Mafia extorted people. Throughout the course of his interview, Kuklinski uses the word 'because', or a version of the word 'because' ('cause or cuz) 27 times. He uses the word in the context of killing both people and cats, expressing emotions, and explaining problems. In a threatening tone Kuklinski explains, "And if you don't kill me [3 second pause] you're stupid 'cause the next time you see me ha I will kill you" ("Greatest," n.d.). He describes his personality as someone's worst nightmare: "I am what you call a person's nightmare. Because of the way I project myself people think they can get by and all a sudden when they wake up it's too late" ("Greatest," n.d.). He shot someone and explains to the judge that the kill was just business: "I ah shot him once in the back of the head. [News broadcaster] 'cause it was due to business" ("Greatest," n.d.). Gravano uses the word 'because' seven times. Once he uses the word to explain and express his emotions and the second time he uses 'because' to explain to the interviewer that outsiders cannot understand the life of a mobster. When explaining his emotions, Gravano admits he does not want his family to join the Mafia: "Just like it would break my heart if my son or if my nephew or somebody when into the mob because I know their destiny" ("Sammy," n.d.). Kuklinski frequently used 'because' in the context of killing and Gravano used it to explain emotions.

Kuklinski uses the word 'if' 19 times. He mainly uses the word to explain that if someone tries to shoot him, he/she had better kill him otherwise he is coming after the shooter. "You could pull a gun on me and if I mad at cho I'm coming forward. And if

you don't kill me [3 second pause] you're stupid" ("Greatest," n.d.). However, he also uses 'if' to explain what would happen if he needed to kill everyone in the room for his children: "Not that I would or want to I'm just saying I would. If it meant I had to for them I would do it without even thinking twice" ("Greatest," n.d.). Gravano uses the word 'if' 18 times to explain that if he had to, he would kill to protect the team of hitmen. "If I had a 357 magnum, and anybody who would interfere with the hit team I would take them out" ("Sammy," n.d.). Kuklinski uses 'if' to make threats and to explain what level he is willing to go to in order to protect his kids. Gravano also uses 'if' in terms of protection though he is talking about the protection of the hitmen.

Kuklinski uses 'so' to explain why and how he murdered, why he hates, how he killed cats, and to explain his lack of the emotion love. Kuklinski killed one of his friends and since his friend was too big to fit in the barrel, Kuklinski amputated one of his legs: "No matter what I did I couldn't get that leg in there, so I hada cut it" ("Greatest," n.d.). In his explanation of how he killed cats, Kuklinski explains,

Well, we had the incinerator in the projects there. So I threw a cat in there in the incinerator. Then I threw a book of matches in there and through the door I watched the fire get bigger and bigger and this cat was running around trying to get away eventually the fire got too big for him and he didn't run anymore ("Greatest," n.d.).

He murdered three people because, "They wanted to play with me. I didn't want to play, so we didn't play no more" ("Greatest," n.d.). He has lost everything because he is unable to make friends: "and I can't make any friends to have any kind of relationship

or so I've lost everything" ("Greatest," n.d.). Gravano uses 'so' four times to explain how the Mafia extorted businesses, why he is not in the drug business, and for protection. He equates the Mafia's extortion to a negotiation:

When you went to ah the bakery for instance and said ok y-y-you're bread is 30 cents a loaf we're gonna make it 50 cents a loaf and we only want 3 cents a loaf. So you're going to make a big profit. So it's more a negotiation ("Sammy," n.d.).

Gravano claims to have steered away from the drug business because he did not like the people involved in that business. Thus Kuklinski uses 'so' to explain killing (both how and why), and Gravano uses it to explain extortion.

Kuklinski uses two cause/effect words that Gravano does not: since and therefore. Kuklinski is the only murderer in the sample to use the word 'since.' Kuklinski uses since to explain why he hates. "It's down the toilet. Since there is no love in my life I must have something to replace it so I replace it with hate" ("Greatest," n.d.). 'Therefore' is used twice in the sample, once by a psychopath, and once by Shipman, a non-psychopath. Kuklinski uses 'therefore' to explain why he left people tied in caves, set up a video camera, and watched rats eat people.

I said that was some type of ah feeling which I wasn't too keen on having. But I did it because it gave me a feeling of some kind and therefore I was trying to find out what it was that was giving me some type of feeling" ("Greatest," n.d).

Gravano uses one cause and effect phrase that Kuklinski does not: if/then.

Gravano is describing kill orders from his boss, "They were told kill them. And if you and if it means you have to die there then die there with them. Die there in a gun battle with the cops. Do not back off this hit" ("Sammy," n.d.).

Both Kuklinski and Gravano make references to primal needs (Table 9). The total number of times Kuklinski refers to primal needs is 16 while Gravano refers to primal needs 38 times. Gravano talks more about money; although, he is mostly referring to others' money. Kuklinski refers to his health on one more occasion than Gravano. Gravano refers to employment 15 times more than Kuklinski, mostly describing his role in the Mafia, what the Mafia did, and his level of devotion to the Mafia.

Kuklinski refers to money a total of six times. He justifies his job as a murderer by reducing it to basic economics: someone needed something and they paid him to do it. "I look at myself as a person who did something that somebody wanted done and they paid me a good price" ("Greatest," n.d.). Kuklinski talks about killing people on multiple occasions for money: money that was owed to him, money they owed his whomever was paying him, or making/losing money betting on killing people.

The man owed me money. He was giving me a run around. I told him I wasn't happy that he wasn't going to pay me. Hey he had the attitude that ah [4 second pause] nobody could hurt him [3 second pause]. I think he was wrong. Anyway he never saw Christmas ("Greatest," n.d.).

On a bet Kuklinski killed a man:

Shot a guy one time in his ah adam's apple. See how long it would take him to die [Interviewer]. Few minutes. He drowned actually he didn't [trails off] [Interviewer]. Mhmm. I was with somebody else. We had a fifty-dollar bet. [5 second pause] I lost ("Greatest," n.d.).

He boldly states that for the right amount of money, he would kill anybody.

Gravano refers to money a total of 13 times in his interview. He speaks of the millions of dollars he made in the Mafia and how the millions of dollars he made was enough money for him, which he says to refute the accusation from the interviewer that people always want more money. Gravano talks about going into the Mafia for the purpose of making money, but later in the interview he claims that his joining the Mafia had nothing to with the greed. When the interviewer asks whether the government took the money he made in the Mafia, Gravano is astonished and appears confused as to why the government would even consider taking his money. Kuklinski talks more about killing for money while Gravano speaks more about the Mafia's money, how the Mafia made money, and his boss' money. Gravano speaks less about his own money until the interviewer brings up the subject.

Kuklinski talks about his health twice. One time he was concerned about his personal safety, which he uses as justification for shooting three men. The last time he mentions is health is at the end of the interview, Kuklinski says, "It is time for me to die" because he believes he has come full circle in life in that he started life with hate and since everything that he cared about is gone, hate is what is left ("Greatest," n.d.).

Gravano mentions his health once while explaining to the interviewer that he had to kill his brother-in-law because if he refused to obey orders he would have been killed.

There's nothing I could have done. I know it sounds easy enough to say get out of town or do something and you see that in the movies but that doesn't really work in real life. If I balked about it or didn't want to do it or whatever I was going too ("Sammy," n.d.).

Both men mention their health once in reference to killing to save their lives.

Kuklinski mentions employment nine times in his interview. He talks about his contract assignments. He calls himself an expediter and refutes that he is an assassin, instead calling himself a murderer. "I'm just a hardworking expediter of sorts" ("Greatest," n.d.). Labeling himself a murderer Kuklinski says, "Assassin? Sounds so exotic. Haha. I was just a murderer" ("Greatest," n.d.). Kuklinski describes one of his assigned contract kills:

He gave me a picture of him and ah a description of what he does, what he generally does and where he goes places he goes and ah so I went to the area where they said he might be and I saw somebody who looked like him. Similar to him he had a knack for smoking and they told me he smoked big cigars Churchill cigars or something [3 second pause] So I ah pulled up alongside of him at the time I was riding a motorcycle and I just said uh Cuban? Are they Cuban? Looks like a good cigar. And he wasn't a happy camper. 'Cause he said fuck you haha and I when he said fuck you he looked my way and I got a clear shot of his face. It was ah a picture I

had of the man they wanted I said naaa don't fuck me, fuck you and I just took this weapon out and blew his head off. He just disintegrated pff ("Greatest," n.d.).

Gravano talks about his employment 24 times. He calls himself a solider of Cosa Nostra and a hitman. "I was a solider of Cosa Nostra. I am a hitman" ("Sammy," n.d.). He is gangster and is trained to con and double cross. He describes his boss, John Gotti, and his relationship with his employer, calling himself Gotti's pitbull and friend. He explains his devotion to the Mafia, the induction process, and what the Mafia did. According to Gravano, "I was doing loansharking. Stealing cars, doing burglaries. Break an arm here, a leg there" ("Sammy," n.d.). In his description of what the Mafia does, Gravano explains, "We raped the community on a constant basis in every way, shape, or form" ("Sammy," n.d.). Gravano describes the importance of following orders and what happens should one decide to disobey orders. "That was an order from Paul Castellano. I was stuck with it [3 second pause] uh I participated in it" ("Sammy," n.d.). Towards the end of the interview, Gravano promoted himself in the Mafia by going from calling himself his boss' pitbull and friend to saying that the two were partners. "We partners. We started off as partners we ended up as partners. I guess" ("Sammy," n.d.). Kuklinski refers to employment when talking about his assignments and labels himself a murderer and an expediter. Gravano gives himself many labels at work (gangster, hitman, friend, pitbull, solider and, eventually, partner).

