UNIVERSITY OF CINCINNATI

Date: **October 25, 2006**

I, **Tracy Harpster**,

hereby submit this work as part of the requirements for the degree of:

Master of Science

in:

Criminal Justice

It is entitled:

The Nature of 911 Homicide Calls: Using 911 Homicide Calls to Identify Indicators of Innocence and Guilt

This work and its defense approved by:

Chair: **Dr. Edward Latessa**

Dr. James Frank

The Nature of 911 Homicide Calls:

Using 911 Homicide Calls to Identify Indicators of Innocence and Guilt

A thesis submitted to the

Graduate School

of the University of Cincinnati

In partial fulfillment of the

requirements for the degree of

MASTER OF SCIENCE

In the Department of Criminal Justice

of the College of Education

By

Lt. Tracy Harpster

B.S., Criminal Justice

Bowling Green State University

Committee Chair: Dr. Edward Latessa

October 25, 2006

The Nature of 911 Homicide Calls:

Using 911 Homicide Calls to Identify Indicators of Innocence and Guilt

Abstract

This exploratory study examined verbal indicators to critically analyze 911 homicide statements for predictive value in determining the caller's innocence or guilt regarding the offense. The audio recordings and transcripts of one hundred 911 homicide phone calls (fifty innocent callers and fifty guilty callers), obtained from police departments and sheriff's departments throughout the United States, provided the database utilized for the study. This study used a retrospective approach, utilizing adjudicated homicide cases in which the determination of guilt or innocence of the caller had already been proven through the legal system. Since the homicide cases were closed, the study was able to focus on the degree to which the twenty variables were able to indicate the likelihood of guilt or innocence of the 911 callers.

The first variable examined is the "Plea for help," which would be expected when a caller uses the 911 emergency contact resource to report a homicide or death. If the Plea for Help is evident, the following sub-categories were also coded and examined:

A. Who the help requested for (victim, caller)

B. The location of the plea (first communication, later communication).

C. The context of the plea (immediacy, lack of immediacy).

D. Urgent demand for officer response (present, not present).

Additionally, the following variables were also analyzed: Modulation, Verbal Reaction before Dispatcher Introduction, Self-Correction, Extraneous Information, Inappropriate Politeness, Caller's Acceptance of the Victim's Death (with and without relationship), Possession of a Problem, Insulting/Blaming the Victim, Minimization (early in discourse and later in discourse), the "Huh Factor," Repetition, Conflicting Facts and the Caller's Resistance to Answer the Dispatcher's Question.

Univariate Analysis and Bivariate Analysis were utilized to study the data. The research results revealed that the presence or absence of sixteen of the variables can indicate the likelihood of the caller's innocence or guilt regarding the offense of homicide.

Acknowledgements

Table of Contents

List of Tables and Graphs

Figure 12

Figure 13

Figure 14

STATEMENT OF THE PROBLEM

Offenders and witnesses in homicide cases provide digitally recorded or taped verbal statements to law enforcement every time a 911 call is placed to report the offense. These statements are unique, in that they are usually made by a distressed individual, confronted with an urgent life-and-death situation. Unfortunately, this evidence is rarely examined in the same comprehensive, thorough manner as other statements and evidence regarding a homicide offense. An analysis of the verbal statements made by 911 homicide callers could reveal information regarding the suspect in the offense and this knowledge may give the investigator insight and provide case strategy during the subsequent investigation. However, without the knowledge and proper training in identifying the Indicators of Innocence and Guilt, the homicide investigator may overlook critical information regarding the offense.

PURPOSE OF THE STUDY

The purpose of this study, The Nature of 911 Homicide Calls: Using 911 Homicide Calls to Identify Indicators of Innocence and Guilt, was to examine linguistic attributes of 911 homicide calls for predictive value in differentiating between the likelihood of the innocence or guilt of the caller. The linguistic attributes, or variables, were used to analyze 100 homicide calls made by fifty innocent individuals and fifty guilty individuals. A "guilty subject" is defined as the individual who actually committed the homicide or one who had direct involvement in the commission of the homicide (hired or coerced the assailant). An "innocent subject" is defined as an individual who had no involvement in the commission of the homicide. The study was retrospective in nature, as the guilt or innocence for each case had been previously determined by adjudication.

The present research study examined twenty variables regarding 911 homicide phone calls made to police departments and sheriff's offices throughout the United States. The first variable examined is the "Plea for Help," which should be expected when a caller uses the 911 emergency contact number to report a homicide or death. If the Plea for Help is present, the following sub-categories were also examined:

A. Who the help is requested for (victim, caller).

B. The location of the plea (first communication, later communication).

C. The immediacy of the plea (immediacy, lack of immediacy).

D. Urgent demand for response (present, not present).

Additionally, the following variables were also analyzed: Modulation, Verbal Reaction before Dispatcher Introduction, Self-Correction, Extraneous Information, Inappropriate Politeness, Caller's Acceptance of the Victim's Death (with and without relationship), Possession of a Problem, Insulting/Blaming the Victim, Minimization (early in discourse and later in discourse), the "Huh Factor," Repetition, Conflicting Facts and the Caller's Resistance to Answer the Dispatcher's Question.

LITERATURE REVIEW

The importance of telling the truth and the negative implications of lying are universally taught from early childhood and culturally reinforced as adolescents grow into adulthood. Despite instruction from parents, schools, the community and the legal system, individuals are still motivated to use deception in certain situations. Identifying truth and differentiating it from deception has captivated attention since the beginning of civilization and the endeavor continues to be a complex and difficult process (Adams, 2002). Much research has been conducted in the area of detecting deception and this research has generated various approaches that have been utilized in the effort to differentiate deception and veracity in oral statements. For the law enforcement community, the necessity of discerning truth from deception provides a constant challenge and the community's welfare is dependant on the police profession's ability to meet that challenge. Consequently, investigators are trained to utilize physiological methods, non-verbal techniques and verbal approaches when attempting to analyze victim, suspect and witness statements. Dr. Susan Adams, a retired FBI agent and current instructor at the FBI Academy, and Mark McClish, a 20-year veteran of the Secret Service, have spent their professional careers researching and instructing in the field of Statement Analysis and detecting deception. Adams describes the detection of deception as "the analysis of an individual's words, in either oral or written form" (p.18). Each word selected by an individual is a product of a conscious or unconscious choice and each word deserves individual analysis (Rabon, 1994). An individual's carefully chosen words combine to form sentences and the sentences merge to develop a theme of the statement. Complications occur when the speaker is conflicted in his/her decision to convey facts or attempt to convince with deception (Rabon, 1994). McClish asserts that this conflict can be observed and analyzed through the specific analysis of an individual's words. He

maintains that "Peoples' words will betray them…when you combine this with the fact that people mean exactly what they say, it then becomes possible to determine if a person is being truthful or deceptive" (p. 9). Adams and McClish (2001) espouse that through detailed analysis of people's words and statements, it is possible to determine exactly what people are telling us and what they are attempting to conceal.

This study examined verbal statements made by 911 callers to law enforcement dispatch centers; therefore, this literature review will specifically address verbal approaches to distinguish veracity from deception.

DETECTION OF DECEPTION IN VERBAL STATEMENTS

In the early 1950s, Undeutsch (1989) hypothesized that statements regarding actual experiences would differ in structure and content from false statements relaying fictitious scenarios. He examined 1,500 cases of alleged child sexual abuse and identified specific criteria found in truthful statements that usually were missing from fabricated statements. Undeutsch developed a technique for analyzing the children's statements by categorizing these components (Reality Criteria) that support the veracity of oral statements. Adams' research supports the Undeutsch Hypothesis and adds, "When deceptive suspects and alleged victims are under stress due to their fear of detection of their deception, changes from the expected structure may appear" (p. 118).

Steller and Koehnken (1989) formulated a method for assessing veracity (Criteria-Based Content Analysis) wherein 19 criteria are utilized to examine verbal narratives. Criteria-Based Content Analysis was created as a technique for assessing veracity rather than deception; therefore, each criterion is considered to be indicative of truthfulness. At least seven criteria must

be present within the verbal statement for the statement to be deemed truthful. However, the absence of an individual criterion does not signify that the narrative is deceptive.

Dana-Kirby (1997) used Criteria-Based Content Analysis to analyze transcripts of verbal statements provided by suspects and victims of criminal offenses. Her study revealed that more reality criteria were observed in truthful narratives than in deceptive narratives. Using both Criteria-Based Content Analysis and Reality Monitoring, Sporer (1997) examined narratives completed by college students who each described a factual and a fictitious event. Both methods differentiated truthful from fabricated statements and using both Criteria-Based Content Analysis and Reality Monitoring criteria, 78.8 percent of the narratives were categorized appropriately.

Rudacille examined verbal deception in <u>Identifying Lies in Disguise</u> (1994), a research project that studied the verbal responses of suspects. The author asserts that deceptive individuals will use varying verbal tactics to convince the investigator that he/she is being truthful. In order to critically analyze the suspect's verbal statements, Rudacille grouped the suspects' responses into sixteen categories and identified and defined each category. Two of the categories, "Rambling Dissertations" and "The Answer did not Equal the Question," focused on extraneous information supplied by the suspect. The author defined "Rambling Dissertations" as the occasion when the suspect supplies more information than is necessary to adequately answer the question. The interviewee could have immediately and directly answered the question posed by the investigator; however, he/she chose to put forth a "linguistic smokescreen" (p. 88). The "Rambling Dissertations" category often contains an answer, buffeted by unsolicited, extraneous information. In contrast, the deceptive category "The Answer does not Equal the Question" addresses replies that do not correspond to the investigator's clear, concise question. For example, when a Homicide Detective asks a suspect "Have you or your wife been having an

affair?" and the suspect replies, "I've been married for nearly twenty years, I love my wife!"

The suspect provided an answer; however, it clearly did not correspond to the question posed by

the investigator.   McClish (2001) identifies extraneous information as a deceptive component in

oral statements and asserts "Unnecessary words provide you with additional information.

Sometimes this additional information can show you the person is being deceptive" (p. 87).

In Discerning Lies from Truths; Behavioral Cues to Deception and the Indirect Pathway

of Intuition (DePaulo, Morris, 2004), the authors studied eighty-eight verbal and nonverbal cues

of deception. The authors' research concluded, liars were less likely to admit they did not

remember some things and they were less likely to correct something they said before. This

conclusion parallels the Self-Correction variable, which theorizes that a truthful 911 homicide

caller will correct original information if the individual learns additional details as the call

progresses.

One of the other cues examined in DePaulo and Morris's research examined word and

phrase repetitions spoken by subjects lying to questioners. The authors concluded, "liars are not

markedly inarticulate, except perhaps in their tendency to repeat the same word or phrase within

the same sentence…" (p. 26). It is probable that liars are repeating words and phrases to stall for

time, in order to give a reasonable answer to the questioner, while under severe stress. Rabon

(1994) defines the exchange of communications as "discourse" and examines the motivation for

stalling by indicating that each and every word, pause and hesitation has meaning during a

discourse. McClish (2001) addresses stalling as a delay tactic used by deceptive individuals and

states:

     "After being asked a question, some people may respond by saying 'Could

      you please repeat the question?' or 'What did you say?' They are giving the

appearance they did not hear the question. Recognize they answered the

 question with a question. You will have to decide for yourself if this person

 is only seeking clarification, or if he is stalling for time" (p. 79).

A review of available literature revealed only one study that specifically analyzes verbal

statements made by callers during emergency phone calls. John Olsson (2004) completed a

forensic linguistic study examining fire emergency calls in London, England. The author advises

that it is often difficult to tell the difference between genuine and malicious calls, and his study

sought to assist English emergency operators (similar to 911 operators in the United States) in

identifying hoax calls regarding arson reports. Olsson maintains that genuine emergency calls

usually contain three characteristics: components of the call, attitude of the caller and aspects of

phonetic output.

Olsson defines the Components of the Call as information regarding the incident, or the

"who, what, why, where, when and how" of the event. These details of the emergency "are

delivered in a sequence that is important from the point of view of what it tells us about the

incident and the caller's relation to the incident" (p. 153). Olsson's sequence characteristic can

be compared to the Location of the Plea sub-category and the relation to the incident

characteristic is similar to the Who the Plea is Requested for variable examined in this study.

Olsson defines the Attitude of the Caller as the commitment and co-operation displayed

by the caller to the emergency operator. The author asserts that genuine arson reporters should

display a sense of urgency and cooperation by delivering information with "full, frank and

timely answering of any questions in addition to the spontaneous offering of any information

regarded as essential" (p. 146). Olsson's contention is supported by DePaulo and Morris' (in

press) research that indicates that "verbal immediacy" is a powerful cue in statement analysis and deceptive individuals are distant and passive, sounding less involved and immediate than truth-tellers. DePaulo and Morris' verbal immediacy cue and Olsson's "urgency characteristic" can be compared to the Plea for Help sub-categories Immediacy of Plea, Urgently Demanding Plea and Location of Plea. Additionally, the "cooperation characteristic" can be compared to the Resistance to Answer variable examined in this study.

Lastly, Olsson defines Aspects of Phonetic Output as the emergency callers' attempt to deliver non-extraneous information, with intonational emphasis and a rising voice pitch on key words. He adds that "the information should be delivered with an overlap between turns…indicating cooperation" (p.154) in the callers' emphasis of important information to the dispatcher. Olsson's intonational emphasis characteristic can be compared to the Modulation variable and the relationship of trust between caller and operator characteristic can be compared to the Extraneous Information variable, examined in this study.

Olsen's description of hoax arson calls, wherein there is a noted lack of cooperation and stalling, parallels DePaulo and Morris (2004), Rabon (1994) and McClish's (2001) contention that deceptive subjects use repetition and non-cooperation as a stalling theme. McClish (2001) states that linguistic analysts should "Listen to what people are telling you. Listen to see if they answer the question…if people don't answer the question, there is something they are hiding" (p. 76).

Olsson contends that the urgency characteristic is the most important characteristic and states that this component can manifest itself in a variety of ways. If Olsson's contention is correct, any linguistic study examining emergency phone calls should specifically address and

analyze the urgency characteristic in conjunction with other possible indicators of truth and deception.

SIGNIFICANCE OF THE STUDY

Adams points out that all statements solicited by police officers are contaminated by both the interviewer and environment of the interview. The physical, psychological and emotional demeanor of the officer asking the questions and the actual setting of the interview, inherently affect the process. Therefore, the purest statements made to law enforcement are the initial comments made by callers to the 911 police dispatcher. During these emergency verbal exchanges, the 911 dispatcher is trained to initiate the conversation by asking the open-ended question "911, what is your emergency?" The burden shifts to the caller to verbally solicit assistance for the emergent event and the interviewer, or the setting of the interview, does not contaminate the caller's initial comments. In an emergency involving a murder, the 911 caller's pure statement can be a critical element in assisting law enforcement during the subsequent homicide investigation.

Dr. Robert Keppel, a former police officer and an Assistant Professor at Seattle University, completed a research study (unpublished) that indicates that 19% of all homicide reports are actually phoned in to the police department by the offender, posing as an innocent individual. Nineteen percent is a remarkable statistic considering that in 2005 there were 16,912 homicides in the United States of America (FBI's Uniform Crime Reporting Program). If Dr. Keppel's research conclusion is accurate, it could be predicted that approximately one in five 911 callers, or 3,382 subjects, actually reported the homicide in which they were the offender. If a variable can be shown to have predictive value in indicating the innocence or guilt of a 911

9

homicide caller, that variable would be considered an indicator and it would be an invaluable tool for the investigator. Using an indicator checklist (a list of indicators with a statistically significant correlation with innocence or guilt) as a directive guide, the homicide investigator could utilize the model to gain insight into the offense, suggest offender probability and to explore pertinent issues during the interview and interrogation phases of the investigation. Additionally, the dispatcher could use the indicator checklist to be alerted to the possibility that the 911 caller is the offender. Once alerted, the dispatcher could ask in-depth, open-ended questions to elicit vital information from the caller. After the initial 911 call, any statement provided by the caller becomes increasingly contaminated by the investigator's questioning techniques, nonverbal reactions and environment, as well as by the influences of the caller's associates, including a spouse or an attorney.

DEFINING THE VARIABLES

The present research study examined twenty variables regarding 911 homicide phone calls made to police departments and sheriff's offices throughout the United States. Eight of the variables (Indicators of Innocence) were predicted to correlate with the innocence of the 911 caller and twelve variables (Indicators of Guilt) were expected to correlate with the guilt of the caller.

INDICATORS OF INNOCENCE

When an individual is confronted with an unexpected emergency situation regarding a serious assault, grave medical episode or unknown life and death event, the paramount objective is to seek immediate assistance from the police and medics. This instinctive response is

intensified when there is a familial, emotional or social relationship between the caller and the victim. Therefore, when an individual calls the 911 emergency resource, it should be expected that his/her first communication should be a plea for help for the victim of the incident.

Plea for Help

This study defines a "Plea for Help" as a 911 caller's specific request for assistance from the police or medics. Generic requests, wherein the caller explicitly states the word "help," but does not specify "police" or "medics," were also regarded as a Plea for Help. For example, the following excerpt from a 911 call would qualify as a plea for help:

Dispatcher: "911, what is your emergency?"

Caller: "Get an ambulance to 4200 Dryden Road, my friend's been shot!"

The caller's first priority was to seek medical assistance for his friend, an objective that would be expected, considering the situation that the victim had been placed. Note the contrast in the second illustration wherein a father is calling 911 to report the condition of his infant son:

Dispatcher: "911, what is your emergency?"

Caller: "I have an infant, he's not breathing."

This caller is actually reporting the incident instead of making a plea for help for the victim. For the purposes of this study, this would be an example of a case where a "Plea for Help" is not present. In this case, the caller had shaken his four-month-old baby to death and the victim's autopsy revealed that the infant had multiple healing fractures at the time of his death.

If the 911 caller fails to make a Plea for Help during his communications with the dispatcher, the associated sub-categories could not be present either. If a Plea for Help is present in a 911 call, the following four sub-categories are analyzed:

Who is the Help Requested for?

The first sub-category of the Plea for Help variable focuses on who the plea for help is requested for: the victim, the caller or both. When an individual calls the 911 emergency resource to seek help for a circumstance involving a victim of a fatality or a potentially fatal event, it would be expected that he/she would ask for help for that victim. The following is an example of a plea for help for the victim of a shooting:

Dispatcher: "What's going on there at Sellars Road?"

Caller: "This guy needs help, he's been shot, he's not breathing."

As expected, the caller immediately requested assistance for the victim of the assault. In this instance the caller was not the offender and he did not know the victim. In the following case, the 911 caller has reported that he has just found his father dead:

Dispatcher: "What happened to your father?"

Caller: "Say something to me…help me!"

In this instance, the caller unexpectedly requested help for himself and not the victim of the event. The subsequent criminal investigation revealed that the caller killed his father as he slept in his recliner.

The Location of the Plea

The second sub-category of the Plea for Help variable focused on the location of the plea for help when an individual called for assistance. When a 911 caller contacts the dispatch center to request help for an emergency, it would be expected that the caller would make that emergency request in the first communication to the dispatcher (or as soon as possible). For example, the following exchange occurred when an individual called 911 to report that a man had been shot in the street:

Dispatcher: "911, what is your emergency?"

Caller: "I need an ambulance at 845 South Euclid! Hurry up please!"

In this case, the caller's primary concern was for the welfare of the victim and he displayed that concern by requesting help for the victim in his first communication. In this example, the caller was not the offender. Cases in which a caller conducts several verbal exchanges with the dispatcher (sometimes lasting minutes into the conversation) and then asks for help for the victim are considered examples of a "later communication plea" for help. In these instances, the callers' primary agenda is not to seek assistance for the victim.

Immediacy of the Plea

The third sub-category of the Plea for Help variable is the Immediacy of the Plea . When an individual is confronted with a crisis situation, involving the life and death of a victim, it would be expected that the subject would call 911 and express a sense of urgency during the call. Further, if the caller and victim have any type of relationship, the immediacy factor should be

even more distinct and pronounced. The following excerpt was taken from a 911 call wherein

the caller was reporting that an unknown victim had just been shot:

Dispatcher: "Where is the person who got shot at?"

Caller: "Please hurry, he's laying in the alley!"

In this instance the caller clearly relates a sense of immediacy by asking the emergency services

to "hurry" in responding to the scene. If the same 911 caller would have simply replied "He's

laying in the alley," there would have been no request for a prompt response; and therefore, a

lack of immediacy in the plea for help.

Urgent Demanding Plea

The last sub-category of the Plea for Help variable is the Urgent Demanding Plea (for

police or medic response). When an individual calls the 911 emergency resource to obtain

services regarding a homicide, it would be expected that the caller would be demanding in

his/her plea for help. For example, the following exchange occurred when a male called 911 to

report that a subject had just been shot on South Euclid Street:

Dispatcher: "What's the phone number you are calling from?"

Caller: "JUST GET TO 845 SOUTH EUCLID! NOW!"

 The caller, who was not the offender, clearly demanded that the medical personnel respond to

the scene rapidly. In contrast, a caller who takes the time to respond to the dispatcher by

relaying his cell phone number and never emphasizes the need for immediate police or medic

response, would not be considered demanding in his plea for help. The immediacy and demanding indicators should be expected when a 911 caller utilizes the resource to seek help for a potential fatality, especially when there is a personal relationship between the caller and the victim of the event.

The following graph illustrates the Plea for Help Continuum, outlining the progression of the plea and dividing the variables into two categories: indicators of potential guilt and indicators of potential innocence:
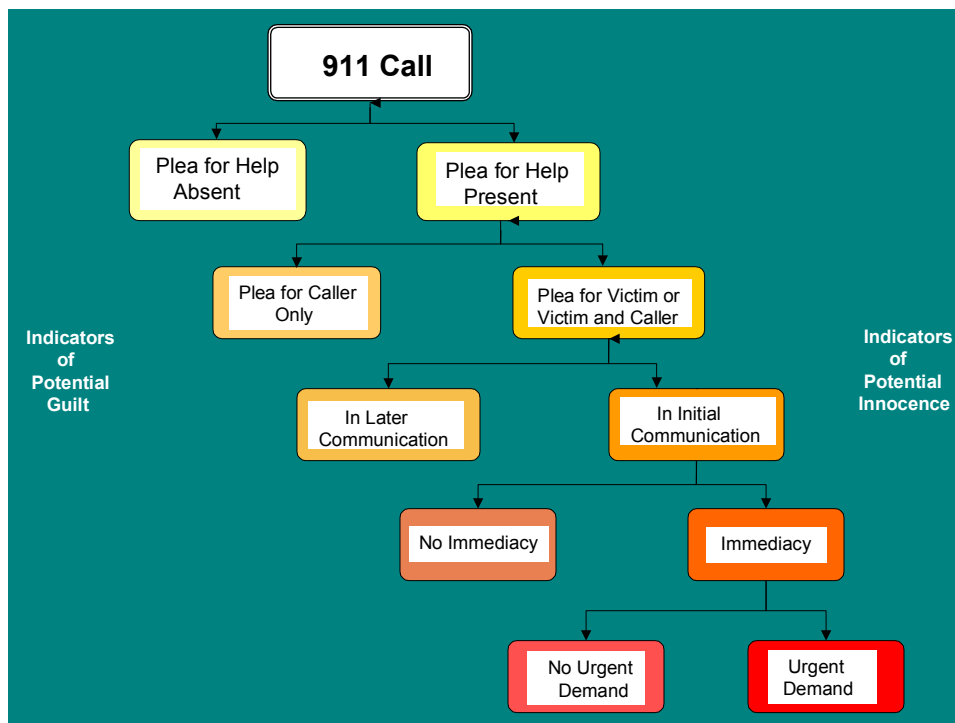
Figure 1 (Adams/Harpster)

Modulation

The sixth variable examined in the study was Modulation. This study defines modulation as a normal or loud voice with inflection, intonation and varying tones. When a 911 caller contacts the dispatch center to report a fatal, or potentially fatal event, it would be expected that

the caller would exhibit modulation during the call. The fear, stress and pressure associated with witnessing and reporting a homicide event or aftermath, would predictably manifest itself in voice modulation during the 911 call. If that caller were reporting a similar event in which he/she had a relationship with the victim (familial, social, emotional), it would be expected that voice modulation would be significant. When an individual calls 911 to report a homicide, or potential homicide and his/her voice is even-paced, emotionless and has a robotic tone with no inflection, it would not be an example of modulation.

Verbal Reaction Before Dispatcher Introduction

The seventh variable examined in the study was Verbal Reaction Before Dispatcher Introduction. This variable occurs when the 911 caller verbally reacts to the situation before the dispatcher speaks to him/her. When a police dispatcher picks up the 911 phone line, a digital or cassette device automatically begins recording the conversation. There is a 1 to 1.5 second pause on the line before the dispatcher cues up the call by stating "911, what is your emergency?" During that pause, which is recorded, it would be expected that a caller would be reacting to the horror, stress and pressure of the homicide situation at hand by exhibiting some type of voice communication. For example, the following exchange occurred when an elderly female called 911 to report a shooting which occurred outside of her residence:

Caller: "Please! Please answer phone!"

Dispatcher: "911, what is your emerg…"

Caller: "Please answer phone! Get help here, guy's been shot outside my house!"

In this case, the dispatcher did not even get the opportunity to cue up the 911 introduction before the caller was demanding assistance for the victim; therefore, this case would be an example of the caller reacting to the situation before the dispatcher spoke to her. It is important to note that different agencies utilize varying recording equipment and not all systems begin recording before the dispatcher speaks.

The Plea for Help variable and the four sub-categories, combined with the Voice Modulation and Verbal Reaction before Dispatcher Introduction variables, form an Immediacy Measure which would be expected when a subject calls 911 to report a possible death/homicide.

Self-Correction

The eighth variable examined in the study was Self-Correction. This variable is defined as additional information provided by the caller after he/she learns additional details, which correct previous communications from the caller. In the following case, a 911 caller notified the dispatcher that a man has just been shot down the hall from his apartment. The dispatcher asked the caller to go back down the hall and check on the victim to see if he had a pulse and the caller complied:

Dispatcher: "911, what is your emergency?"

Caller: "There's a man been shot down the hall of my apartment."

Dispatcher: "Can you check and see if he has a pulse?"

Caller: "Ok."