Kuklinski makes 25 references to social needs in his interview. Gravano refers to social needs 26 times (Table 4). However, once when Kuklinski is talking about God, he

is doing so in reference to a man he killed. Kuklinski told the man that he would give him some time to pray before he killed him and if God happened to figure a way out of this mess for him, Kuklinski would not kill him:

It was a man he was begging and pleading and ah [3 second pause] and praying I guess [5 second pause] and umm [8 second pause] he was please Godding all over the place [5 second pause]. So I told he could have a half hour to pray to God and if God could come down and change the circumstances [3 second pause] he'd have that time [6 second pause] but God never showed up and he never changed the circumstances [3 second pause] and that was that ("Greatest," n.d.).

Another time Kuklinski makes spiritual or religious references is when he comments that he is not asking for forgiveness. "I'm not looking for forgiveness and I'm not repenting [8 second pause] I know I'm wrong. [3 second pause] I'm wrong" ("Greatest," n.d.). The last time he makes a spiritual or religious reference is when he talks about killing people up close so that the last thing they see before he kills them is his face, which is an image that he thinks they will carry with them for eternity wherever they end up:

And if they carry that glimpse to eternity, infinity or whatever it is they are going to be thinking of me all that time [3 second pause]. I'd be looking in their eyes. I would see the blankness come over it ("Greatest," n.d.).

Gravano makes two spiritual or religious references. He thanks God that he had a good team of FBI agents to work with. "Thank God I dealt with a great team of FBI

agents and and prosecutors and people who lived up to their word" ("Sammy," n.d.). He also talks once about how he was a hitman and a moral person. "As far as being a hitman I w- I I actually was good at it. [Interviewer] And moral. I didn't I I I believed in a life. And when I was on your case I dropped everything" ("Sammy," n.d.). Kuklinski used spiritual and religious references when talking about murder and says he is not asking for forgiveness. Gravano uses the references he made to thank people and call himself moral.

In a demonstration of a lack of social needs, twice Kuklinski talks about how he lost everything and how he has nothing.

I am probably the lonest person in the world because I have nothing I care for and I can't make any friends to have any kind of relationship or so I've lost everything. I've lost everything I ever cared for. Everything I ever wanted. It's down the toilet. Since there is no love in my life I must have something to replace it so I replace it with hate. Constant hate. Constant reminder to hate ("Greatest," n.d.).

A few minutes later Kuklinski adds, "[hate] It's all I got left. Everything that I ever cared for is gone. Everything I ever liked is gone. Everything that every meant anything to me is gone" ("Greatest," n.d.). Once Gravano mentions that he felt nothing when he killed a person. "I remember something that surprised me that I had no remorse at all. None. I didn't feel sorry for him in the least" ("Sammy," n.d.).

Kuklinski mentions his friends six times. He talks about how it is possible that he liked his friends and how he murdered them. He claims he thinks might have even liked them when he murdered them. One friend he killed to protect his family:

Georgeyboy yeah liked him. Actually yeah really liked him. One of the few people I ever really liked...We got in the van and ah gosh George was really sincere with the fact that you would hurt my family and ah to get back at me and he said ah that's the only way I could get you I could get could get over on you. Get you to do what I wanted you to do was to hurt your family. I said but that was a stupid thing to say George cause knowing how badly how how sincere I am about my family. I said for you to say something like that you must realize you're going to make me mad. He said no you won't be mad he said because you'd be afraid that something would happen to your family. I said well you're very wrong about that George. I said cuz I'm going to put the stop to that. As a matter a fact I'm going to put a stop to that right now. And I shot him five times ("Greatest," n.d.).

He continues the story by saying he had to cut his friend's leg off in order to get the body to fit in the barrel. As Kuklinski explains, the only friend he did not kill turned out to be an undercover police officer who then put him in prison:

You see because I was put in prison by a man I knew 30 years and I liked him. Big mistake. I had one friend too many. I am now serving multi-life sentences because of my one friend. And he's the only friend I didn't kill ("Greatest," n.d.).

Gravano talks about his friends four times. He was his boss' friend and pitbull. He talks about how he did not want to kill his friend's son, which in the end he did not do,

and how he would hate for his friends or family to join the Mafia. The one friend he did kill, he hated doing it. "Oh absolutely felt something. Tore me up" ("Sammy," n.d.). Kuklinski talks about his friends in the context of killing all of them expect for one who he did not kill and whom he blames his prison sentence on. Gravano talks about being his boss' friend, protecting his friends, and killing one friend. Gravano mentions not wanting to kill his friend while Kuklinski never shows any sign of regret over killing his friends. He does appear to regret not killing his last friend.

Kuklinski talks about his family on 14 occasions, and Gravano mentions his family on 15 occasions. Kuklinski talks about being good to his family, wanting his family to forgive him, how he hurt his family, how he hated his mother and father, domestic violence, and his brother who is also in prison. He claims he was good to his family even though he hurt them emotionally. "I feel for my family" ("Greatest," n.d.). He recognizes that he hurt them, "but I've hurt [4 second pause] people that mean everything to me [7 second pause] but the only people that mean anything to me" ("Greatest," n.d.). Kuklinski as a show of devotion to his children proclaims,

There was nothing I wouldn't do for my for my children. Nothing. I'd kill everybody in this room for them. That's just to show you a point. Not that I would or want to I'm just saying I would. If it meant I had to for them I would do it without even thinking twice. It might upset me, it might hurt me but I would do it ("Greatest," n.d.).

He even admits he feels sorry that he hurt his family. In reference to his wife and domestic abuse, Kuklinski comments, "See I really liked loved the girl but when I got

mad I forgot all that and wound up hurting the person I loved, so where did I really love her? I still hurt her" ("Greatest," n.d.). Gravano mostly describes the Mafia as his family and his brotherhood though he does not want his actual family to join the Mafia. He describes his induction to his family:

One by one they called us down the basement. A small room. Basement. Real seemed to be real crowded. Dim lights. Real smoky. And when I walked down there was ah Paul Castellano, [10:40 interviewer interrupts] And ah he says if we ask you to kill for us would you? I said yes. And he asked me what finger would you pull the trigger? And I pointed to my index finger. [Interview not to Gravano] They tell you that day if your son is dying in bed of cancer and he's only got an hour left to live, if we call for you, you come immediately and leave his side. [Interview not to Gravano] They just said if you betray this brotherhood may your soul burn like this saint [Interviewer] With my heart and soul. There's honor. There's respect. There's integrity. There's loyalty. It's a brotherhood. It's a secret society ("Sammy," n.d.).

Gravano wants his actual family to get away from the Mafia:

Just like it would break my heart if my son or if my nephew or somebody when into the mob because I know their destiny. I know what they're gonna do. I know what kind of life they're going to live. They're gonna murder their best friends. They are gonna lie and cheat their whole life ("Sammy," n.d.).

On a few occasions, Gravano refers to his actual family although it is usually in the context of the Mafia. Kuklinski talks about his family in terms of killing for his family, protecting his children, and how he hated his parents. Gravano talks about his family as the Mafia and rarely mentions his actual family outside of the context of the Mafia.

Kuklinski totaled 262 instances of speech disfluencies while Gravano used a total of 111 (see Tables 6 through 8). Kuklinski used the speech filler 'ah' 71 times mostly in reference to killing someone (Table 6). For example Kuklinski said, "And ah he was rushed to the hospital after that and ah he died" ("Greatest," n.d.). Another example is, "But I ah put the rope around his neck, twisted it, and threw him over my shoulder and held him there" ("Greatest," n.d.). When he explained how he used to let rats eat people, Kuklinski said, "I used to have ah thing where I would take somebody into ah a cavern or a cave whatever you wanna call it" ("Greatest," n.d.). Gravano used 'ah' 38 times in a variety of contexts including talking about money, his boss, murder, court, and plastic surgery. In the context of talking about deciding to help the FBI, Gravano said, "and I made arrangements to call ah and get in touch with the FBI" ("Sammy," n.d.). Gravano talked about the plastic surgery he had saying, "I really did at one point. I asked the plastic surgeon if it was possible to look like ah Robert Radford but when he told me no then I just stayed with what I had" ("Sammy," n.d.). Both Gravano and Kuklinski use the speech filler 'like' once (Table 6). Kuklinski used the word in the context of explaining a contract kill and Gravano used it when talking about his boss. Gravano also used the

speech filler 'uh' more than Kuklinski (Table 6). Kuklinski said 'uh' eight times, and Gravano used the speech filler 19 times.

Kuklinski used three speech fillers that Gravano did not: 'oh,' 'um,' and 'so' (Table 6). He used 'oh' once, 'um' once, and 'so' six times. With the exception of one instance, all of the times that Kuklinski used the word 'so' occurred at the beginning of a sentence. One example of Kuklinski using the word 'so' is, "So anyway I'm trying to get close to this guy" ("Greatest," n.d.).