(The caller checks on the victim)

Caller: "I thought it was a man but it's a lady. It's a lady and

                I didn't feel a pulse."

The caller did not know the victim and he had only glanced in the victim's apartment after he heard a gunshot. He originally reported that a male had been shot; however, when he returned to the victim's apartment and checked for a pulse he realized that the victim was, in fact, a female. The caller provided the new information to the dispatcher, correcting his earlier comment; therefore, this would be an example of the Self-Correction Indicator. In this case, the caller was not involved in the incident and the subsequent investigation revealed that the victim committed suicide.

The Self-Correction variable is an Accuracy Measure, which would be expected when an innocent subject calls 911 to report a possible death/homicide and learns additional, relevant information during that call.

Indicators of Guilt

As previously stated, when an individual is confronted with an unexpected emergency situation regarding a serious assault or grave medical episode, the paramount objective is to seek immediate assistance from the police and medics. This instinctive response is intensified when there is a familial, emotional or social relationship between the caller and the victim. Therefore, when the individual calls the 911 emergency resource it should be expected that the caller focus on the objective (immediate assistance), instead of using extraneous, distancing, or evasive measures.

Extraneous Information

The ninth variable examined in the study was Extraneous Information. For the purposes of this study, extraneous information is defined as any unexpected communication made by the

911 caller to the dispatcher, which is outside the context of the topic. For example, the following exchange occurred when a female called 911 to report that her six-month-old child was not breathing:

Dispatcher: "How old is your son?"

Caller: "He's only six, he's like ate an apple and he's burpin' it up, he's

not, not, it's like a seizure type, we got in a, yea, we got in a car

wreck two months ago."

In this exchange, there was no plea for help and the mother of the dying child communicated unsolicited, unexpected, extraneous information to the dispatcher by mentioning "we got in a car wreck two months ago." There is no clear connection to an infant having difficulty breathing and a car accident two months ago (unless the caller specifically states that since the car accident the infant had difficulty breathing.) Therefore, this would be a case where the Extraneous Indicator is present. The subsequent investigation revealed that the infant's father severely beat his baby in the mother's presence and the child died before the medics arrived.

The Extraneous Information variable forms an Extraneous Measure, which would not be expected when a subject calls 911 to report a possible death/homicide.

Inappropriate Politeness

The tenth variable examined in the study was Inappropriate Politeness. This variable is defined as unexpected, gracious language spoken by the caller during the 911 emergency call. It should be expected that a 911 caller would be preoccupied with obtaining immediate police and medical assistance to the scene of a life and death incident, especially if there is a relationship

between the caller and the victim, with little emphasis on civility and etiquette. The following exchange occurred when a wife called 911 to report that she and her husband had been shot by an unknown assailant:

Dispatcher: "911, what's your emergency?"

Caller: "Hi, I've been shot and my husband has been shot."

Unexpectedly, the wife offered the friendly greeting "Hi" to the dispatcher as her husband, who had sustained a gunshot wound to the head, lay dead on the floor. The wife's priority should have been demanding immediate medical and police assistance; however, she took effort to be polite to the dispatcher, even before advising of the seriousness of the event. This is an example of the presence of the Inappropriate Politeness indicator.

In contrast, the following comments were screamed by the mother of an infant who had died during the night and was not discovered until the following morning:

Dispatcher: "Is the baby breathing?"

Caller: "WHAT THE FUCK IS TAKING THEM (paramedics) SO LONG!

                 WHAT THE FUCK IS TAKING THEM SO LONG?"

In this case, the mother is clearly not concerned with politeness and civility. As expected, her sole objective was to obtain medical assistance for her baby. The criminal investigation revealed that the infant had accidentally wedged his head between the mattress and the crib and suffocated during the night. The baby had been deceased for several hours and was blue and cold to the

touch before the mother discovered the baby's condition. However, the mother refused to accept the death of her child and she was demanding and impolite during her communications.

Acceptance of Death

The eleventh variable examined in the study was the Acceptance of the Victim's Death during the 911 call. In this study, the Acceptance of Death variable is defined as the 911 caller's assertion that the victim is dead when the victim's actual condition (i.e.: life/death) is not known by the caller. It is possible for individuals to survive serious, horrific injuries and the medical literature is replete with cases wherein victims have survived gunshot wounds to the head and stabbing injuries to the heart. Therefore, if the 911 caller does not know the actual physiological condition of the victim's pathology, the caller should not declare the mortality of the victim to the dispatcher. The following example illustrates the point:

Dispatcher: "911, what is your emergency?"

Caller: "I just heard a gunshot in the apartment next door and

             I went over … my neighbor is dead!"

In this case, the 911 caller, who was not certain of the actual physiological condition of the victim, declared the mortality of the victim in his first communication to the dispatcher. The subsequent investigation revealed that the 911 caller had been romantically interested in his neighbor; however, she did not share his interests. He later confessed that he killed the victim because she would not date him.

Acceptance of Death When Relationship Exists

The twelfth variable examined in the study was the Acceptance of the Victim's Death during the 911 call. Patrol officers are often tasked with informing members of the community that a traffic crash or medical event has caused the death of a family member. After being informed of the tragic news, the common response is usually denial due to the individual's inability to immediately process the shocking information. It is common for people to buckle at the knees, collapse and even pass out when informed that their loved one has just died or been killed. Further, police officers report that they are often requested, by demanding family members, to attempt life saving measures on individuals who are obviously dead (some in full rigor). The family members have a difficult time processing and accepting the fact that their loved one is dead and they want every life saving measure attempted. Even when one is informed that their loved one has died, the expected reaction is denial. It should be expected that an innocent 911 caller facing a similar situation would respond in a similar manner as those who are personally contacted by the police.

In this study, the Acceptance of Death with Relationship variable is defined as the 911 caller's assertion that the victim is dead when the victim's actual condition (i.e.: life/death) is not known by the caller and there is a relationship (familial, emotional or social) between the caller and the victim. As mentioned in the previous segment, it is possible for individuals to survive serious, horrific injuries. Therefore, if the 911 caller does not know the actual physiological condition of the victim's pathology, the caller should not declare the mortality of the victim to the dispatcher, especially if there is a relationship between the caller and victim. The following exchange occurred when a husband called 911 regarding his wife:

22

>Dispatcher: "911, what is your emergency?"

>Caller: "I just got home from work and my wife is laying dead

>at the bottom of the stairs!"

In this communication, it is obvious that the caller is not having a difficult time accepting the death of his wife, nor is he in the denial phase that would be expected when learning of the death of a subject with which he had a personal relationship. The subsequent investigation revealed that the caller had killed his wife minutes before he contacted the 911 dispatcher.

Possession of a Problem

   The thirteenth variable examined in the study was Possession of a Problem. This variable occurs when an individual calls the 911 emergency line and unexpectedly reports a problem ("I have a …"), but does not ask for assistance from the dispatcher. This category is only applicable when the caller uses the word "I," indicating personal possession of the problem. For example, the following dialogue occurred when a father called 911 to report that his son was having a medical event:

>Dispatcher: "911, what is your emergency?"

>Caller: "I have an unconscious child who is breathing very shallowly."

In this case, the father unexpectedly comments that he is in possession of a problem and refers to his problem (his dying son) as "an unconscious child." When the paramedics arrived at the residence, the child had already died. The subsequent criminal investigation revealed that the

father assaulted his son causing cerebral hemorrhaging. It is important to note that if the 911

caller uses the word "we," it is not an example of the caller possessing a problem, as the

following examples illustrate:

Dispatcher: "911, what is your emergency?"

Caller: "I think <u>we</u> have a dead woman at the Ranch Inn Motel."

Dispatcher: "911, what is your emergency?"

Caller: "<u>We</u> got a shooting at MJ's Nightclub!"

Both of these cases demonstrate instances of the caller stating we have a problem instead of I

have a problem.

Insulting or Blaming the Victim

The fourteenth variable examined in the study was Insulting or Blaming the Victim. This

variable was present when the 911 caller unexpectedly insulted or blamed the victim of a

homicide during the call for assistance. It is extremely unusual and rare for an individual to

insult a victim who is dead, or in the process of dying. For example, the following case involved

a father who called 911 to report that his daughter was in serious medical distress:

Dispatcher: "Do you know what's wrong with your daughter?"

Caller: "Not a clue."

Dispatcher: "Has she taken any medications?"

Caller: "She might have, she's very, very sneaky. She threw a huge

                      temper tantrum earlier, she might have taken something."

While his daughter was dying in his arms, the caller unexpectedly describes his daughter as "very, very sneaky" and comments about her previous "huge temper tantrum." The subsequent investigation revealed that the child, the caller's adopted daughter, disobeyed her father by taking a sip of her sister's drink. As punishment, the father tied the four-year-old girl's hands behind her back and forced her to drink 64 ounces of water. The child died of hyponatremia, a fatal medical event caused by the body's cells rapidly absorbing an inordinate amount of water.

It is also extremely unusual and rare for an individual to blame a victim who is dead or dying for that victim's predicament. Consider the following discourse when an individual called 911 to report that her husband had been shot:

Dispatcher: "Was this accidental or on purpose?"

Caller: "We were having a domestic fight and he threw me on the bed and

                he grabbed my purse so I couldn't leave…"

Instead of answering the dispatcher's question, the caller unexpectedly blamed the victim for his fatal injury. She indicated that he was responsible for his condition because he threw her on the bed and stopped her from leaving the area by grabbing purse. The subsequent investigation revealed that the wife shot and killed her husband and she was convicted of murder for the offense.

Minimizing "Just"

The fifteenth variable examined in the study was Minimizing. This variable is present when the caller unexpectedly utilizes the word "just" to refer to his own actions before, during or

after the event. For example, the following dialogue occurred when a subject called 911 to report a shooting:

> Dispatcher: "911."
>
> Caller: "Yes, yes…ahh, I got a man over here, he's, he's, he's been shot."
>
> Dispatcher: "There's somebody there that's been shot?"
>
> Caller: "Yea, he's been it's been it's been, but he's in pain, real bad."
>
> Dispatcher: "Ok where are you?"
>
> Caller: "I'm, uhh, uhh, I don't know, I just been seeing him in his car."

In this case, the caller unexpectedly minimizes his own involvement in the situation by stating "I just been seeing him in his car" when asked about his location. The subsequent investigation revealed that the caller's associate shot the victim in the head at a residence and the caller drove the victim to another location and dumped him in the parking lot. It is important to note that this component is not applicable if the "just" is solely related to time (i.e.: just now).

Minimizing "Just" in Initial Communication

The sixteenth variable examined in the study was Minimizing in the Initial Communication issued by the 911 caller reporting a homicide. This variable is present when the caller unexpectedly utilizes the word "just" to refer to his own actions during his/her initial exchange with the dispatcher. For example, the following dialogue occurred when a subject called 911 to obtain assistance for his wife:

> Dispatcher: "911, state the emergency."

Caller: "I, I, I just came home. My wife is on the floor and there's blood all over.

      I don't know what to do."

The first comment uttered by the husband was "I, I, I just came home." The caller unexpectedly minimized his involvement in the situation even before advising that his wife was on the floor with "blood all over." The criminal investigation revealed that the husband hired two men to kill his wife and he was convicted of first-degree murder.

   The Acceptance of Death variable, the Possession of a Problem variable, the Inappropriate Politeness variable, the Insulting or Blaming the Victim variable and the Minimizing variable form a Distancing Measure, which would not be expected when a subject calls 911 to report a possible death/homicide.

The "Huh Factor"

   The seventeenth variable examined in the study was the "Huh Factor." This variable is present when a 911 caller unexpectedly responds to a dispatcher's relevant question by commenting "huh?," "what?" or "do what?"   These responses indicate that the caller appears to be caught completely off guard and is not tracking his/her own responses. For example, in the following case, an individual calls 911 to report that his wife has suffered a serious accident:

Dispatcher: "911, what is your emergency?"

Caller: "I just came home and my wife has fallen down the stairs,

      she's hurt bad and she's not breathing!"

Dispatcher: "How many stairs did she fall down?"

Caller: "Huh?"

In this instance, the caller originally reported that his wife was at home and she fell down the stairs. However, when the dispatcher asked a relevant question regarding the event, the caller was confused and did not answer because he was not tracking his own story. Had the victim actually fallen down three steps, ten steps or a flight of stairs, the caller should have immediately responded with an answer, or an estimate, to the dispatcher's pertinent question. In this case, the criminal investigation revealed that the caller assaulted and killed his wife; therefore, when asked a specific question about the caller's fictitious story, the caller responded with a bewildered "huh?" It is important to note that the "Huh Factor" does not apply when excessive background noise causes the caller difficulties in hearing the dispatcher's questions.

Repetition

The eighteenth variable examined in this study was the 911 caller's unexpected repetition when answering a dispatcher's specific question. For the purposes of this study, the Repetition variable is defined as words or phrases (excluding "ums") that are used three or more times in succession, in one communication and is provided in response to a question. An example of the Repetition variable occurs in the following communication after a 911 caller has reported that she had been assaulted and an unknown assailant had shot her husband:

Dispatcher: "Ma'am, do you know what he was wearing?"

Caller: "Oh God, um, um, oh God, oh God, oh my God…oh my God!"

If an offender had actually broken in, assaulted the 911 caller and shot the caller's husband, she should be able to immediately provide a description of the suspect to the dispatcher or immediately explain why she could not provide the description. Unexpectedly, the caller

repeated the phrase "Oh God" several times instead of answering the question. Note that the repetition occurred all in the same communication, a requirement in the definition of repetition for this study.

Conflicting Facts

The nineteenth variable examined in the study was Conflicting Facts presented by 911 callers. The Conflicting Facts variable is defined as an instance when the caller unexpectedly provides information that conflicts with specifics the caller previously provided. When a 911 caller is relaying information concerning a homicide or serious medical event, it would be expected that he/she would remain consistent regarding factual matters of the event and situation. This category does not include self-correction after caller learns additional information. For example, the following exchange occurred when a mother contacted 911 to report that her baby was not breathing:

Dispatcher: "How long has your baby not been breathing?"

Caller: "Just now, she's been fine for the last few hours."

Dispatcher: "Has she been sick lately?"

Caller: "No, we were just sleeping and the phone woke me up."

The caller advised the dispatcher that her baby "had been fine for the last few hours," however, she later issued an unexpected, conflicting statement indicating that the phone had just woken her up. If the phone had just awakened the caller, she would have no way of knowing that her baby "had been fine for the last few hours." This discrepancy is an example of an instance

where conflicting facts are present. In this case, the mother was charged and convicted for killing her child.

Resistance to Answer

The last variable examined in the study was the Resistance to Answer Indicator. The study defined this variable as an unexpected situation wherein the 911 caller resists answering a dispatcher's logical, relevant question. When an individual calls the emergency 911 resource to obtain immediate assistance, he/she is well aware that cooperating with the dispatcher is key to obtaining that goal. Cooperation, which includes immediately answering any and all questions, will logically lead to a quicker and better response from emergency services. A caller who had reported that his girlfriend was in need of medical assistance presented the following example of Resistance to Answer:

Dispatcher: "Did something happen to her, was this more than just an argument?"

Caller: "That's all I'm trying to report."

In this case the caller, unexpectedly, resisted providing any further information regarding the condition of his girlfriend. Officers located the girlfriend, dead, in her apartment and the boyfriend was convicted of the offense.

The "Huh Factor" variable, the Repetition variable, the Conflicting Information variable and the Resistance to Answering a Question variable combine to form an Evasion Measure, which would not be expected when a subject calls 911 to report a possible death/homicide.

Figure 2 represents the twenty variables examined in the study and the five measures into which the variables are grouped:

Five Measures

Immediacy Measure	**Distancing Measure**
Plea for Help	Insult/Blame of Victim
Plea for Help (for victim or caller)	Acceptance of Death
Location of Plea	Acceptance of Death with Relationship
Immediacy of Plea	Possession of Problem
Urgently Demanding Plea	Inappropriate Politeness
Voice Modulation	Minimizing (just)
Caller Speaks before Dispatcher Intro	Minimizing (just) in first Communication

Accuracy Measure	**Extraneous Measure**
Self-Correction	Extraneous Information

Evasion Measure

Resistance in Answering
"Huh Factor"
Conflicting Information
Repetition

Figure 2

RESEARCH STRATEGY

Dependent and Independent Variables

The dependent variable in this study is the likelihood of a 911 caller being innocent or guilty of the offense of murder. The study was retrospective in nature, as the guilt or innocence variable for each case had been previously determined by adjudication. The results of the research reflect the accuracy of the predicted innocence and guilt of 911 callers when compared with actual innocence and guilt.

The independent variables in this study are the twenty variables: the Plea for Help and the sub-categories, Extraneous Information, Repetition, the caller's Acceptance of the Victim's Death

(when a relationship is present and when there is no relationship), Self-Correction, Inappropriate Politeness, Voice Modulation, Verbal Reaction before dispatcher introduction, Possession of a Problem, Conflicting Facts, Unexpected Insult or Blaming of the Victim, the "Huh Factor," Minimizing (early and later in the discourse) and the caller's Resistance to Answer the dispatcher's questions.

Through bivariate analysis, the strength and direction of the relationships between each independent variable and the dependent variable were examined. The dependent variable, the likelihood of innocence or guilt, was interpreted as a probability distribution ranging from 0 (no guilt) to 1 (guilt). When dichotomous group membership is expressed in a quantitative form as a continuous variable, the Pearson's Product-Moment Correlation Coefficient (Pearson's Correlation) can be computed. Therefore, Pearson's Correlation was used to examine correlations between continuous variables

Data Collection

One hundred 911 homicide calls were selected for analysis. Fifty callers were determined by adjudication to be innocent and fifty callers were determined to be guilty (those who committed or were involved in the homicide). The cases were selected for inclusion only if the 911 phone call was recorded (digitally or tape), retained and a copy of the recording was provided by the originating law enforcement agency. The recordings were provided by the investigators with the understanding that they would be used for research and law enforcement purposes only.

The data was obtained by contacting case agents (lead detective) from nineteen states, across the United States. Each case agent was personally contacted and his/her permission was

received before the case was included in the database. Figure 3 represents the states that

contributed 911 homicide calls for the study and the numbers of 911 calls per state:

911 Homicide Calls by State

Figure 3

The researcher personally transcribed each 911homicide call (digital/tape), making certain

that every word and sentence was properly recorded. Additionally, the researcher analyzed each

individual case and scored the indicators on the Indicator checklist before translating individual

case data to the data spreadsheet for univariate and bivariate. One of the strengths of the study is

the personal care and consistency exercised during the transcription of calls, data analysis and

data recording. A checklist was constructed to record the data from each individual homicide (see

Appendix A). Once each data sheet was completed, the data was transferred to a spreadsheet

where the information could be readily examined and analyzed (see Appendix B).

Research Questions Guiding the Inquiry

In an effort to examine whether guilty 911 homicide callers differ linguistically from innocent 911 callers, twenty research questions guided the study. Each research question is listed below:

Question 1: Is there a positive relationship between the presence of a plea for help and innocence in 911 homicide calls?

Question 2: Is there a positive relationship between the presence of a plea for help for the victim and innocence in 911 homicide calls?

Question 3: Is there a positive relationship between the presence of a plea for help located in the first communication and innocence in 911 homicide calls?

Question 4: Is there a positive relationship between the presence of an immediacy context and innocence in 911 homicide calls?

Question 5: Is there a positive relationship between the presence of an urgently demanding context and innocence in 911 homicide calls?

Question 6: Is there a positive relationship between the presence of voice modulation and innocence in 911 homicide calls?

Question 7:   Is there a positive relationship between the presence of verbal reaction before dispatcher introduction and innocence in 911 homicide calls?

Question 8: Is there a positive relationship between the presence of self-correction and innocence in 911 homicide calls?

Question 9: Is there a positive relationship between the presence of extraneous information and guilt in 911 homicide calls?

Question 10: Is there a positive relationship between the presence of inappropriate politeness and guilt in 911 homicide calls?

Question 11: Is there a positive relationship between the presence of the acceptance of death and guilt in 911 homicide calls?

Question 12: Is there a positive relationship between the presence of the acceptance of death (when there is a personal, emotional or familial relationship between the caller and the victim) and quilt in 911 homicide calls?

Question 13: Is there a positive relationship between the presence of a possession of a problem and guilt in 911 homicide calls?

Question 14: Is there a positive relationship between the presence of an unexpected insult of the victim/blaming the victim and guilt in 911 homicide calls?

Question 15: Is there a positive relationship between the presence of "Just" (minimizing) and guilt in 911 homicide calls?

Question 16: Is there a positive relationship between the presence of "Just" (minimizing) in the initial communication and guilt in 911 homicide calls?

Question 17: Is there a positive relationship between the presence of the "Huh Factor" and guilt in 911 homicide calls?

Question 18: Is there a positive relationship between the presence of repetition and guilt in 911 homicide calls?

Question 19: Is there a positive relationship between the presence of conflicting facts and guilt in 911 homicide calls?

Question 20: Is there a positive relationship between the presence of resistance in answering and guilt in 911 homicide calls?

RESEARCH METHODOLOGY

The present study recorded and examined the demographic data of each individual who

placed a 911 homicide call. The 911 calls were examined for frequency measures and the

homicide cases chosen for inclusion in the study were selected without regard to gender for

either the victim or the caller of the case. Some cases involved a member of one gender calling

911 to report the murder of a member of the same gender, while other cases involved gender

diversity between the caller and the victim of the homicide. Figure 4 represents the gender of

both the Victim Sample (victims of the homicide cases) and the Caller Sample (911 callers

reporting the offenses) in this study:
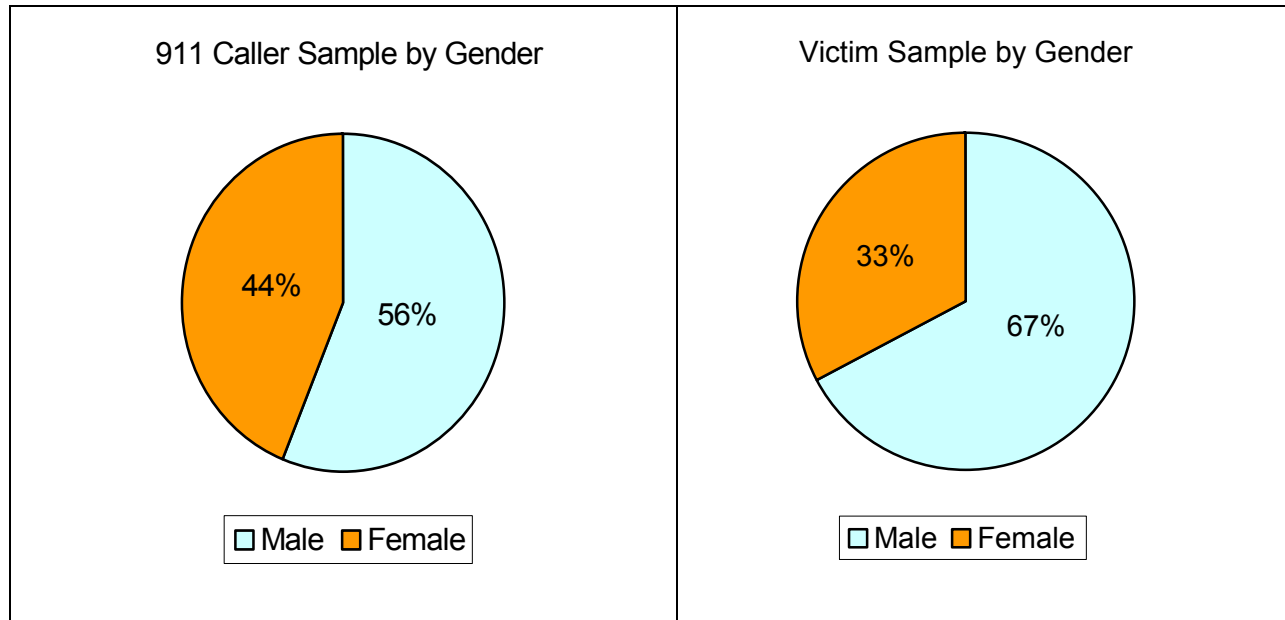
Figure 4

The homicide cases chosen for inclusion in the study were selected without regard to race for either the victim or the caller of the case. Some cases involved a particular race calling 911 to report the murder of a member of the same race, while other cases involved race diversity between the caller and the victim of the homicide. Figure 5 represents the race of both the Victim Sample (victims of the homicide cases) and the Caller Sample (911 callers reporting the offenses) in this study:

911 Caller Sample (Race)

31%

69%

☐ White ■ Black

Victim Sample by Race

5%

1%

30%

64%

☐ White ■ Black ■ Hispanic ■ Other
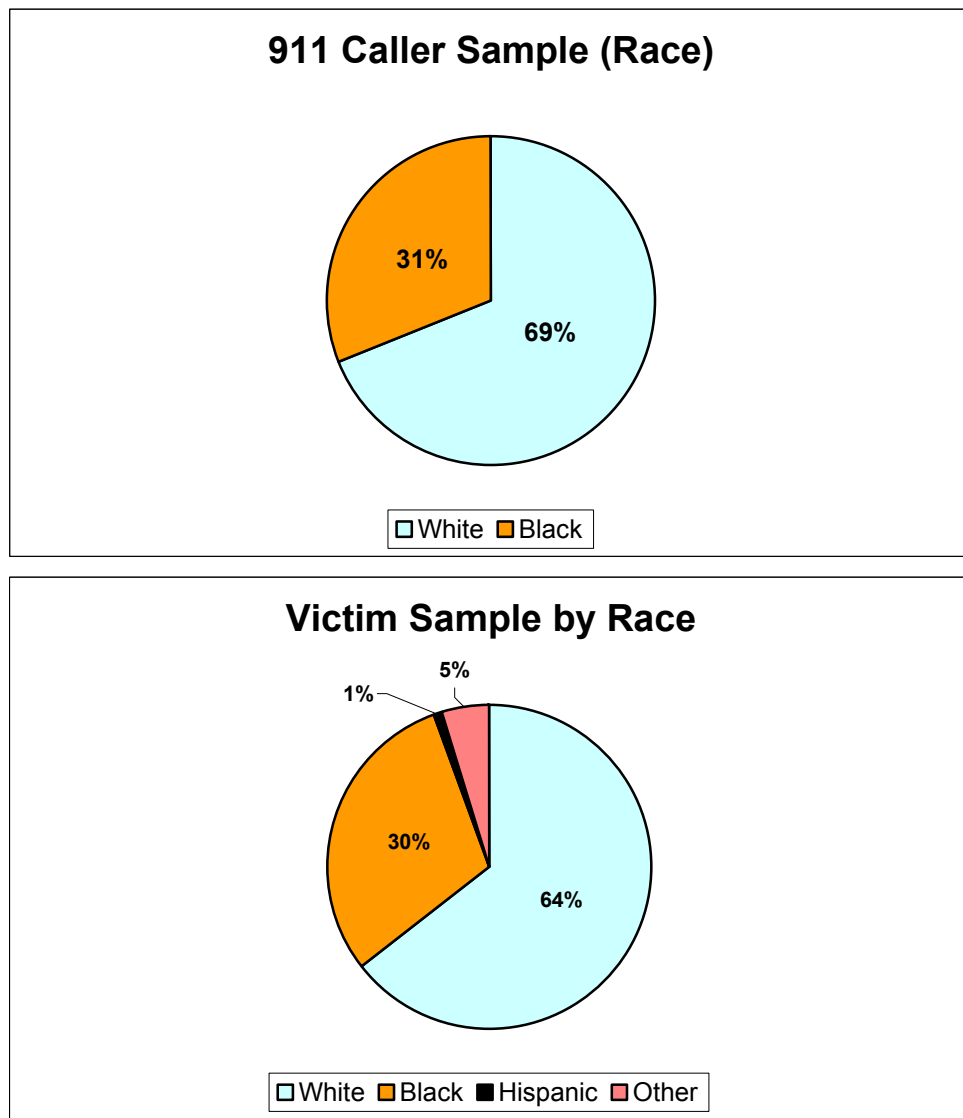
Figure 5

The homicide cases chosen for inclusion in the study were selected without regard for the age of either the victim or the caller of the case. Figure 6 represents the age of both the Victim Sample (victims of the homicide cases) and the Caller Sample (911 callers reporting the offenses) in this study:

Victim Sample by Age

911 Caller Population (Age)
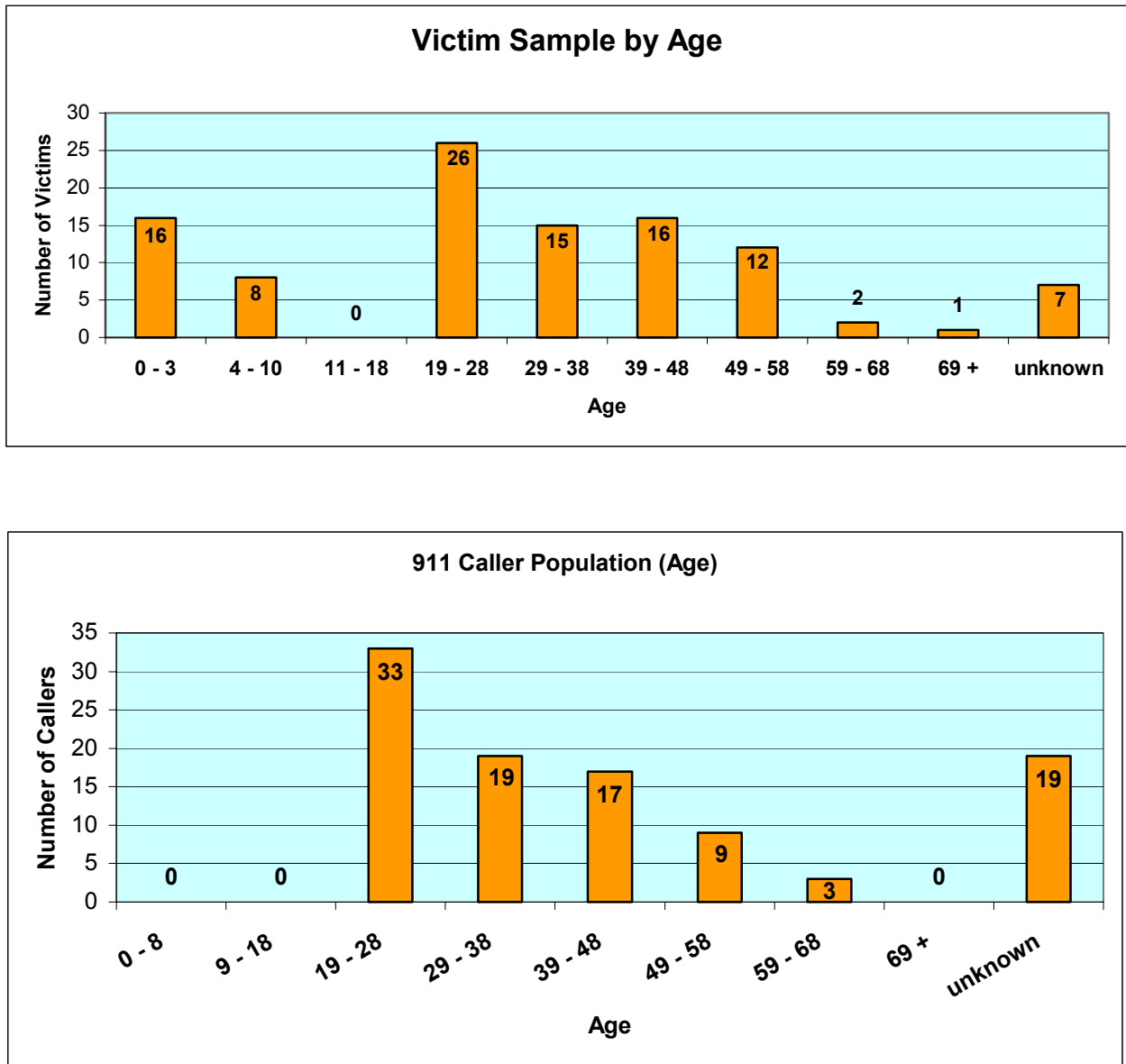
Figure 6

The relationship of the 911 callers to the homicide victims was very important to the study. Several of the indicators (Urgent Demand, Acceptance of Death, Modulation and

Inappropriate Politeness) were predicted to be significant when a personal, emotional or familial relationship existed between the caller and the homicide victim. Fifty-eight percent of the homicide cases involved a personal relationship between the caller and the victim while forty-two percent of the cases had only an "acquaintance" relationship or no relationship at all. Figure 7 represents the caller-to-victim relationship of the homicide offenses:

Caller-to-Victim Relationship
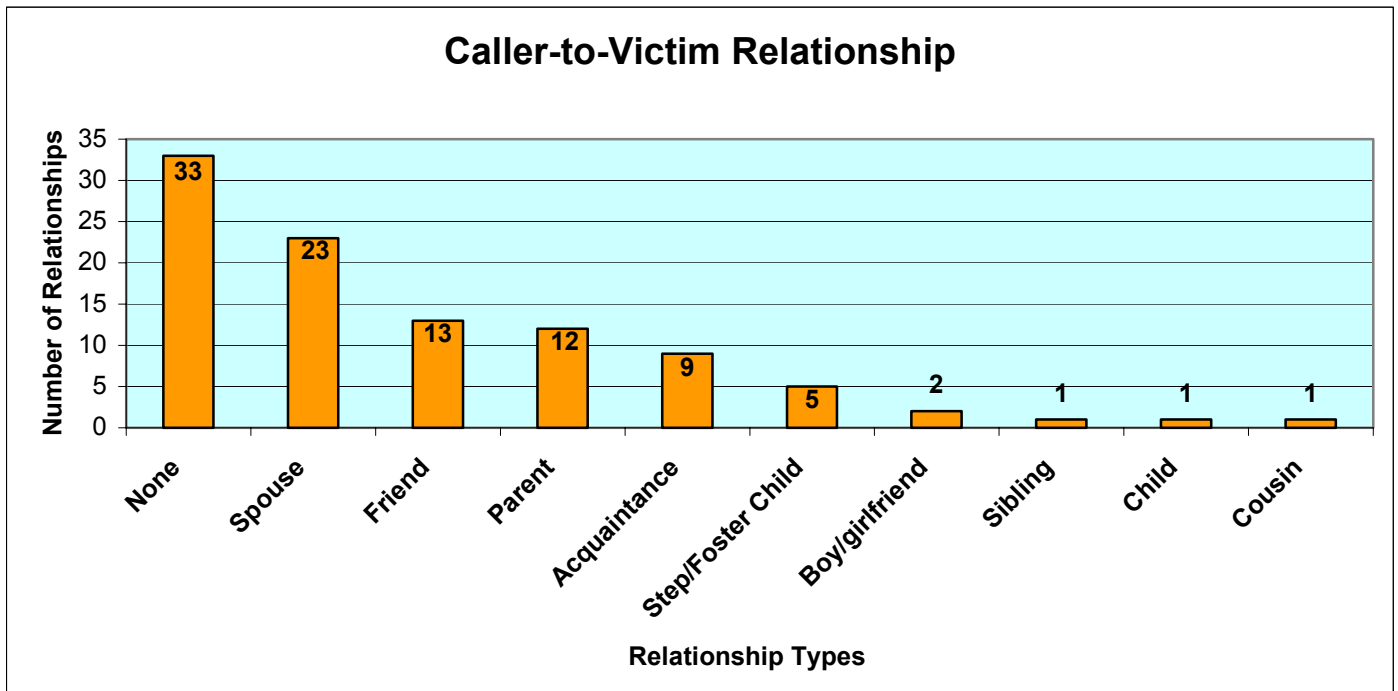
Figure 7

The strength and direction of the relationships between two variables were examined using correlation-based measures. Each of the independent variables representing the 911 calls attributes were correlated with the dependent variable, the likelihood of innocence or guilt. The independent variables in the present study were continuous ratio data. The nominal dependent variable was interpreted as a continuous variable, with a probability distribution ranging from 0 to 1.

In the current study, eight research questions predicted positive relationships with innocence of the 911 calls and twelve predicted positive relationships with guilt. In coding the innocence or guilt of the 911 calls, innocence was coded as 0 and guilt was coded as 1.

RESEARCH FINDINGS

Presence of Plea for Help (Q1)

The first question guiding the research focused on the relationship between the presence of a Plea for Help variable and the innocence or guilt in 911 homicide offenses. It was hypothesized that a caller's plea for help during the discourse with the dispatcher would predict innocence for that caller. The data indicated that 57 percent of the 911 calls in the present study contained a plea for help. The remaining 43 percent of the 911 calls contained no plea. Of the fifty-seven percent of the 911 calls, which contained a plea, 55 percent of the callers were innocent and 42 percent of the callers were determined to be guilty of the offense. To determine the correlation between the plea for help and innocence or guilt, the Pearson Product Moment Correlation (Pearson's Correlation) was utilized. This method of bivariate analysis revealed that the strength of the variable is -.196 with an inverse relationship with guilt. Therefore, a negative relationship was found between the Plea for Help variable and guilt. Since r = -.196 and p<0.05, the relationship is not statistically significant.

Who the Plea for Help is Requested for (Q2)

The second question guiding the research focused on the relationship between the presence of a Plea for Help for the victim of the homicide and innocence or guilt in 911 homicide offenses. It was hypothesized that a 911 caller's plea for help for the victim, alone, would predict innocence for the caller. In contrast, a 911 caller's plea for help for himself/herself would predict

guilt for the caller. The data indicated that 41 percent of the pleas were requested for the victim of the homicide, 7.5 percent of the pleas were requested for the individual making the call and 9 percent of the pleas were made for both the victim and the person making the call. Of the 911 callers who expressed a plea for help for the victim alone, 68 percent were innocent and 32 percent of the callers were guilty of the offense. One hundred percent of the individuals, who requested help for themselves and not the victim, were guilty of the homicide. This category, Plea for the Caller, is a distancing technique and is included in the Distancing Measure (see Figure 9). Lastly, only eight callers requested help for the victims and themselves, of these eight, five callers (63%) were guilty of the murder and three (37%) were innocent of the offense. To determine the correlation between the plea for help for the victim and guilt or innocence, Pearson's Correlation was utilized. This method of bivariate analysis revealed that the strength of the variable is .003 with an inverse relationship for guilt. Therefore, there is a direct relationship with innocence and the presence of a plea for help. A positive relationship was found between the Plea for Help (Victim) variable and innocence for the victim. However, since r = .003, the relationship is not statistically significant.   It was statistically significant and noted that 100 percent of the callers who requested help for themselves, alone, were guilty of the offense. This is an area that needs additional study with many more cases, as it appears to have very strong correlation with guilt; however, there are not enough in cases in this sample to rely on the data for statistically significant results.

Location of the Plea for Help (3)

The third question guiding the research focused on the relationship between the presence of the Plea for Help variable located in the first communication and innocence or guilt in 911 homicide offenses. It was hypothesized that a caller's early plea for help during the discourse with the dispatcher would predict innocence for that caller. The data indicated that 27 percent of

the 911 calls in the present study contained a plea for help located in the first communication. Of that percentage, 70 percent were innocent of the offense and 30 percent were guilty of the homicide. To determine the correlation between the Location of the Plea for Help and guilt or innocence, the Pearson's Correlation was utilized. This method of bivariate analysis revealed that the strength of the variable is -.310 with an inverse relationship with guilt. Therefore, a negative relationship was found between the Location Plea for Help variable and guilt. Since $r = -.310$ and $p<0.05$, the relationship is statistically significant.