Table 6: Speech Disfluencies Part A

Table 6: Speech Disfluencies Part A									
Speech Disfluencies	ah	aw	eh	huh	like	oh	SO	uh	um
Psychopaths									
Kuklinski	71	0	0	0	1	1	6	8	1
Bundy	47	0	0	1	0	3	2	26	6
Downs	2	1	0	0	0	0	1	2	4
MacDonald	0	0	0	0	0	1	1	0	0
Gacy	33	0	0	0	1	1	1	7	0
Total:	153	1	0	1	1	6	11	43	11
Non-Psychopaths									
Gravano	38	0	0	0	1	0	0	19	0
Keyes	1	0	0	6	8	5	22	20	13
Duley	1	0	0	0	0	0	0	6	10
Shipman	0	0	0	0	0	0	0	0	0
Nilsen	4	1	3	0	0	0	0	4	0
Total:	44	1	3	6	8	5	22	49	23

Most of Kuklinski's speech disfluencies were pauses (Table 7). Kuklinski paused 107 times in his interview. The average amount of time he paused was 4.43 seconds.

Conversely, Gravano paused 4 times with an average pause of 3 seconds. Gravano used the speech filler 'well' half the number of times Kuklinski used it. Kuklinski said 'well' ten times and Gravano said it five times. For the most part, both used the word at the beginning of a sentence or thought.

Kuklinski used the word 'whatever' once at the end of a sentence and Gravano used it twice (Table 7). He used it once at the beginning of a sentence and once in the middle of a sentence. Kuklinski used the phrase 'you know' six times in the middle and end of thought while Gravano used it four times mostly in the middle of a sentence (Table 7).

Table 7: Speech Disfluencies Part B

Speech Disfluencies	well	whatever	you know	pause	
Psychopaths					
Kuklinski	10	1	6	107	
Bundy	21	1	11	24	
Downs	3	0	0	1	
MacDonald	11	0	6	0	
Gacy	6	0	6	0	
Total:	51	2	29	132	
Non-Psychopaths					
Gravano	5	2	4	4	
Keyes	32	2	19	64	
Duley	1	0	11	11	
Shipman	5	0	0	0	
Nilsen	2	0	2	0	
Total:	45	4	36	79	

They each repeated words about the same number of times (Table 8). Kuklinski had eight instances in which he repeated a word at least twice, and Gravano had nine instances in which he repeated a word at least twice.

Table 8: Speech Disfluencies Part C

Table 8: Speech Disfluencies Part C								
Speech Disfluencies	repetition word	repetition phrase	stutter	false start	Total			
Psychopaths								
Kuklinski	8	4	5	33	262			
Bundy	19	13	7	69	250			
Downs	4	1	1	37	57			
MacDonald	3	3	0	22	47			
Gacy	28	7	6	24	121			
Total:	62	28	19	185	737			
Non-Psychopaths								
Gravano	9	3	8	18	111			
Keyes	31	13	8	66	310			
Duley	7	0	3	11	61			
Shipman	0	0	0	7	12			
Nilsen	6	1	2	10	35			
Total:	53	17	21	112	529			

Both men repeated a form of the word 'I' the most often. Kuklinski repeated a version of the word "I' seven times and Gravano repeated it four times. Aside from the word 'I,' words that were most often repeated were small words, about three letters long. Kuklinski repeated a phrase of words four times. Gravano repeated a phrase three times. Kuklinski's phrases were mostly two word phrases but he did repeat three two-word

phrases. For example, when talking about killing a person he said, "Basically I didn't have any more pressure. No more tension. It was it was almost like a cure all unbelievable" ("Greatest," n.d.). Gravano repeated two two-word phrases and one three-word phrase. One of his two-word phrases was, "Well the tape the tapes just like you're saying right now sound like it's in other words poor John Gotti he lost control of 'Sammy the Bull'" ("Sammy," n.d.). His only three-word phrase was "I think history will show that he took down he took down with his mouth half of the mob and this flamboyant style" ("Sammy," n.d.).

Kuklinski stuttered less often than Gravano (Table 8). Gravano stuttered eight times while Kuklinski stuttered five times. Both stuttered mostly on the first syllable of a word though Kuklinski did stutter on the middle syllable of one word. Kuklinski's speech displayed 33 instances of false starts, and Gravano's speech displayed 18 instances of a false start. For example, Kuklinski said, "I'm going to give you a lil' I'm going to light your fire" ("Greatest," n.d.). An example of Gravano falsely starting a thought is, "Check his tires. Check his which is all union rules. Check if he's in good standing with the union if he is up to date with his dues" ("Sammy," n.d.).

Kuklinski used a total of six different figures of speech, and Gravano also used six (Tables 2 and 3). They both use similes. Kuklinski uses three similes using the word 'like' to explain why he murders and what shooting someone feels like. In one of the similes Kuklinski uses he describes killing a man, "Basically I didn't have any more pressure no more tension. It was it was almost like a cure all unbelievable" ("Greatest," n.d.). In this simile Kuklinski is comparing killing someone and feeling the person die to

a cure all for pressure and tension. Gravano uses two similes using the word 'like' to explain how he acquired his nickname, "Sammy the Bull" and to explain what killing someone feels like. His nickname came from someone who saw him fight to get his bike back from some children who tried to steal it. According to Gravano the man who gave him his nickname said, "Look at him. He's like a little bull. He's Sammy the Bull" ("Sammy," n.d.). Gravano then explains how he felt when he shot a man in the back of the head. "Felt like my adrenaline in my body went completely out of control. I guess it's like an animal going after its prey" ("Sammy," n.d.).

Kuklinski also uses cacophony to relay his story of killing three men in Georgia: "They decided I guess it was interesting to play with a guy from New Jersey and they started click clackin' with their vans and push me here push me there" ("Greatest," n.d.). His use of cacophony was the only use of that figure of speech in the sample. Kuklinski is the only person in the sample to use a metaphor. He is trying to explain himself and what he has done: The life he wanted and the life he lived were two different things. "It was a Jekyll and Hyde existence. The way it was and the way I wanted it to be were absolutely two different [3 second pause] two different lives. I wanted one life. I had to have another life" ("Greatest," n.d.). Kuklinski does not explain why he had to have the life he lived.

Gravano uses two analogies; the only analogies in the sample. In both analogies he compares himself to a solider to explain his position in the Mafia. "You can relate me to a solider in Vietnam who killed hundreds of people maybe. I was a solider of Cosa Nostra. I am a hitman" ("Sammy," n.d.). Gravano is the only person in the sample to use a phrase that is close to a hyperbole. Gravano uses the hyperbole to divert attention from

the number of persons he killed by contrasting it to the vast number of people his boss killed. "Look at John Gotti. If I have 19, he has forget about what he's got. When he ordered a hit, he wanted it done yesterday" ("Sammy," n.d.). Gravano used on instance of sarcasm. In response to the interviewer inquiring about how Gravano and the others rationalized extorting people, Gravano laughs and proclaims,

What did we say to ourselves? While we're at the table cuttin' up the money? We didn't say too much [chuckles] we just cut up the money it was ah it was for greed. It was There's nothing There is no honor in in a lot of things that we do" ("Sammy," n.d.).

Kuklinski is the only person to use cacophony and a metaphor, and Gravano is the only person to use an analogy and a hyperbole. Kuklinski uses figures of speech to explain murder and his life as a hitman. Gravano uses figures of speech to explain his occupation and to make light of the number of people he killed. Thus both Kuklinski and Gravano use figures of speech to explain their professions and to talk about their murders.

Kuklinski referenced events with a higher frequency in the past tense than Gravano (Table 1). Kuklinski used more cause and effect words (Table 4). Kuklinski and Gravano referenced the same number of events using the present tense (Table 1). Gravano spoke of more primal and social needs (Table 9 and 4). Kuklinski used more speech disfluencies (Tables 6 through 8), but Gravano used more figures of speech (Tables 2 and 3).

Kuklinski and Gravano both realize and convey that there is no honor in what they do. In fact, Kuklinski mentions that given the choice he would want a different life. Gravano proclaims he does not want a Mafia life for his friends and family. Kuklinski spends more time talking about murder while Gravano talks about the Mafia and occasionally speaks about the murders. Kuklinski used the highest number of past and present tense verbs out of the psychopath sample to reference different events (Table 1). Gravano used the second highest number of present tense verbs to talk about different events from the matched pair sample and the second highest number of past tense verbs (Table 1). Out of the 15 times Gravano mentions his family he is mostly speaking about the Mafia not his biological family. Gravano is careful to place many powerful, aggressive labels on himself: gangster, hitman, solider, and pitbull. Kuklinski declines to label himself an assassin and instead prefers the term murderer, one of the few labels Gravano did not give himself. Out of the psychopath sample, Kuklinski has the highest number of cause and effect words (Table 4), social needs (Table 5), figures of speech (Tables 2 and 3), and speech disfluencies (Tables 6 through 8). Out of the sample of matched pairs, Gravano has the highest number of cause and effect words (Table 4), references to social needs (Table 5), and primal needs (Table 9). Gravano is tied with Israel Keyes for the highest number of figures of speech with each of them having used six figures of speech (Tables 2 and 3). Gravano is tied with Shipman for the third lowest number of speech disfluencies (Tables 6 through 8). Kuklinski and Gravano also have two of the longest interviews. Kuklinski's interview is the longest in the psychopath sample (Appendix B). Gravano's interview is four minutes short from being tied with the longest interview in the matched pair sample (Appendix B). The length of their interviews may account for the reason some of their results are the highest in their groups. Presumably the longer one speaks, the more opportunities the person has to use any of the six variables in the study; however, that is not always the case. For example, Bundy's interview was about an hour shorter than Kuklinski's and Bundy used only 12 fewer speech disfluencies than Kuklinski (Tables 6 through 8).

Jeffrey MacDonald and Harold Shipman

MacDonald spoke about more primal needs (Table 9) and more social needs (Table 4) than Shipman. MacDonald also used more cause and effect words (Table 5). Neither used any figures of speech (Tables 6 through 8). MacDonald talked about more events using the past tense than Shipman while Shipman talked about more events using the present tense than MacDonald (Table 1).

MacDonald refers to different events in the past tense 17 times in his interview (Table 1). He talks about the night of the attack, being in the hospital, his first vivid memory, the injuries he sustained, witnesses to the attack, his wife, and his Article 32 hearing. When he begins to describe what happened that day, MacDonald starts by saying it was a normal day:

Well, February 16 was a Monday in 1970, and it was a day like any other day to us. It was a little dreary. It was a little cold. I worked that day.

Colette stayed at home with the kids. I came home at 5:00 o'clock. I took the children down to visit our pony that I had bought them for Christmas, and we fed the pony. I came back, had dinner. My wife went to extension

classes at the University of North Carolina on post. I took care of the kids that evening ("Larry king," 2003).

His description of the events of the day is relayed using the past tense. However, his quote is interesting because of the gaps in his story: MacDonald explains that he and his children went to see their pony. Then he says that he returned to the house and had dinner but makes no mention of the children coming back and having dinner. He continues relaying the events of the evening before the attack by saying, "My wife came home about 9:00 o'clock, and the kids were both in bed by this time..." ("Larry king," 2003). Again, his description is past tense, but now he mentions his children. He uses the past tense to talk about the beginning of the actual attack,

The next thing I knew, I was awakened on the couch, and I was awakened by a combination of hearing my wife screaming for help and asking for me and my older daughter...the 5-year-old, yelling, screaming for help -- Daddy, Daddy, Daddy ("Larry king," 2003).

He talks about his struggle with the intruders in the past tense:

And the black male to the left raised something, and he swung a club at me. And I threw my hand up, and he hit me in the head with the club, which I took to be a baseball bat. He drove me back to the couch that I was sleeping on ("Larry king," 2003).

He describes the injuries he sustained in the past tense, "There were several hits to the head. There was a hit on the right side in the hairline, on the left side in the hairline and

several behind the left side of my head" ("Larry king," 2003). He claims that some people witnessed the attack,

There were witnesses [Interviewer] There were witnesses in the neighborhood who saw these people [Interviewer]...coming to the house, leaving the house. They saw...[Interviewer]. The people who were in that house were witnesses to the crime ("Larry king," 2003).

Shipman uses the past tense 19 times to talk about blood test results, a typewriter, a patient whom he thought was using narcotics, searching the house, and to deny killing the woman. The police officer is accusing Shipman of using his typewriter to manufacture and falsify a patient's will. Shipman contests these accusations by saying he loaned his typewriter to his patient, "This was a typewriter that was loaned out to Mrs. Grundy on two or three occasions" ("Shipman tapes 1," n.d.). The officer questions Shipman about why his patient's medical records do not have any mention of blood tests. Shipman explains, "Normally blood results came back two days later" ("Shipman tapes 1," n.d.). He describes remembering thinking his patient was not looking well using the present and the past tense. "I think the thing was she was frail and elderly" ("Shipman tapes 1," n.d.). This statement means he still thinks that at the time he saw her, she was not doing well. He suspected that his patient was using narcotics:

And I have commented. I have said that I had my suspicions that she was abusing a narcotic of some sort, or at least taking a narcotic of some sort over a period of a year or so. [He refers to an earlier GP who wrote about her medication.] I am not suggesting she took drugs every day. Far from it.

But the scenario was there. She did have drugs available and she may well have accidentally given herself an overdose ("Shipman tapes 1," n.d.).

Shipman uses a mix of past and present tense to describe the possibility that his patient was using drugs. In the past he suspected she was using drugs, but at that time of the interview he is not saying that she did so daily. He uses the past tense to say she had the opportunity to use drugs and she might have overdosed, possibly by accident.

MacDonald speaks in the present tense in his interview 9 times to talk about different events (Table 1). He talks about the attack, the subsequent investigation, jurisdiction over the case, witnesses, and the government's files on the case. Shipman speaks in the present tense 22 times to talk about blood samples, the typewriter, manufacturing the will, drugs, the Heath of the Nation project, and whether the house was searched. MacDonald says, "There is no motive, Larry" ("Larry king," 2003) to explain in the present tense that the attackers did not have a motive. He uses a mix of the present and past tense to claim the charges against him are wrong and that after the hearing in the Army, he was free for a period of time,

I underwent a lengthy Article 32 hearing in the Army, which is the equivalent of a grand jury. It was the longest one ever held up until that time, until the My Lai incident. And the charges against me were found to be not true. It is not that there was not enough evidence to push this to court martial. We have the findings. We have the reports [Interviewer] Totally exonerate me. The charges are not true. [Interviewer] I'm free ("Larry king," 2003).

When Shipman spoke about the blood sample to explain why it was not recorded in the patient's medical records he said, "I've got no explanation...It could have been [an oversight]...I don't know why there is no entry" ("Shipman tapes 1," n.d.). The officer asked, "Can I put it directly to you doctor that you forged, you produced the letters of this will from your typewriter in the hope of benefitting from Mrs. Grundy's estate?" To which Shipman replied in the present tense, "That is not the case" ("Shipman tapes 1," n.d.). The officer again asserts that Shipman murdered the woman. Shipman, using the present and past tense, answers, "And I am saying I didn't do it" ("Shipman tapes 1," n.d.), meaning he is claiming in the present tense that he did not do the past event. The officer asks where the office Shipman worked for keeps drugs, and Shipman replies in the present tense that he does not have drugs, "I do not have any DDAs on the premises, in my car. I don't have a dangerous drugs book" ("Shipman tapes 1," n.d.).

MacDonald used a total of 24 cause and effect words. Shipman used 10 (Table 5). The cause and effect word MacDonald used the most was 'because,' which he used 15 times. The cause and effect word Shipman used the most was 'so,' which he used five times. MacDonald used 'because' to explain why he does not like the smell of waxed floors, to tell what his first vivid memory was after the attack, to talk about his injuries, the witnesses to the crime, his hearing, and his wife's pregnancy. When he was being attacked, MacDonald explained,

And I finally grabbed the black male's arm as he swung it, and he kept jerking his arm away to pull the weapon away, and my hand kept sliding

down on the weapon, which is how I know it was a baseball bat, because it was smooth ("Larry king," 2003).

In regards to the reason why he is on the show, MacDonald says, "Because you can't get back in court anymore in this country" ("Larry king," 2003). He claims the assailants murdered his wife and children,

because of the amount of drugs they were on. Both of them have said and other people in their group have said...[Interviewer] They were so high on five different drugs, they were on barbiturates, they were on LSD, they were on heroine, they were on opium and they were on -- one more, which escapes me at the moment ("Larry king," 2003).

According to MacDonald he and his family were targeted for the attack:

Both Helena Stoeckley and now just recently witnesses that have come forward on Greg Mitchell, her boyfriend, have said that they came to that house, not for killing, they came to threaten me because I had somehow developed a reputation as being a hard-liner on drugs, on heroine addicts coming back from Vietnam ("Larry king," 2003).

Shipman uses because four times to explain why the clock in the practice was not right, that he thought the patient was using drugs, and to talk about his records. The officer questioning Shipman is accusing Shipman of falsifying a patient's records on the computer to cover the fact that Shipman killed her. Shipman is disputing the time that he entered the records into the computer, saying that the clock on the computer is wrong, "You'll find the clock is out by an hour because we don't change it for summertime"

("Shipman tapes II," n.d.). A few comments later Shipman uses 'because' again to talk about the clock, "The timing seems a little awry, that's what I'm saying because the clock is not changed or we don't change the clock for summertime" ("Shipman tapes II," n.d.).

MacDonald uses the cause and effect word 'so' nine times to talk about the attack, the witness and her confession, his one-night stands, the government's files and the struggle to prove his innocence. MacDonald says that the witness did not recant her confession; rather the judge doubts the accuracy of her confession because of discrepancies between the confession and the crime. "She never recanted the confession. And the judge in North Carolina does not want to hear about her confessions because there are some discrepancies. Some of the facts in her confession don't match...[Interviewer] The scene [Interviewer] So they doubt her" ("Larry king," 2003). Shipman uses the word 'so' to talk about the Health of the Nation Project, his first visit to a patient's home, a patient's health, and the clock. In describing his debate with himself over whether or not the patient was taking drugs Shipman comments,

Really difficult if she denies everything. She is not really at risk. She is not an intravenous user as far as I was aware. I am not sure. Still, clinically, nothing of note to confirm my suspicions. "Wait and see." So over that period of time, I wondered very seriously whether this lady was taking drugs other than which I had prescribed...I believed she was taking something other than what I had prescribed for the osteoporosis. I would only be guessing where she got it from? ("Shipman tapes 1," n.d.).