Immediacy of the Plea for Help (Q4)

The fourth question guiding the research focused on the relationship between the Immediacy of the Plea for Help and innocence or guilt in 911 homicide offenses. It was hypothesized a caller's use of the Immediacy variable, during the discourse with the dispatcher, would predict innocence for that caller. The data indicated that 36 percent of the callers demonstrated immediacy during the plea for help. Of the callers who demonstrated the variable, 69 percent were innocent of the offense and 31 percent were guilty of the homicide.

To determine the correlation between the Location of the Plea for Help and guilt or innocence, the Pearson's Correlation was utilized. This method of bivariate analysis revealed that the strength of the variable is -.416 with an inverse relationship with guilt. Therefore, a negative relationship was found between the Immediacy of the Plea for Help variable and guilt. Since, since $r = -.416$ and $p<0.01$, the relationship is statistically significant.

Urgent Demand of the Plea for Help (Q5)

The fifth question guiding the research focused on the relationship between the Urgent Demanding Plea for Help and innocence or guilt in 911 homicide offenses. It was hypothesized a caller's use of an urgently demanding plea for help, during the discourse with the dispatcher,

would predict innocence for that caller. The data indicated that 16 percent of the pleas for help were delivered in an urgently demanding manner. One hundred percent of the 911 callers who demonstrated the Urgent Demanding variable were innocent of the homicide. Therefore, 0 percent of the guilty population displayed the urgently demanding variable during the 911 discourse. To determine the correlation between the Location of the Plea for Help and guilt or innocence, the Pearson's Correlation was utilized. This method of bivariate analysis revealed that the strength of the variable is -.492 with an inverse relationship with guilt. Therefore, a negative relationship was found between the Urgently Demanding Plea for Help variable and guilt. Since r = -.492 and p<0.01, the relationship is statistically significant and noted as one of the strongest indicators examined in the study.

Voice Modulation (Q6)

The sixth question guiding the research focused on the relationship between the presence of the 911 caller's voice modulation when engaged in discourse with the dispatcher and innocence or guilt in 911 homicide calls. It was hypothesized the presence of modulation, in the voice of an individual communicating with the dispatcher, would predict innocence for that caller. The data indicated that the Voice Modulation variable was present in 80 percent of the 911 homicide calls.   Of that percentage, 60 percent of the callers were innocent and 40 percent of the callers were guilty of the offense. To determine the correlation between the Voice Modulation variable and the guilt or innocence of the 911 callers, Pearson's Correlation was utilized. This method of bivariate analysis revealed that the strength of the variable is -.390 with an inverse relationship for guilt. Therefore, a negative relationship was found between the Voice Modulation variable and guilt. Since r = -.390 and p<0.05, the strength of the Voice Modulation variable is statistically significant.

Verbal Reaction before Dispatcher Introduction (Q7)

The seventh question guiding the research focused on the relationship between the presence of the 911 caller's verbal reaction before the dispatcher's introduction and innocence or guilt in 911 homicide calls. It was hypothesized a caller demonstrating a verbal reaction, before the dispatcher initiates the discourse, would predict innocence for that caller. The data indicated that the Verbal Reaction variable was present in ten percent of the 911 homicide calls. Of that percentage, 80 percent of the callers were innocent of the offense and 20 percent of the callers were guilty of the homicide. To determine the correlation between the Verbal Reaction Before Dispatcher Introduction variable and the innocence or guilt of the 911 callers, Pearson's Correlation was utilized. This method of bivariate analysis revealed that the strength of the variable is -.198 with an inverse relationship with guilt. Therefore, a negative relationship was found between the Verbal Reaction Before Dispatcher Introduction variable and guilt. Since $r = -.198$ and $p < 0.05$, the relationship is statistically significant.

As noted in the Definition of Variables section, some law enforcement agencies do not employ 911 call systems which automatically initiate recording of the discourse when the dispatcher picks up the phone, or selects the line by touching a computer screen. Therefore, some variance in the 911 recording instrumentation in the data sample exists.

Self-Correction (Q8)

The eighth question guiding the research focused on the relationship between the presence of the 911 caller's self-correction when communicating with the dispatcher and innocence or guilt in 911 homicide calls. It was hypothesized a caller's use of the Self-Correction variable, during the discourse with the dispatcher, would predict innocence for that caller. The data indicated that 6 percent of the 911 homicide callers corrected themselves when they learned additional

information. Of that percentage, 100 percent of the callers were innocent of the offense, 0 percent of the guilty callers self-corrected during the discourse with the dispatcher. To determine the correlation between the Self-Correction variable and the guilt or innocence of the 911 callers, Pearson's Correlation was utilized. This method of bivariate analysis revealed that the strength of the variable is -.253 with an inverse relationship for guilt. Therefore, a negative relationship was found between the Location Plea for Help variable and guilt. Since $r = -.253$ and $p<0.05$, the relationship is statistically significant. This is an area that needs additional study with many more cases, as the variable appears to have very strong correlation with innocence.

Extraneous Information (Q9)

The ninth question guiding the research focused on the relationship between the presence of Extraneous Information and innocence or guilt in 911 homicide offenses. It was hypothesized a caller's use of extraneous information, during the discourse with the dispatcher, would predict guilt for that caller. The data indicated that 44 percent of 911 homicide callers uttered extraneous information during the discourse. Of that population, 95 percent of the callers were guilty of the offense and 5 percent of the callers were innocent of the homicide. To determine the correlation between the extraneous information and guilt or innocence, Pearson's Correlation was utilized. This method of bivariate analysis revealed that the strength of the variable is .806 with a positive relationship for direction indicating guilt. Therefore, a positive relationship was found between the Extraneous variable and guilt. Since $r = .806$ and $p<0.01$, the relationship is statistically significant and noted to be the strongest correlation examined in the study.

Inappropriate Politeness (Q10)

The tenth question guiding the research focused on the relationship between the presence of the 911 caller's inappropriate politeness with the dispatcher and innocence or guilt in 911 homicide calls. It was hypothesized a caller's use of inappropriate politeness with the dispatcher would predict guilt for that caller. The data indicated that the Inappropriate Politeness variable was present in 22 percent of the 911 homicide calls. Of that percentage, 100 percent of the callers were guilty. Zero percent of the innocent 911 callers demonstrated the variable while engaged in conversation with the 911 dispatcher. To determine the correlation between the Inappropriate Politeness variable and the guilt or innocence of the 911 callers, Pearson's Correlation was utilized. This method of bivariate analysis revealed that the strength of the variable is .531 with a positive relationship for guilt. Since $r = .531$ and $p<0.01$ the strength of the Inappropriate Politeness variable is significant and noted to be one of the strongest correlations examined in the study.

Acceptance of Death (Q11)

The eleventh question guiding the research focused on the relationship between the presence of the 911 caller's acceptance of the victim's death and the innocence or guilt in 911 homicide calls. It was hypothesized a caller's acceptance of the victim's death, during the discourse with the dispatcher, would predict guilt for that caller. The data indicated that 29 percent of the 911 homicide callers accepted the death of the victim as they communicated with the dispatcher. Of the 29 percent of the population who exhibited the variable, 79 percent were guilty of the offense. In contrast, only 21 percent of the 911 callers, who were innocent, accepted the death of the victim. To determine the correlation between the Acceptance of Death variable and the guilt or innocence of the 911 caller, Pearson's Correlation was utilized. This method of

47

bivariate analysis revealed that the strength of the variable is -.375 with a positive relationship with guilt. Therefore, a positive relationship was found between the Acceptance of Death variable and guilt. Since, since r = -.375 and p<0.01, the relationship is statistically significant.

Acceptance of Death with Relationship (Q12)

The twelfth question guiding the research focused on the relationship between the presence of the 911 caller's acceptance of the victim's death, when there is a personal, familial or emotional relationship and innocence or guilt in 911 homicide calls. It was hypothesized a caller's acceptance of death, when a relationship exists between the caller and the victim, during the discourse with the dispatcher would predict guilt for that caller. The data indicated that 29 percent of the 911 homicide callers accepted the death of the victim when they communicated with the dispatcher. Of the 29 percent of the population who exhibited the variable, 100 percent were guilty of the homicide. Not one innocent caller, who had a relationship with the victim, accepted the death of that victim. To determine the correlation between the Acceptance of Death with Relationship variable and the guilt or innocence of the 911 callers, Pearson's Correlation was utilized. This method of bivariate analysis revealed that the strength of the variable is -.531 with a positive relationship with guilt. Therefore, a positive relationship was found between the Acceptance of Death variable and guilt. Since r = -.531 and p<0.01, the relationship is statistically significant and noted as one of the strongest correlations examined in the study.

Possession of a Problem (Q13)

The thirteenth question guiding the research focused on the relationship between the presence of the 911 caller's indication that he/she possessed a problem, when engaged in discourse with the dispatcher and guilt or innocence in 911 homicide calls. It was hypothesized a caller demonstrating the Possession of a Problem variable, would predict guilt for that caller. The

data indicated that the variable was present in 12 percent of the 911 homicide calls. Of that percentage, 100 percent of the callers were guilty of the offense. In other words, all of the individuals who demonstrated the Possession of a Problem variable were guilty of the homicide. To determine the correlation between the Possession of a Problem variable and the guilt or innocence of the 911 callers, Pearson's Correlation was utilized. This method of bivariate analysis revealed that the strength of the variable is .369 with a positive relationship for guilt. Therefore, a positive relationship was found between the Possession of a Problem variable and guilt. Since r = .369 and p<0.01, the relationship is statistically significant.

Unexpected Insult of the Victim/Blaming the Victim (Q14)

The fourteenth question guiding the research focused on the relationship between the presence of the caller's unexpected insult directed towards the victim, or the caller placing blame on the victim, for the circumstances surrounding the event. It was hypothesized a caller demonstrating this variable would predict guilt for that caller. The data indicated that the variable was present in 5 percent of the 911 homicide calls. Of that percentage, 100 percent of the callers were guilty of the offense. In other words, all of the individuals who demonstrated the Unexpected Insult/Blaming the Victim variable were guilty of the homicide. To determine the correlation between the variable and the guilt or innocence of the 911 callers, Pearson's Correlation was utilized. This method of bivariate analysis revealed that the strength of the variable is .229 with a positive relationship for guilt. Therefore, a positive relationship was found between the Unexpected Insult/Blaming of the Victim variable and guilt. Since r = .229 and p<0.05, the relationship was significant. However, this is an area that needs additional study with many more cases, as the variable appears to have very strong correlation with guilt.

Minimizing "Just" (Q15)

The fifteenth question guiding the research focused on the relationship between the presence of the caller's unexpected usage of the word "just" in a minimizing manner during the discourse with the dispatcher. It was hypothesized a caller demonstrating this variable would predict guilt for that caller. The data indicated that the variable was present in 33 percent of the 911 homicide calls.   Of that percentage, 64 percent of the callers were guilty of the offense and 46 percent of the callers were innocent of the homicide. To determine the correlation between the variable and the guilt or innocence of the 911 callers, Pearson's Correlation was utilized. This method of bivariate analysis revealed that the strength of the variable is .191 with a positive relationship for guilt. Therefore, there is a positive relationship with guilt and the presence of the Minimizing variable. However, since r = .191 and p>0.05, the relationship is not statistically significant.

Minimizing "Just" in the Initial Communication (Q16)

The sixteenth question guiding the research focused on the relationship between the presence of the caller's unexpected usage of the word "just" in a minimizing manner during the initial communication offered by the caller to the dispatcher. It was hypothesized a caller demonstrating this variable would predict guilt for that caller. The data indicated that the variable was present in 19 percent of the 911 homicide calls.   Of that percentage, 68 percent of the callers were guilty of the offense and 46 percent of the callers were innocent of the homicide. To determine the correlation between the Minimizing "Just" in the Initial Communication variable and the guilt or innocence of the 911 callers, Pearson's Correlation was utilized. This method of bivariate analysis revealed that the strength of the variable is .178 with a positive relationship for guilt. Therefore, there is a positive relationship with guilt and the presence of the Minimizing

50

"Just" Early in the Communication variable. However, since r = .178 and p>0.05, the variable was not statistically significant.

"Huh Factor" (Q17)

The seventeenth question guiding the research focused on the relationship between the presence of the caller's unexpected usage of the "Huh Factor" when engaged in discourse with the dispatcher. It was hypothesized a caller demonstrating this variable would predict guilt for that caller. The data indicated that the variable was present in 12 percent of the 911 homicide calls. Of that percentage, 91 percent of the callers were guilty of the offense and 9 percent of the callers were innocent of the homicide. To determine the correlation between the variable and the guilt or innocence of the 911 callers, Pearson's Correlation was utilized. This method of bivariate analysis revealed that the strength of the variable is .308 with a positive relationship for guilt. Therefore, there is a positive relationship with guilt and the presence of the "Huh Factor." Since r = .308 and p<0.01, the relationship is statistically significant.