In a dispute with the officer over how many times Shipman visited the woman's house Shipman says, "Well you're taking it that it's a repeat visit, I'm correcting you in saying I can't remember visiting at 3 o'clock, so for me this is the first visit" ("Shipman tapes II," n.d.).

Shipman used 'therefore' to explain a cause and effect relationship. The officer is implying that Shipman falsified the patient's records and said she refused treatment to cover his murdering the woman in order to obtain a death certificate. Shipman replies, "If it's written on the records then she had the history and therefore..." ("Shipman tapes II," Interview). Shipman does not complete his thought, but a reasonable person might deduce that what Shipman meant was "If it's written on the records then she had the history and therefore that is what happened."

MacDonald talks about primal needs 19 times while Shipman mentions none (Table 9).

Table 9: Primal Needs

Primal Needs	Employment	Food	Health	Money	Total
Psychopaths					
Kuklinski	9	0	2	5	16
Bundy	0	0	1	0	1
Downs	1	0	0	0	1
MacDonald	10	2	6	1	19
Gacy	2	1	1	0	4
Total:	22	3	10	6	41
Non-Psychopaths					

Gravano	24	0	1	13	38
Keyes	1	4	0	0	5
Duley	1	0	9	0	10
Shipman	0	0	0	0	0
Nilsen	0	0	1	0	1
Total:	26	4	11	13	54

MacDonald talks about food twice: once on the night of the attack and once in prison. He speaks of having dinner the night of the attack. He talks about not being able to eat in prison once the book 'Fatal Vision' was released.

MacDonald refers to his health six times when he speaks of the wounds he sustained in the attack, his hospital stay, and a CID agent who thought the crime scene was a murder and an attempted suicide. When he was in the hospital,

They put me into intensive care. They put in two chest tubes to reinflate my lung. I had about 15 to 17 puncture wounds. Some were ice-pick wounds, some were stab wounds. There was about a three-inch laceration into the stomach muscles, where the muscle was visible through the... ("Larry king," 2003).

While he is in prison he, "work[s] hard on staying physically fit, because I think it helps me stay mentally fit. And I communicate" ("Larry king," 2003).

MacDonald talks about money once in his interview only to say that he and his wife made enough to make ends meet. He talks about his employment 10 times. "We [his wife and he] worked as emergency physicians in nearby hospitals" ("Larry king," 2003). On base he says,

I was a group surgeon. It was actually a good time for us. After coming through the trauma of medical school and an extremely grueling internship, a surgical internship in New York City at Columbia Presbyterian, so we found the Army life actually to be quite pleasant ("Larry king," 2003).

After the attack, he began working again before he was rearrested. He explains that he is not allowed to practice medicine in prison:

It's not allowed in the Federal Bureau of Prisons. Inmate cannot practice either dentistry or medicine. I study my medical books, so I'm still up to date. I know everything... I could practice tomorrow. I mean, I'm sure they would have to give me a test and I'd be happy to take it, but I could practice tomorrow. I work on the case. I study my medicine ("Larry king," 2003).

MacDonald refers to social needs 20 times in his interview (Table 4). Shipman does not mention any social needs. However, MacDonald is convicted of murdering his family while Shipman is convicted of murdering his patients, which likely accounts for some, but not all, of the differences in references. MacDonald talks about his friends five times, his family 12 times, and having a sense of belongingness three times. When MacDonald and his family lived on base, he tells the interviewer that, "...we had a nice circle of friends" ("Larry king," 2003). When he moved after his Article 32 hearing, he comments about his family and friends, "I had a circle of friends and family..." ("Larry

king," 2003). He does not call his friends in prison a 'circle of friends' rather he says he has,

Friends in a guarded fashion. There's two people that I spend considerable time with in here and we walk the track together or run the track together. Friends in prison come and go. You know? It's a different thing than friends out on the street. I have two good friends in here ("Larry king," 2003).

MacDonald spoke some about of his family prior to the attack, his father-in-law, and commented about his new wife. He confirms that his first wife was pregnant when she was murdered, "My wife was pregnant, correct. That was our...[Interviewer] About four-and-a-half, maybe five months" ("Larry king," 2003). After the murder of his family members, when the first response officer arrived, MacDonald says he said,

...I kept saying, Check the kids, check the kids. I heard Kimmy screaming. And he said, We're checking the kids. We're checking the kids. What happened? And I gave him a description of the people I saw, as best I could ("Larry king," 2003).

In regards to having a sense of belonging, MacDonald talks about the army and his volunteer work. "I enjoyed the volunteer things that I did. I volunteered for the paratroopers and then the Green Berets" ("Larry king," 2003). After the murders when MacDonald had moved away MacDonald says that, "I was planning a life" when the FBI arrested him ("Larry king," 2003).

MacDonald used a total of 49 speech disfluencies. Shipman used a total of 12 (Table 8). It is important to note that the researcher did not transcribe these two interviews as they were found already transcribed. Audio recordings were not available; thus, the number of times the participants paused and the length of time they paused could not be calculated. Speech disfluencies that are sounds could not be calculated.

MacDonald used the speech filler 'well' 11 times all at the beginning of a sentence (Table 7). Shipman said 'well' five times also all at the beginning of a sentence. MacDonald falsely started a sentence 22 times while Shipman falsely started a sentence seven times (Table 8). For example, MacDonald said, "I was- I'm an emergency physician" ("Larry king," 2003). Shipman falsely started a sentence when he said, "Pain only if she rushes upstairs in- and it's in the throat and now in the arms" ("Shipman tapes II," n.d.).

MacDonald uses five speech disfluencies that Shipman does not: 'oh,' 'so,' repetition of a word, repetition of a phrase, and 'you know.' Once MacDonald said 'oh', and once he said 'so' (Table 6). He repeated a word three times (Table 8). Twice the word he repeated was 'I' and once he repeated the word 'the.' He repeated a phrase of words three times (Table 8). The phrases mostly contained short words. One phrase contained a four-letter word. Six times MacDonald said 'you know' (Table 7).

Shipman spoke of more events in the past and present tense than MacDonald (Table 1). MacDonald used more cause and effect words (Table 5) and speech fillers (Tables 6 through 8). MacDonald described more primal needs (Table 9) and more social needs (Table 4). Neither of them used any figures of speech (Tables 2 and 3).

Shipman referenced more events in the past and present tense than MacDonald (Table 1). MacDonald used more cause and effect words (Table 5), references to primal (Table 9) and social needs (Table 4), and speech disfluencies (Tables 6 through 9). MacDonald used more than twice as many cause and effect words than Shipman (Table 5). MacDonald used 'because' the most and Shipman used 'so' more often. MacDonald referenced 20 social needs in his interview while Shipman mentioned none (Table 4). MacDonald is convicted of killing his family while Shipman was convicted of killing his patients, so the difference in their social needs might be a reflection of their relationship to their victims. MacDonald mentioned primal needs 19 times in his interview and Shipman did not mention any (Table 9). Since Shipman was convicted of killing his patients it would seem logical that he would mention his employment (where he worked, his day to day routine, how the practice functioned etcetera), but he does not. It would also seem logical that he would mention money since at one point in the interview the police officer accused him of manufacturing and falsely a willing, but the only comment he makes is that he did not do it. It is possible that he mentioned primal needs in a different interview that was not released. Neither used figures of speech (Tables 2 and 3), but since both interviews were found already transcribed if one of them used sarcasm in their interview, the researcher did not have the opportunity to observe tone of voice or facial expressions.

MacDonald used the past tense to talk about the second highest number of events in the psychopath sample (Table 1). MacDonald used the present tense to talk about the third highest number of events in the psychopath sample. In the non-psychopathic

sample, Shipman tied with Duley for the most number of events talked about in the past tense. Shipman talked about the highest number of events in the present tense in the matched pair sample. MacDonald tied with Downs for the lowest number of figures of speech used in the psychopath sample with each not using any (Tables 2 and 3). Shipman did not use any figures of speech and has the lowest number of figures of speech used in the matched pair sample. MacDonald talked about the second highest number of social needs in the psychopath sample (Table 4). Shipman did not refer to any social needs and has the lowest number of references to social needs in the matched pair sample. MacDonald talked about the highest number of primal needs in the psychopath sample (Table 9). Shipman did not talk about any primal needs and thus used the least number of references to primal needs in the matched pair sample. MacDonald and Shipman each used the third highest number of cause and effect words in the psychopath and nonpsychopathic sample, respectively (Table 5). MacDonald's speech was the fourth most disfluent in the psychopath sample (Tables 6 through 8). Shipman's speech was the least disfluent speech from the non-psychopathic sample.

CHAPTER FIVE

This study attempted to assess the linguistic cues of psychopaths by examining the use of six variables: primal needs, social needs, past tense verbs, cause and effect words, speech disfluencies, and figures of speech. The researcher found that psychopaths did not reference more primal needs than their matched pairs. Psychopaths referred to a greater number of social needs and used past tense verbs to discuss more events than their matched pairs. Psychopaths used more cause and effect words. Psychopaths' speech was more disfluent than their matched pairs. The matched pairs used a greater number of figures of speech than the psychopaths.

Sample Summary and Discussion

Research suggests that psychopathic offenders will describe more events using the past tense than non-psychopathic offenders (Hancock et al., 2013). The findings from this study of matched pairs support this hypothesis. The inverse logical statement (psychopaths will describe fewer events using the present tense than the control) derived from the hypothesis above was not supported. Psychopaths described more events using the past tense than their matched pairs. Psychopaths also described more events using the present tense than their matched pairs.

Psychopaths also used the present tense in more contexts than their matched pairs.

This may mean that their matched pairs used the hypothetical and future tense in more

contexts than the psychopaths, but uses of the hypothetical and future tense were not coded in this research. The number of times a verb tense was used in different contexts varied with the length of the interview: people with longer interviews used more verb tenses in different contexts than those with shorter interviews. However, even though psychopaths' average interview time was shorter than the matched pairs' average interview time, psychopaths still used more present and past tense verbs in different contexts.

The psychopath who used the most past verbs in different contexts was Kuklinski, who had the longest interview time in the psychopath sample. The matched pair who used the most past tense verbs in different contexts was Duley and Shipman who were tied with 19 different contexts containing past tense verbs. Duley's interview time was the third longest interview time of the matched sample. Shipman's interview time length is unknown. The psychopath who used the most present tense verbs in different contexts was Kuklinski. Kuklinski spoke about 16 different events using the present tense. Shipman uses the most present tense verbs in different contexts out of the matched pair sample.

As Hancock et al. (2013) explain the use of the past tense may indicate psychological distancing from the event. It may also be an indication of the perceived decreasing relevance an event from the past has on his/her current life (Hancock et al., 2013). Kuklinski, Bundy, and Downs all used past tense verbs in a greater number of contexts than their matched pairs. Gacy and Nilsen talked about the same number of

events using past tense verbs. Downs talked about fewer events using the past tense than Duley.

In two of the matched pairs psychopaths used present tense verbs in more contexts (1. Bundy and Keyes 2. Gacy and Nilsen). Bundy's interview was almost an hour shorter than Keyes, yet he used past and present tense verbs in more contexts than Keyes. Reasoning why this discrepancy occurred would be pure speculation. Gacy's interview was about 20 minutes longer than Nilsen's, and Gacy used present tense verbs in a greater number of contexts than Nilsen, which appears logical since Gacy had a longer time to speak. Kuklinski and Gravano use the same number of present tense verbs in different contexts. Both Downs and MacDonald used present tense verbs in fewer contexts than their matched pairs. Downs and Duley's interview length were about the same, so this result would support Hancock et al.'s (2013) hypothesis. Again MacDonald and Shipman's interview lengths are unknown. Thus two matches support the idea that psychopaths will use fewer present tense verbs, one pair is tied, and two do not support the hypothesis.

Hancock et al.'s (2013) hypothesis and findings suggests that psychopaths will use a greater number of cause and effect words than the matched pairs. The findings from the current study support this hypothesis. Psychopaths used a total of 159 cause and effect words whereas the matched pairs used 82. The most used cause and effect word from each group was 'because.' Psychopaths used 'because' 72 times, and the matched pairs used it 35 times. The psychopath who used 'because' the most was Kuklinski who used it 27 times. Keyes used 'because' the most out of the matched pair sample. Keyes

said 'because' 15 times. Only one person, Kuklinski, used 'since.' Three people out of the entire sample used if/then as a cause/effect phrase: Downs, Gravano, and Shipman. More participants from the matched pair sample used if/then. Everyone except for Bundy, Gacy, and Nilsen used 'if' to demonstrate a cause and effect without using the word 'then.' Kuklinski and Shipman were the only two people to use 'therefore.' According to Hancock et al. (2013) psychopaths using more cause and effect words could suggest that they believe the action was necessary in order to accomplish the objective, which could also suggest that their crimes are more instrumental in nature and are conducted with a goal oriented purpose.

The hypothesis and findings from Hancock et al. (2013) predicted that psychopaths will refer to more primal needs than the matched pairs. Findings from this study did not support this hypothesis. The matched pairs made more references to primal needs than the psychopaths. The matched pairs mentioned 54 primal needs while the psychopaths mentioned 41. The psychopath who mentioned the most primal needs was MacDonald, who mentioned 19. The matched pair who mentioned the most primal needs was Gravano, who mentioned 38. Out of the psychopath sample Bundy and Downs mentioned the fewest number of primal needs with each of them referencing one. The matched pair who mentioned the fewest primal needs was Shipman who made no reference to primal needs. Both samples made more references to employment and the fewest references to food as compared to mentioning other primal needs.

The number of references to primal needs in the matched pair group was driven up by Gravano. Gravano talked about 38 primal needs. Twenty-four references were

about his employment (the Mafia). Gravano's employment references overlap with his family references because he refers to the Mafia as his family and his employer. If Gravano's references to his employment were removed from the matched pairs primal needs total, the psychopaths would have a higher number of references to primal needs than the matched pairs.

Kuklinski, Bundy, and Downs all used fewer references to primal needs than their matched pairs. MacDonald and Gacy used more references to primal needs than their matched pairs. Kuklinski's job was as a contract killer, which should mean that he has the most number of primal references because usually the reason he kills and his employment overlap. Keyes references five primal needs while Bundy talks about one. If the four times Keyes refused food from the interviewers were removed, Bundy and Keyes would have the same number of references to primal needs. Duley has a higher number of references to primal needs than Downs because of the number of times Duley mentions her suicidal intentions.

The conflicting results from this study compared to Hancock et al. (2013) could be a result of differences in coding. The present researcher coded references to primal needs as employment, food, health, and money using Maslow's Hierarchy of Needs (Maslow's Hierarchy, n.d.). The present researcher does not know all the specific categories Hancock et al. (2013) used for coding primal needs; although, based on the article one can conclude the primal needs were based on Maslow's Hierarchy of Needs, but how the needs were broken down and coded could be different.

Further Hancock et al. (2013) hypothesized and found support for the hypothesis that psychopaths will make fewer references to social needs. Results from this study did not support this hypothesis. The psychopaths made 74 social need references while the matched pairs made 42 references. The psychopath who made the most social need references was Kuklinski. Kuklinski made 25 references to social needs. The matched pair who made the most social need references was Gravano who made 26 references to social needs. The most referenced social needs category for the psychopaths was family and the least referenced was their lack of social needs. The most referenced social needs category for the matched pairs was family and the least referenced category was their lack of social needs.

Kuklinski and Downs both made fewer references to social needs than their matched pairs. Bundy, MacDonald, and Gacy each made more references to social needs than their matched pairs. Bundy talked about his family twice, and his match, Keyes, talked about his family once. MacDonald spoke of 20 references to social needs. The social need he mentioned the most was his family. MacDonald was convicted of killing his family, so it would make sense that he mentions them multiple times. Shipman, MacDonald's match, does not reference any social needs. Shipman was convicted of killing his patients, which may account for the differences in their references of social needs. Gacy talked about 16 social needs. Mostly Gacy talked about religion and the church. Nilsen, Gacy's match, only talked about one spiritual need.

Hancock et al. (2013) proposed that psychopaths referenced fewer social needs because psychopaths place a heavier focus on basic needs. Since psychopaths are largely

incapable of bonding, they speak about their murders with an emphasis on basic (primal) needs. The differing results from this study compared to Hancock et al. (2013) could again be a result of differences in coding. The present researcher coded references to social needs as family, friends, spiritual/religion, belongingness, and references to the lack of social needs using Maslow's Hierarchy of Needs (Maslow's Hierarchy, n.d.). The present researcher does not know all the specific categories Hancock et al. (2013) used for coding social needs.

Research suggests that psychopaths will use more speech disfluencies/speech fillers than the matched pairs (Hancock et al., 2013). The findings from this study support this hypothesis. The psychopath sample used 737 speech fillers. Kuklinski used the most speech fillers (250), and MacDonald used the least (47). Kuklinski had the longest psychopath interview. MacDonald's interview was found already transcribed: the interview did not include any pauses MacDonald may or may not have made. The transcript does not contain any speech fillers that are sounds (ah, aw, eh, huh, uh, um), so it is unknown whether MacDonald did not use them or if they were not transcribed. The lowest number of speech disfluencies used by a psychopath in an interview that the researcher transcribed was Downs at 57, which was the shortest psychopath interview. The matched pair sample used a total of 529 speech disfluencies. Keyes at 310 used the most, and Shipman at 12 used the least. Keyes had the longest matched sample interview, which was almost five minutes longer than the next longest interview. Shipman's interview was not transcribed by the researcher and may have experienced some of the same problems as MacDonald's. The matched pair's interview transcribed by the

interview that contained the fewest number of speech disfluencies was Nilsen at 35. Nilsen's interview was also the shortest matched sample interview. The length of the interview appears to have an affect on the number of speech disfluencies used.

The psychopaths most used speech disfluency was false starts. The psychopath sample falsely started a thought 185 times. The matched pair sample most used speech disfluency was also false starts, which they used 112 times. The least used speech disfluency for the psychopaths was 'eh,' which they did not use. The only person in the entire sample who used 'eh' was Nilsen, who is British, so it seems likely that using 'eh' is a cultural norm. The other least used speech fillers by the psychopaths were 'aw,' 'huh,' and 'like.' These speech fillers were used once by psychopaths. The least used speech filler for the matched pair group was 'aw,' which was used once.