Repetition (Q18)

The eighteenth question guiding the research focused on the relationship between the presence of Repetition and innocence or guilt in 911 homicide offenses. It was hypothesized a caller's use of repetition, during the discourse with the dispatcher, would predict guilt for that caller. The data indicated that 15 percent of the 911 homicide callers displayed repetition during the call. Of those callers, 100 percent of the 911 callers were guilty of the homicide. Not one innocent individual utilized Repetition during his/her 911 homicide calls. To determine the correlation between the variable and the guilt or innocence of the 911 callers, Pearson's Correlation was utilized. This method of bivariate analysis revealed that the strength of the variable is .420 with a positive relationship for guilt. Therefore, there is a positive relationship

with guilt and the presence of the Repetition variable. Since r = .420 and p<0.01, the relationship is statistically significant.

Conflicting Facts (Q19)

The nineteenth question guiding the research focused on the relationship between the presence of conflicting facts uttered by the 911 caller, while engaged in discourse with the dispatcher and innocence or guilt in 911 homicide calls. It was hypothesized a caller demonstrating the Conflicting Facts variable would predict guilt for that caller. The data indicated that the variable was present in 28 percent of the 911 homicide calls.   Of that percentage, 100 percent of the callers were guilty of the offense. In other words, all of the individuals who demonstrated the Conflicting Facts variable were guilty of the homicide. To determine the correlation between the variable and the guilt or innocence of the 911 callers, Pearson's Correlation was utilized. This method of bivariate analysis revealed that the strength of the variable is .624 with a positive relationship for guilt. Therefore, there is a positive relationship with guilt and the presence of the Conflicting Facts variable. Since r = .624 and p<0.01, the relationship is statistically significant and noted to be the second strongest correlation examined in the study.

Resistance in Answering (Q20)

The twentieth question guiding the research focused on the relationship between the presence of the Resistance in Answering variable and innocence or guilt in 911 homicide calls. It was hypothesized a caller demonstrating the variable would predict guilt for that caller. The data indicated that the variable was present in 26 percent of the 911 homicide calls.   Of that percentage, 100 percent of the callers were guilty of the offense. In other words, all of the individuals who demonstrated the Resistance in Answering variable were guilty of the homicide. To determine the correlation between the variable and the guilt or innocence of the 911 callers,

Pearson's Correlation was utilized. This method of bivariate analysis revealed that the strength

of the variable is .593 with a positive relationship for guilt. Therefore, there is a positive

relationship with guilt and the presence of the Resistance in Answering variable. Since r = .593

and p<0.01, the relationship is statistically significant and noted to be the third strongest

correlation examined in the study.

Figure 8 represents the Pearsons Correlations for the variables examined in this study:

Pearson's Correlation

Extraneous Information	.806**
Conflicting Facts	.624**
Resistance	.593**
Inappropriate Politeness	.531**
Acceptance of Death with Relation	.531**
Urgent Demanding Plea	-.492**
Repetition	.420**
Immediacy of Plea	-.416**
Voice Modulation	-.390**
Acceptance of Death	.375**
Possession of Problem	.369**
Location of Plea	-.310**
Huh Factor	.308**
Plea for Caller Only	.274**
Self-Correction	-.253*
Insulting/Blaming	.229*
Verbal Reaction	-.198*
Plea for Help	-.196
Minimizing Just	.191
Minimizing Just Early	.178
Who the Plea was Requested for	.003

**p<0.01
* p<0.05

Figure 8

The Five Measures
(Combining the Indicators)

After excluding the insignificant variables, the strongest variables (indicators) remain in

the five Measures, which can be divided into two segments (Figure 9). The Extraneous Measure,

the Evasion Measure and the Distancing Measure all correlate to guilt of 911 homicide caller and

the Immediacy and Accuracy Measures correlate with the innocence of the 911 homicide caller.

Indicator Correlations With Innocence	Indicator Correlations with Guilt
Immediacy Measure • Plea for Help (Location) • Immediacy in Plea • Urgently Demanding Plea • Voice Modulation • Verbal Reaction before Dispatcher Speaks **Accuracy Measure** • Self-Correction	**Evasion Measure** • Resistance in Answering • "Huh Factor" • Repetition • Conflicting Facts **Extraneous Measure** • Extraneous Information **Distancing Measure** • Acceptance of Death with R • Possession of a Problem • Inappropriate Politeness • Insulting or Blaming Victim • Plea for Caller

Figure 9

Indicator Correlations with Innocence

The Immediacy Measure is comprised of the Plea for Help Indicator and its

corresponding sub-categories: the Plea Location Indicator, the Plea for the Victim Indicator, the

Immediacy Indicator, the Urgently Demanding Indicator combined with the Verbal Reaction

before the Dispatcher Speaks Indicator and the Voice Modulation Indicator. The components, and the number of callers who included this variable in their call for the Immediacy Measure, are illustrated in Figure 10:

Immediacy Measure	Innocent Callers	Guilty Callers
Plea Early in Call	19	8
Immediacy	25	9
Urgently Demanding	16	0
Voice Modulation	48	32
Verbal Reaction before Disp.	8	2
Total	*116*	*51*

Figure 10

The Self –Correction Indicator is the sole component comprising the Accuracy Measure. The component, and the number of 911callers who included this variable in their call for this measure, is illustrated in Figure 11:

Accuracy Measure	Innocent Callers	Guilty Callers
Self-Correction	6	0
Total	*6*	*0*

Figure 11

Indicator Correlations with Guilt
(The Distancing Measure)

The Distancing Measure is compromised of the Acceptance of Death when a

Relationship Exists Indicator, Possession of a Problem Indicator, Inappropriate Politeness

Indicator, the Insult/Blame of Victim Indicator and the Plea for Help for the Caller Indicator. An

examination of the combination of indicators within this measure reveals a frequency count of

callers with the indicator. Guilty callers exhibited 68 of the variables contained in the Distancing

Measure. In contrast, 0 innocent callers exhibited variables contained in the measure. The

components, and the number of callers who included this variable in their call for the Distancing

Measure, are illustrated in figure 12:

Distancing Measure	Innocent Callers	Guilty Callers
Acceptance of Death when Relationship Exists	0	22
Possession of a Problem	0	12
Inappropriate Politeness	0	22
Insulting/Blaming Victim	0	5
Plea for Caller	0	7
Total	*0*	*68*

Figure 12

The Evasion Measure is comprised of the Resisting In Answering Indicator, The Huh

Factor, the Repetition Indicator and the Conflicting Facts Indicator. An examination of the

combination of indicators within this measure reveals a positive score for 79 individuals, each of

whom were guilty of the homicide. In contrast, only 1 innocent caller was scored in the Evasion

Measure. The components, and the number of callers who included this variable in their call for

the Evasion Measure (the strongest for all the measures), are illustrated in Figure 13:

Evasion Measure	Innocent Callers	Guilty Callers
Resistance in Answering	0	26
"Huh Factor"	1	11
Repetition	0	15
Conflicting Facts	0	28
Total	*1*	*79*

Figure 13

The data revealed that the Extraneous Measure was the strongest individual indicator

examined in the study. When analyzed, in combination with the other variables, the Extraneous

Indicator overwhelmed the other indicators examined in the study. Therefore, the Extraneous

Indicator was designated as a measure, in itself, so that it could be analyzed and compared to the

other measures. Forty-four individuals included this measure in their calls, 42 of which were

guilty of the homicide offense. In contrast, only 2 callers who included the measure were

innocent of the offense. The component, and the number of callers who included this variable in

their call for the Extraneous Measure, are illustrated in Figure 14:

Extraneous Measure	Innocent Callers	Guilty Callers
Extraneous Information	2	42
Total	*2*	*42*

Figure 14

58

LIMITATIONS OF THE STUDY

The present study was designed to analyze the data in an objective, thorough manner, which could be repeated by future researchers; however, some type of limitation restricts all studies. This study was limited by the distribution of the homicide cases, the predictive limitations of the data, the frequencies of the variables selected for the study and the manner in which these indicators were combined to form the measures and the dispatcher affect.

The 911 homicide phone calls were obtained from 19 states; however, sixty-three of the 100 calls were acquired from police departments in Ohio. An inordinate percentage of calls were received from Ohio because the researcher had immediate access to Ohio law enforcement agencies. Ohio law mandates that all 911 recordings are public records; therefore, police agencies are required to provide copies of the tapes upon request. However, some states do not regard 911 recordings as public records; therefore, those calls were unobtainable for analysis. Further, some agencies, outside the State of Ohio, were hesitant to forward 911 recordings due to pending appeals, departmental issues or sensitivity of the homicide investigation.

The second constraint of the study involved the predictive limitations of the data. For example, all of the cases in this study involved English speaking 911 callers from the USA. This study excluded callers who spoke a foreign language and the researcher did not have access to homicide calls from foreign countries. Additionally, this research did not include any calls from 911 homicide callers under the age of 19 (none were available). Cases wherein the caller was extremely intoxicated, on drugs or alcohol, were also excluded from the study.

The third limitation of the study centered on the frequencies of the variables selected for the study and the manner in which these indicators were combined to form the measures. This study examined the independent variables of one hundred 911homicide calls. Some of the

Indicators of guilt were significant in direction and predictability; however, they did not occur frequently enough in the 100-call sample to be reliably measured by Pearson's Correlation. A larger database might provide the necessary amount of the variable to be measure and analyzed. For example, the Verbal Reaction Before Dispatcher Introduction Indicator was present in only ten cases in the study (because of different recording systems, not all calls are recorded before the dispatcher speaks). Of the 50 innocent callers, eight of the cases contained the indicator and of the 50 guilty callers, only two cases contained the indicator. While the Indicator was predicted to correlate with the innocence of 911 callers, the sample was too small to adequately measure, analyze and compare.

One of the strengths of the present study is the consistency in the opening communication by each of the one hundred dispatchers, initiating the discourse. Each homicide call began with the same question "911, what is your emergency?" or "911." This consistency allowed for a non-contaminated verbal statement as the caller chose words, comments and sentences to communicate his/her theme. As the discourse continued, a few cases suffered from a dispatcher affect, which caused a slight contamination to the subsequent portion of the statement. The following case illustrates the issue:

Dispatcher: "911, what is your emergency?"

Caller: "There's been a shooting at my neighbor's apartment!"

Dispatcher: "Ok, we've got help on the way…do you know who did it?"

Caller: "No, I only heard the shots!"

Since the dispatcher immediately informed the caller that help "was on the way," the caller did not have to make a plea for help. Therefore, the dispatcher affect caused the Plea for Help variable to be contaminated in this case.

RECOMMENDATIONS FOR FURTHER RESEARCH

After reviewing the data and completing the research study, there are four areas in which further research is recommended. First, the present study indicated that the Plea for Help sub-category, Plea for the Caller Only, has a strong correlation with guilt ($r = .274**$). However, there are not enough cases in the sample to rely on the data. Although 100 percent of the 911 homicide callers who requested a Plea for Help for themselves were guilty of the offense, the population sample totaled only seven cases. Additional research with a larger sample is needed to confirm that the variable is remarkable in strength and direction.

Similarly, the present study indicated that the Self-Correction variable was noteworthy in strength with an inverse direction (-.253), indicating a significant correlation with innocence.

Again, 100 percent of the 911 homicide callers who demonstrated the variable were innocent of the homicide; however, the population sample totaled only six cases. Additional research is needed to confirm that the Self-Correction variable is remarkable in strength and direction.

This was a preliminary study and further research may find additional Indicators of Innocence and Guilt. Further, superior combinations of those indicators could produce improved measures for analysis. For instance, initial observations from the data indicate that "Self-Interruption" and "Contractions" may be viable indicators. During the analysis of the data, it was noted that there were no occasions when an innocent 911 homicide caller interrupted

himself/herself, mid-sentence while speaking to the dispatcher. However, there were occasions

when guilty callers self-interrupted themselves. For example, a police lieutenant reporting the

murder of his wife made the following statement to the 911 dispatcher:

> Dispatcher: "911, what is your emergency?"
>
> Caller: "There's a murd-my wife has just been killed I think."

The lieutenant began to state the word murder; however, for some reason he found it necessary

to self-interrupt, mid word and change the context of the act to a killing. Another example of self

interruption occurred when a subject called the 911 operator to report that she discovered her

husband had been killed:

> Dispatcher: "911, what is your emergency?"
>
> Caller: "My husb-I just got home and my husband is deeeaaadddd!"

The wife was going to begin her request for help by stating "My husb-;" however, she self-

interrupted to assert, "I just got home..." To the caller, it was extremely important to advise that

she "just got home," so much so, that she interrupted herself to put that comment ahead of her

belief that her husband was dead. The subsequent investigation revealed that the caller

orchestrated her husband's murder, manipulating her boyfriend to commit the act.   Both of these

cases are examples of a 911 caller self-interrupting, mid word, to change the context of the

sentence. Additional research could determine if the Self-Interruption Indicator has predictive

value regarding the guilt or innocence of 911 callers.

The second suggestion for future research centers on the 911 callers' use of contractions when communicating with the 911 dispatcher. After studying the data, several cases were observed wherein callers, unexpectedly, failed to use the time saving contractions during the emergency 911 call. All of these instances occurred during communications from guilty callers. Innocent callers, pressed for time and desiring to convey information to the dispatcher in a speedy fashion, used contractions freely. Conversely, the following discourse occurred when a husband called 911 to report that his wife had just been shot:

Dispatcher: "911, what is your emergency?"