Psychopaths paused a total of 132 times in their interviews while the matched sample paused 79 times. Psychopaths used the speech filler 'ah' 153 times compared to the matched sample using it 44 times. Conversely, the matched sample group was more likely to use 'uh' and 'um' than the psychopaths. They were also more likely to say 'you know.' Psychopaths repeated more words and phrases than their matches.

According to Hancock et al. (2013) describing a highly emotionally charged incident seems to create more cognitive pressure for the psychopaths that then results in more disfluent speech. As Hancock et al. 2013) notes, other studies have concluded that less fluent speech might be a common feature of a psychopath's dialogue, meaning that less fluent speech might not be related only to speaking about emotionally charged events but instead could be normal for psychopaths.

The present researcher hypothesized that that psychopaths would use fewer figures of speech than their matched samples. Results from this study support this hypothesis. Psychopaths used eight figures of speech. Out of the eight figures of speech, five were similes. The matched sample used 15 figures of speech and eight were similes. Psychopaths used a little less than half the number of figures of speech that the matched pairs used. All of the similes from both of the samples used the word 'like' to make the comparison except for one which made a comparison using the word 'was.' The matched pair used two analogies, one hyperbole, and four instances of sarcasm. The psychopaths used one instance of cacophony, and one metaphor.

From the psychopath sample, Kuklinski used the most figures of speech. Bundy used one simile and Gacy used one simile. No other psychopaths used figures of speech. Kuklinski used three similes, one instance of cacophony, and one metaphor to tell his 'greatest hits.' Kuklinski's interview was for a TV show and was about his 'greatest hits.' It is likely that since his interview was the longest of the psychopaths' interviews and since his video was about describing hit after hit and therefore he was telling story after story, and because he has more stories to tell due to the number of people he claims to have killed, he had more instances in which to incorporate figures of speech.

From the matched pair sample, Gravano and Keyes used the most figures of speech. Gravano and Keyes each used six figures of speech. Gravano used two similes, two analogies, one hyperbole, and one use of sarcasm. Keyes used three similes and three instances of sarcasm. Gravano and Keyes also had the longest interviews from the matched pair sample.

The researcher interprets the results to mean that psychopaths use fewer figures of speech because they struggle to understand the nuances of language (Hare, 1996), which would make it difficult to incorporate figures of speech. While psychopaths can understand concepts with a denotative meaning, they struggle to understand concepts with a connotative meaning (Hare et al., 1988). Figures of speech have both connotative and denotative meanings. The connotative meaning being what the speaker means and the denotative meaning being what the speaker says. The connotative meaning is true and the denotative meaning is false. Since psychopaths can only understand half of the meaning of a figure of speech (the denotative meaning, which is actually the part that is false), it would appear logical that they do not use as many figures of speech. It should be difficult to use that which one does not understand, and the data appears to support this logic.

The psychopath sample did not use more sarcasm than the matched pairs. None of the psychopaths used sarcasm. The matched pairs had four instances of sarcasm, three of which were from Keyes. The researcher had proposed that psychopaths would use more sarcasm than the matched pairs because sarcasm is a lie and psychopaths seem to enjoy lying. However, perhaps sarcasm is more similar to the other figures of speech used in the study in that even though sarcasm is a lie, it has both denotative and connotative meanings, which psychopaths struggle to understand.

Implications for Practice

Secondary analysis of data provided the researcher with a general overview of psychopaths' language. Psychopaths used past tense verbs in more contexts than their

matched pairs. Psychopaths also used more cause and effect words and speech disfluencies and referenced more social needs. The psychopaths' language included fewer uses of figures of speech and fewer references to primal needs. These results indicate that the study of psychopaths' language might be a viable option to use for profiling or interrogation proposes. Detectives are currently trained in deception detection, and officers attempt to be aware of body cues in an effort to help them during the questioning of subjects for interrogation or during everyday patrol interactions. Linguistic training could become a part of normal training for detectives and officers. Word choice reveals intricate details about the person speaking and perhaps with more research, word choice can reveal the psychopath.

There is no research on profiling via language cues and there are very few studies on the profiling of psychopaths prior to the current study. More research would have to be conducted before implementation, but the current research can be viewed as a starting point in developing further tools for law enforcement to use. Profiling using language cues, given the results from this study and from Hancock et al. (2013), warrants consideration of implementing this linguistic-based approach.

Interrogation

For example, if future research supports the results found in this study and in Hancock et al. (2013), police, likely first level or midlevel managers or detectives during interviewing, could be trained to listen for the linguistic cues that may indicate psychopathy. Using these indications of psychopathy, police could identify a psychopath

or they could decide to change interrogation tactics to suit the characteristics of a psychopath.

Using the Reid Technique of interrogation as an example, one can observe the possible opportunities to implement changes in the tactics. In the interview stage there are seven steps: "positive confrontation, theme development, talking through denials, focusing attention, responding to passivity of the interrogation, and alternative questioning" (Becker and Dutelle, 2013, p. 194-195). Knowing that the person being questioned is a psychopath would likely be useful in all of the seven stages, but it might be especially useful in the theme development stage.

In the theme development stage the interrogator gives, "...a monologue in which the investigator offers moral or psychological excuses for the suspect's criminal behavior" (Becker and Dutelle, 2013, p. 195). Offering moral excuses for a psychopath's behavior might not be the best way to appeal to the psychopath to elicit a confession.

Instead of offering "moral or psychological excuses" investigators may instead decide to offer excuses based on primal needs while veering away from excuses based on social needs.

In order to implement this linguistic technique, officers could be trained to listen for linguistic cues. During an interrogation, having an additional investigator (or perhaps supervisor or specialist if during patrol) to listen to both what the suspect is saying and to how the suspect is saying it could also help identify linguistic cues of psychopaths.

Investigators could focus on speech disfluencies and use of cause and effect words

because those were where the largest discrepancies between the psychopaths and matched sample's speech occurred.

Another interrogation technique utilized by police officers is referred to as "painting a portrait" because conceptually interviewing is in part an art form in addition to being a science. In this technique officers match suspects whom they are going to interrogate to the interrogators the police officers feel will be the most successful in accomplishing the goal (i.e. a confession). Officers may decide to use results from the current study to assist in matching the suspect to an interrogator.

If the officers think the offender might be a psychopath, officers could decide to match the offender to someone who could act the most like a psychopath with the goal of gaining a sense of rapport or understanding between the officer and the suspect. The officer would need to be able to portray a sense of control, be remorseless and manipulative (without the psychopath knowing he is being manipulated), and use the language cues provided in this study. The officer would need to use excuses based on primal needs for the criminal behavior, cause and effect words, speak in the past or present tense, and incorporate speech disfluencies.

The underlying idea behind "painting a portrait" draws from social psychology whereby people in general are more likely to become friends with or romantic partners with people who are more similar to themselves. Similarity includes agreeing on topics such as opinions and interests and having similar experiences, personalities, and communication skills (Aronson, Wilson, & Akert, 2010). Since social psychology shows that "birds of a feather flock together" more so than "opposites attract," in "painting a

portrait" it would seem that a suspect would be more likely to talk to a person who is similar to the suspect. Any of these topics could be incorporated into matching offenders to interrogators. Specifically in regards to the present research, communication skills could include the linguist cues as useful matching tools.

The current researcher leaves to police experts the task of training police officers on identifying linguistic cues and implementing the linguistic cues approach. Hancock et al. (2013), the current research results, and other studies described in the literature analysis section indicate there is merit to considering using the linguistic approach as an investigative or interrogation tool.

Street Officer and Officer Safety

Another aspect of implications for this research falls under officer safety or implications for the street officer. Specifically, linguistic cues could be useful in the context of determining "premise history" for the location of a 911 call, distilling the PCL-R into a few questions that could be asked over the phone, and distilling the PCL-R into a few questions that could be added to the survey given a jail/prison intake. Officers do not always have the opportunity to ask questions or to speak with the suspect before arriving on the scene and occasionally they do not have the opportunity to converse with the suspect on the scene. These possible implications for street officers and for officer safety may allow the officer to gain valuable knowledge without having to spend vast amounts of valuable time talking with the suspect. The implication regarding "premise history" would allow the officer to gain such knowledge without having to speak to the offender at all.

Police now have the ability to use their in-car laptops to review the "premise history" of an address. Thus police can see when officers last visited the address and for what reasons thereby allowing them a glimpse into the past. Residences with known problems have different flags on them. For example, a residence where a sex offender lives has a flag on the officer's computer or the residence of a parolee has a flag on the address (Cassidy, 2011). Since the FBI (1992) study concluded that half of the law enforcement officers who were feloniously killed in the line of duty where killed by persons with psychopathic traits and characteristics, it seems it is time to add a flag to residences where known psychopaths live in order to alert officers before they arrive on the scene.

A second option relating to officer safety is distilling the PCL-R into a few short questions that could be asked either by a 911 operator either during a 911 emergency call or at the intake stage of confinement in prison or jail. Given psychopaths rate of violence, it seems unlikely that the psychopath would be making a 911 emergency call as it seems more likely that the psychopath would be the cause of someone else making a 911 call. However, if the 911 operator decided that the caller might be a psychopath or if the operator decides the caller knows enough information about the suspect to answer the questions, the operator could ask several questions derived from the PCL-R to determine whether the person has psychopathic characteristics.

The more likely situation in which a shortened version of the PCL-R would be useful is when inmates are being asked questions during the intake process of incarceration. Since incoming offenders are already asked questions at this stage, it would

not be difficult to add a few more questions relating to psychopathy to the list. In much the same manner as how it is useful for prison staff and officials to know that they are housing sex offenders, murderers etcetera it would be useful for them to know if the person coming into the institution is a psychopath.

Converting the PCL-R into a shortened version to use in the above scenarios while still achieving the same level of reliability and validity as the current instrument would require another research study to both design and test the instrument and should be taken as a suggestion for future research. Most ideas concerning implications discussed in this paper would require the distilment of the PCL-R or other such well regarded diagnostic instruments. Until future research on distilling the PCL-R is conducted, it seems the results from the immediate study are better suited for interrogation purposes.

There are several important limitations in this study. The murderers in the interviews speak about their crimes in varying degrees of detail and some relay details of a crime they witnessed but maintain their innocence. The varying level of detail that is discussed in interviews and the knowledge that some of the psychopaths have confessed to the crimes they discuss while others have not could have an impact on the results. Some interviews are longer than others. Presumably the longer the interview, the longer the person has to talk about or use any of the six variables. The exact number of times a psychopath or matched sample uses one of the variables in his/her speech could be inaccurate. While each interview was reviewed three times and briefly reviewed a fourth time, there is room for human error. In order to reduce the chance of human error there would need to be more researchers on the project and more sophisticated computer

software, but even then the chance of making a mistake is not eliminated. While there may be errors in the exact numbers, the current researcher doubts the errors are such that they would alter the resulting themes of the research. The coding in this research and the operationalization of variables may differ from the methods used in Hancock et al. (2013)'s research, which may explain the different outcomes for the social needs and primal needs variables. Lastly, the psychopaths and their matched pairs were matched as closely as possible given the data the researcher had to work with, however, that does not mean that the matches were the best possible match for the psychopath (Appendix B). The researcher acknowledges that there are better matches, but the researcher was constrained by the data available on the Internet. Nevertheless, no two people are exactly alike, so finding the perfect match is likely impossible.

Suggestions for future research include collecting data for the purpose of observing it for the variables in this study instead of using a secondary analysis of data. Researchers could chose to conduct interviews or have participants write narratives. If the researchers chose to conduct interviews, they could decide to set a time limit on the interviews to avoid having major differences in length of the interviews or they could code how many variables the participant mentioned per a certain amount of time (2 minutes or 5 minutes etcetera). Coding variables used per certain amount of time would control for having interviews that vary in length. This method was not implemented in the current study due to time constraints. The researcher recommends conducting studies that examine linguistics using narratives other than ones describing murder. For example, participants could speak about their childhood, their favorite memory, their family, or

their favorite TV show etcetera. Research of this sort would allow researchers to examine whether the themes present in murder narratives are actually a common feature of psychopaths' language or if they are confined to murder narratives. Instead of interviewing participants, researchers could ask participants to write about any of the above and compare their written narratives. Likely written narratives would not contain as many speech disfluencies as interviews, but they may contain an increased number of other variables, such as figures of speech. Since the biggest gap between the psychopaths and their matched pairs in the current research was found in their use of speech fillers, the current researcher recommends pursuing further research on that topic. While which voice, passive or active, the speaker used was not a variable in this study, the use of the passive voice shows a greater psychological distancing of the person from the action even more so than just using the past tense thus the researcher recommends observing the use of passive and active voice to ascertain variance in subconsciously or consciously transferring guilt or responsibility for one's actions. A final suggestion is geared toward broadening the understanding of the language of non-criminal psychopaths. Since not all psychopaths are violent, perhaps language cues could be used to differentiate between criminal and non-criminal psychopaths. Another possibility for future research is comparing the language of an average non-criminal, a non-psychopathic criminal, a noncriminal psychopath, and a criminal psychopath.

APPENDIX A: LITERARY DEVICES

1. Metaphor*

Definition: Metaphors are one of the most extensively used literary devices. A metaphor refers to a meaning or identity ascribed to one subject by way of another. In a metaphor, one subject is implied to be another so as to draw a comparison between their similarities and shared traits. The first subject, which is the focus of the sentences is usually compared to the second subject, which is used to convey a degree of meaning that is used to characterize the first. The purpose of using a metaphor is to take an identity or concept that we understand clearly (second subject) and use it to better understand the lesser known element (the first subject).

Example: "Henry was a lion on the battlefield". This sentence suggests that Henry fought so valiantly and bravely that he embodied all the personality traits we attribute to the ferocious animal. This sentence implies immediately that Henry was courageous and fearless, much like the King of the Jungle.

2. Simile*

Definition: Similes are one of the most commonly used literary devices; referring to the practice of drawing parallels or comparisons between two unrelated and dissimilar things, people, beings, places and concepts. By using similes a greater

degree of meaning and understanding is attached to an otherwise simple sentence.

The reader is able to better understand the sentiment the author wishes to convey.

Similes are marked by the use of the words 'as' or 'such as' or 'like'.

Example: He is like a mouse in front of the teacher.

3. Personification*

Definition: Personification is one of the most commonly used and recognized literary devices. It refers to the practice of attaching human traits and characteristics with inanimate objects, phenomena and animals.

Example: "The raging winds"

4. Analogy*

Definition: An analogy is a literary device that helps to establish a relationship based on similarities between two concepts or ideas. By using an analogy we can convey a new idea by using the blueprint of an old one as a basis for understanding. With a mental linkage between the two, one can create understanding regarding the new concept in a simple and succinct manner. Example: In the same way as one cannot have the rainbow without the rain, one cannot achieve success and riches without hard work.

5. Cacophony*

Definition: A cacophony in literature refers to the use of words and phrases that imply strong, harsh sounds within the phrase. These words have jarring and dissonant sounds that create a disturbing, objectionable atmosphere.

Example: His fingers rapped and pounded the door, and his foot thumped against the yellowing wood.

6. Chiasmus*

Definition: Chiasmus is a figure of speech containing two phrases that are parallel but inverted to each other.

Example: You can take the patriot out of the country but you cannot take the country out of the patriot.

7. Hyperbole*

Definition: A hyperbole is a literary device wherein the author uses specific words and phrases that exaggerate and overemphasize the basic crux of the statement in order to produce a grander, more noticeable effect. The purpose of hyperbole is to create a larger-than-life effect and overly stress a specific point. Such sentences usually convey an action or sentiment that is generally not practically/ realistically possible or plausible but helps emphasize an emotion.

Example: "I am so tired I cannot walk another inch"

8. Oxymoron*

Definition: Oxymoron is a significant literary device as it allows the author to use contradictory, contrasting concepts placed together in a manner that actually ends up making sense in a strange, and slightly complex manner. An oxymoron is an interesting literary device because it helps to perceive a deeper level of truth and explore different layers of semantics while writing.

Example: Sometimes we cherish things of little value.

9. Puns*

Definition: Puns are a very popular literary device wherein a word is used in a manner to suggest two or more possible meanings. This is generally done to the effect of creating humor or irony or wryness. Puns can also refer to words that suggest meanings of similar-sounding words. The trick is to make the reader have an "ah!" moment and discover 2 or more meanings.

Example: Santa's helpers are known as subordinate Clauses.

*from literarydevices.com

10. Sarcasm**

Definition: Sarcasm is derived from French word sarcasmor and also from a Greek word sarkazein that means "tear flesh" or "grind the teeth". Somehow, in simple words it means to speak bitterly. Generally, the literal meaning is different than what the speaker intends to say through sarcasm. Sarcasm is a literary and rhetorical device that is meant to mock with often satirical or ironic remarks with a purpose to amuse and hurt someone or some section of society simultaneously. Example: "I didn't attend the funeral, but I sent a nice letter saying I approved of it." (Mark Twain)

** from literarydevices.net

APPENDIX B: SAMPLE INFORMATION

Psychopath Sample

- 1. Dr. Jeffrey MacDonald*
- 2. Ted Bundy**
- 3. John Wayne Gacy**
- 4. Richard Kuklinski**
- 5. Diane Downs**

Matched Pairs

- 1. Dr. Harold Shipman *
- 2. Israel Keyes***
- 3. Dennis Nilsen**
- 4. Sammie Gravano**
- 5. Shaquan Duley**
- * interview found already transcribed
- ** researcher transcribed the interview
- *** interview was found already transcribed but was edited by the researcher

Video Length

- 1. Dr. Jeffrey MacDonald*
- 2. Dr. Harold Shipman*
- 3. Ted Bundy 19:04
- 4. Israel Keyes 1:20:05
- 5. John Wayne Gacy 26:03
- 6. Dennis Nilsen 5:47
- 7. Richard Kuklinski 1:13:37
- 8. Sammie Gravano 1:24:32
- 9. Diane Downs 13:31
- 10. Shaquan Duley 14:75

<u>"Ideal Matches"</u> (ideally the psychopath would be matched to one of the murderers listed below his/her name but neither interviews nor confessions for the "perfect matches" could not be located)

- 1) John Wayne Gacy
 - a) Author Gary Bishop
 - b) William Bonin
 - c) Dennis Nilsen
- 2) Richard Kuklinski
 - a) Jose Manuel Martinez

- 3) Diane Downs
 - a) Marybeth Tinningb) Lianne Smith

 - c) Susan Smith
- 4) Dr. Jeffrey MacDonalda) Scott Peterson

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