Caller: "My wife has been shot."

Dispatcher: "Does she have a pulse?"

Caller: "Let me see…I do not feel one."

The husband's first communication, "My wife <u>has been</u> shot," could have been stated, "My <u>wife's</u> been shot." Use of the contraction would have been an instinctual, time saving method of conveying information in the fastest manner possible. His next communication "Let me see…I <u>do not</u> feel" one regarding his wife's pulse, could have been stated, "…I <u>don't</u> feel one." Again, the husband chose to reply in an unnatural, slower manner. The subsequent investigation revealed that the husband set up the murder of his wife and he was convicted of the offense. His purposeful failure to use contractions and therefore his failure to save time in conveying important information during an emergency 911 call, are examples of a possible Contraction Indicator. This possible indicator may have predictive value in determining the guilt or innocence of 911 homicide callers.

CONCLUSION

The results of the current study reveal that the presence or absence of sixteen of the variables can indicate the likelihood of a 911 caller's innocence or guilt regarding the offense of homicide. When a 911 homicide call includes an indicator(s) from the Immediacy Measure or the Accuracy Measure during the discourse, it suggests the caller's innocence regarding the offense. In contrast, when a 911 homicide caller communicates an indicator(s) from the Distancing Measure, the Evasion Measure or the Extraneous Measure, it suggests the caller's guilt regarding the offense. As the 911 homicide caller utters his/her statement over the phone, law enforcement professionals can, simultaneously, utilize the indicators as a directive guide to gain insight into the offense and suggest offender probability.

Since the 911 dispatcher is the first person to come in contact with the individual reporting the offense, the dispatcher is the first law enforcement professional that can benefit from education and training regarding the Indicators of Innocence and Guilt. Dispatchers, armed with an understanding of the indicators, would be alerted to the possibility that the 911 homicide caller reporting the crime may be the actual offender. Once alerted, the dispatcher could ask in-depth, open-ended questions to elicit vital information and investigative leads from the caller. The dispatcher, skilled in recognizing the indicators and employing open-ended questions, would minimize the contamination of the 911 caller's statements during the discourse. The criminal investigation actually begins at the instant the 911 homicide call is received by the police agency. Consequently, the dispatcher who has a clear understanding of the indicators and is proficient in minimizing contamination could greatly aid the homicide detective's subsequent investigation.

The results of the present study suggest that homicide investigators should analyze 911 homicide calls in the same manner that all other evidence of homicides are collected and

examined. Using the Indicators of Innocence and Indicators of Guilt as a directive guide, the

homicide investigator can utilize the model to gain insight into the offense, suggest offender

probability and to explore pertinent issues during the interview and interrogation phases of the

investigation. It is suggested that a homicide investigator obtain a copy of the 911 tape and

personally transcribe it as soon as practical. Using the Indicator Checklist to record the

indicators, the investigator will be able to successfully analyze the 911 caller's statement. If the

data recorded on the Indicator Checklist indicates the likelihood of the 911 homicide caller's

guilt, the investigator can immediately organize and manage an appropriate case strategy for the

subsequent investigation. This strategy can include the directing of additional resources towards

the suspected 911 homicide caller and insight into the offense, which could then be exploited

during the interview and interrogation phases of the investigation.

The present study examined only one hundred 911 homicide calls and the results should,

therefore, be interpreted with caution. As this was an exploratory study, additional research will

be needed to confirm the reliability of the findings.

BIBLIOGRAPHY

Adams, Susan (2002). Communication Under Stress: Indicators of Veracity and Deception in Written Narratives. (Doctoral dissertation, University of Virginia, 2002). etd-04262002-164813.

Dana-Kirby, L. (1997). Discerning Truth from Deception: Is Criteria-Based Content Analysis Effective with Adult Narratives? (Doctoral Dissertation, University of Oregon, 1997). Dissertation Abstracts International, 58, 022B 1020.

DePaulo, B. M., Morris, W. L. (in press) Discerning Lies from Truths: Behavioural Cues to Deception and the Indirect Pathway of Intuition. In P.A. Granhag & L. Stromwoll (Eds.), Deception Detection in Forensic Contexts. Cambridge: Cambridge University Press.

Hess, J. (1997). Interviewing and Interrogation for Law Enforcement. Cincinnati, Ohio: Anderson.

McClish, M. (2001). I Know you are Lying: Detecting Deception through Statement Analysis. Winterville, NC: PoliceEmployment.com.

Olsson, J. (2004). Forensic Linguistics: An Introduction to Language, Crime and Law. London: Continuum International Publishing Group Ltd.

Porter, S. & Yuille, J. C. (1995). Credibility Assessment of Criminal Suspects through Statement Analysis. Psychology Crime and Law, 1 (4), 319-331.

Porter, S. & Yuille, J. C. (1996). The Language of Deceit: An Investigation of the Verbal Clues to Deception in the Interrogation Context. Law and Human Behavior, 20 (4), 443-458.

Rabon, D. (1996). Investigative Discourse Analysis. Durham, N.C.: Carolina Academic Press.

Ruby, C. L. (1995). The Utility of the Criteria-Based Content Analysis in Distinguishing

Between Truthful and Fabricated Statements made by White and Black Speakers. (Doctoral Dissertation, Florida State University, 1995). <u>Dissertation Abstracts International, 56,</u> 07A 2616.

Rudacille, W. C. (1994). <u>Identifying Lies in Disguise</u>. Dubuque, IO: Kendall/Hunt.

Sapir, A. (1987). <u>Scientific Content Analysis</u>. Phoenix: Laboratory for Scientific Interrogation. Unpublished manuscript.

Sporer, S. L. (1997). The less traveled road to truth: Verbal cues in deception detection in accounts of fabricated and self-experienced events. <u>Applied Cognitive Psychology II</u>, 373-397.

Steller, M. (1989). Recent Developments in Narrative Analysis. In J. C. Yuille (Ed.), <u>Credibility Assessment </u>(pp. 135-154). London: Kluwer.

Steller, M. & Koehnken, G. (1989). Criteria Based Narrative Analysis. In D. C. Raskin (Ed.), <u>Psychological methods for criminal investigation and evidence</u> (pp. 217-245). New York: Springer.

Undeutsch, U. (1989). The development of narrative reality analysis. In J. C. Yuille (Ed.), <u>Credibility assessment</u> (pp. 101-119). London: Kluwer.

Yuille, J. C. (1989). <u>Credibility assessment</u>. London: Kluwer.

Zaparniuk, J., Yuille, J. C., & Taylor, S. (1995). Assessing the Credibility of True and False Statements. <u>International Journal of Law and Psychiatry, 18</u> (3), 343-352.

Appendix A

911 Call
Indicator Checklist

1. Plea for help:	Present	( )	Not Present	( )
1 a. Help is requested for:	Victim	( )	Caller	( )
1 b. Location of plea:	First Communication	( )	Later Communication	( )
1 c. Plea Context:	Immediacy	( )	Lack of Immediacy	( )
1 d. Urgently demanding officer response:	Present	( )	Not Present	( )
2. Extraneous Information:	Present	( )	Not Present	( )
3. Repetition:	Present	( )	Not Present	( )
4. Caller's Acceptance of victim's death when the victim's condition (ie: life/death) is not known:	Present	( )	Not Present	( )
5. Self –correction:	Present	( )	Not Present	( )
6. Inappropriate Politeness:	Present	( )	Not Present	( )
7. Voice Modulation:	Present	( )	Not Present	( )
8. Verbal reaction before dispatcher intro	Present	( )	Not Present	( )
9. Possession of a problem:	Present	( )	Not Present	( )
10. Conflicting facts:	Present	( )	Not Present	( )
11. Unexpected Insult of Dying/Dead Victim or Blaming the Victim:	Present	( )	Not Present	( )
12. Huh Factor	Present	( )	Not Present	( )
13. Just (Minimizing)	Present	( )	Not Present	( )
14. Resistance to Answer	Present	( )	Not Present	( )

Appendix B

	Plea for help	Vic/ Caller	Loc	Context	Urgently Demand	Extra Info	Rep	AOD	AOD R	Self Corr	IP	Mod	Verbal React	Poss Prob	Conflict Facts	Insult	Huh	Just	Just is Early	Resist
1	1	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
4	1	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0
5	1	3	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
6	1	1	0	1	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
7	1	3	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
8	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
9	1	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
10	1	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
11	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
12	na	na	na	na	na	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	1	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
14	na	na	na	na	na	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0
15	1	1	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1	1	0
16	na	na	na	na	na	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
17	1	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
18	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
20	1	1	1	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
22	1	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	1	0
24	1	1	1	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
26	na	na	na	na	na	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
27	1	1	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
28	1	3	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
29	1	1	0	1	0	0	0	0	0	1	0	1	1	0	0	0	0	1	1	0
30	na	na	na	na	na	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
31	1	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
32	1	1	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0
33	1	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
34	na	na	na	na	na	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
37	1	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
38	1	1	0	1	0	0	0	0	0	1	0	1	1	0	0	0	0	1	0	0
39	1	1	0	1	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
40	1	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	1	0
42	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
43	na	na	na	na	na	0	0	0	0	0	0	1	1	0	0	0	1	1	0	0
44	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
45	1	1	1	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
47	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
48	1	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
49	1	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
50	1	1	0	1	1	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0

	Plea for help	Vic/ Caller	Loc	Context	Urgently Demand	Extra Info	Rep	AOD	AOD R	Self Corr	IP	Mod	Verbal React	Poss Prob	Conflict Facts	Insult	Huh	Just	Just is Early	Resist
51	0	0	0	0	0	0	1	1	1	0	0	0	0	1	1	0	0	1	0	1
52	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	1
53	0	0	0	0	0	1	1	1	1	0	0	1	na	0	1	0	0	0	0	1
54	0	0	0	0	0	1	0	1	1	0	1	0	0	1	0	0	0	1	0	0
55	1	1	1	1	0	1	0	0	0	0	1	1	0	0	0	1	0	0	0	1
56	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0
57	0	0	0	0	0	1	0	0	0	0	1	0	0	1	1	0	0	1	1	0
58	0	0	0	0	0	1	1	0	0	0	1	1	0	0	1	0	0	0	0	0
59	1	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
60	1	2	0	0	0	1	1	1	1	0	0	1	0	0	0	0	0	1	1	1
61	1	2	0	0	0	0	0	1	1	0	0	na	1	0	0	0	0	0	0	0
62	1	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
63	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	1
64	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	1	0	0	0
65	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	1
66	0	0	0	0	0	1	0	1	1	0	0	1	0	1	0	0	0	1	1	0
67	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	1	0
68	1	2	0	0	0	1	0	1	1	0	0	1	0	0	1	0	0	1	1	1
69	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1
70	1	1	0	1	0	1	0	0	0	0	0	1	1	0	1	0	0	1	1	1
71	1	2	0	0	0	1	0	1	1	0	0	0	0	0	1	0	0	1	1	0
72	1	3	1	1	0	1	1	1	1	0	0	0	0	0	1	0	0	0	0	0
73	0	0	0	0	0	1	1	1	1	0	1	0	0	0	0	0	0	1	1	1
74	1	2	0	0	0	1	0	0	0	0	1	1	0	0	0	0	1	0	0	0
75	1	3	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
76	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0
77	0	0	0	0	0	1	0	1	1	0	1	1	0	0	0	0	0	0	0	1
78	1	1	1	0	0	1	0	0	0	0	1	1	0	0	0	0	1	0	0	0
79	1	2	0	0	0	1	1	0	0	0	1	1	0	1	0	0	0	0	0	0
80	0	0	0	0	0	1	0	1	1	0	0	0	0	1	1	0	0	1	0	0
81	1	1	1	0	0	1	0	0	0	0	0	1	0	1	0	0	1	0	0	0
82	1	2	0	0	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	1
83	1	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0
84	0	0	0	0	0	1	1	1	1	0	0	1	0	0	0	1	1	1	1	1
85	0	0	0	0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1
86	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0
87	1	3	0	1	0	1	1	1	1	0	0	0	0	0	1	0	0	1	1	1
88	0	0	0	0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	0
89	1	1	0	0	0	1	1	1	1	0	1	1	0	0	1	0	1	0	0	1
90	1	1	1	0	0	1	0	1	1	0	0	1	0	0	0	0	0	1	0	0
91	1	3	1	1	0	0	1	1	0	0	0	1	0	0	1	0	0	1	0	1
92	0	0	0	0	0	1	1	1	1	0	0	1	0	0	1	0	0	1	0	0
93	0	0	0	0	0	1	0	1	1	0	0	0	0	0	1	0	0	0	0	1
94	0	0	0	0	0	1	0	1	1	0	1	1	0	0	1	0	1	1	1	1
95	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	0	0	1	0	1
96	1	3	1	1	0	1	1	1	1	0	0	0	0	0	1	0	0	1	0	1
97	1	1	0	0	0	1	0	0	0	0	1	0	0	0	1	1	0	0	0	1
98	0	0	0	0	0	1	1	0	0	0	1	1	0	1	1	0	1	1	1	1
99	1	1	0	1	0	1	1	0	0	0	0	1	0	1	0	1	0	0	0	0
100	1	1	0	1	0	1	0	0	0	0	1	1	0	0	1	0	1	0	0	1