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Media Effects and Criminal Profiling: How Fiction Influences Perception and Profile Accuracy

Asha Bolton

Nova Southeastern University, abolton2010@me.com

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**School of Criminal Justice
Abraham S. Fischler College of Education
Nova Southeastern University**

Media Effects and Criminal Profiling:
How Fiction Influences Perception and Profile Accuracy

by
Asha Bolton
A Dissertation Presented to the
School of Criminal Justice in the Abraham S. Fischler College of Education
of Nova Southeastern University
in Partial Fulfillment of the Requirements for the Degree of
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Approval Page

This dissertation was submitted by Asha Bolton, under the direction of the persons listed below. It was submitted to the School of Criminal Justice, Abraham S. Fischler College of Education, and approved in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Nova Southeastern University.

Approved: Kendra Gentry Date: 4/8/19
Kendra Gentry, Ph.D.
Committee Chair

Approved: Marcelo Castro Date: 4/3/19
Marcelo Castro, Ph.D.
Committee Member

Approved: James Nardozi Date: 4/3/19
James Nardozi, D.P.A.
Committee Member

Approved: Tammy Kushner, Psy.D. Date: 4/3/19
Tammy Kushner, Psy.D.
Executive Associate Dean

Abstract

Media Effects and Criminal Profiling: How Fiction Influences Perception and Profile Accuracy. Asha Kalifa Akilah Kiara Bolton, 2019: Dissertation, Nova Southeastern University, Abraham S. Fischler College of Education, School of Criminal Justice. Descriptors: Social Constructionism, CSI Effect, Profiling, Crime and Media

The objective of this dissertation was to investigate whether media and fictional information that is observed daily can influence perception to build a criminal psychological profile. Staggering between a distinguished art and science, the term profiling has been known by several different names – including criminal profiling, psychological profiling, offender profiling and more. Bandura (2009) believed that exposure to television and other media feeds into a socially constructed reality, where the audience is inevitably influenced by the beliefs and cognitions of observed media. The researcher believed that exposure to media can either influence criminal profiling and investigations with increasing accuracy or encourage perpetuated stereotypes. Kocsis, Hayes, and Irwin (2002) suggested that increased exposure to crime dramas creates a bias that decreases profile accuracy. The researcher examined the knowledge and perceptions of profiling and the crime scene examination skills of approximately 119 law enforcement professionals both active and retired at the local, state, and federal levels as well as college students to determine if these theories were accurate. This dissertation examines the literature on profiling and how it aids in criminal investigations for law enforcement officers, as well as in risk assessments for psychologists, approaches, and legal admissibility in courts. The data explores the reactions of exposure to media and crime television shows in relation to criminal psychological profiling, as well as the ability to accurately profile a crime and an offender based on the skills needed, specifically objective reasoning. The participants were asked questions utilizing a questionnaire to determine their exposure to crime related television shows and fictional media, and their views on profiling. The participants were then given a case scenario and asked to provide a criminal psychological profile based on the information given in the case paired with completing the *Profiling Offender Characteristics Questionnaire* adapted from Kocsis et al. (2000). Active and retired law enforcement professionals as well as college students seemed to agree on the belief that criminal profiling can be influenced by fictional and non-fictional media. The researcher found in a regression analysis that media consumption influenced the ability for participants to accurately create a criminal profile. This research contributes to the field of crime and media because it aids in law enforcement training, as well as criminal justice and psychology studies to ensure time and resources are invested correctly – ensuring that individuals are creating a criminal profile that will not have law enforcement searching for the wrong offender. The results of this study expound on previous profiling research leading to the determination if profiling should continue to be considered as a viable tool.

Dedication

To the many generations of my family, who have loved me and prayed for my well-being, faith, courage, strength, kindness, and so much more... before I was ever born. Thank you all!

This dissertation is dedicated to my family, you have all helped me to live and learn. I sincerely appreciate how you all keep pushing me toward my greatest potential.

To two of Gainesville Georgia's first – One of the first two Black police officers and the first Black bookmobile librarian, my Papa and Granny, Earnest and Catherine Earls. You are two of my grandparents who did not get a chance to bear witness to this part of my academic journey. However, you both were integral to my successful steps on this path.

To my Mom, Lisa – Your love is more than I could ever ask for. Your strength, courage, wisdom, poise, grace, and faith are just a few things I admire. Thank you for raising me to keep God and a song in my heart. Thank you for always pushing me to dig deeper and climb higher and for being there across the hurdles as well as the easy times. God knew what he was doing when he put us together, and I will continue to stand, dance, and keep the faith.

To my Brother, Ari – We are eight years apart, we could have easily been separated at birth. I thank God for you and all the love and support you give me. I hope and pray that I can continue to be a positive role model for you. Remember you are just beginning, I know God still has so much more in store for you.

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I am tremendously blessed and thankful to all those who supported my pursuit of this doctoral degree. To my dissertation chair, Dr. Kendra Gentry, thank you for your critical guidance, wise counsel, thoughtful encouragement, practical advice, well-placed enthusiasm, and breadth of understanding. To Dr. Marcelo Castro and Dr. James Nardozzi, thank you both for serving on my dissertation committee as well as your commitment to academic excellence, as evidenced by your classroom instruction. I treasure your illustrious guidance and support throughout this dissertation process.

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Chapter 1: Introduction

Nature of the Research Problem

Profiling is defined as the recording and analysis of a person's psychological and behavioral characteristics to assess or predict their capabilities in a certain sphere or to identify a particular subgroup of people (*Dictionary.com*, n.d.). The concept of profiling can essentially be accomplished every day while we are walking around in retail stores, given that we constantly observe our surroundings and other individuals check individuals. However, members in law enforcement and psychologists use profiling on a different scale, whether it is preventing or solving a crime from occurring.

There are several different techniques to profiling. Profiling is also known by several names. These include criminal profiling, psychological profiling, offender profiling, and others. The profiling technique has been represented in U.S. media with movies such as *Silence of the Lambs* and television shows like *Criminal Minds*. While the idea of criminal profiling has increased in popularity over the years through media, its validity and accuracy is still questioned. This is mostly because criminal profiling relies on the ability of an individual or team to analyze and interpret information. Bandura (2009) believed that exposure to television and other media feeds into a socially constructed reality where the audience is inevitably influenced by the beliefs and cognitions of observed media. If one or more of these individuals who profile, read or watch any fictional media on a reoccurring basis, it is possible that the media can influence their perception of others or of geographical areas, causing their profile data to be misleading in crime solving or prevention.

Background and Significance

The nature of profiling has seen increased popularity in television by the CBS-network show *Criminal Minds*. Even though profiling existed in the era of the Jack the Ripper case in 1888, it was not officially recognized until 1972 with the development of the United States Federal Bureau of Investigation's (FBI) Behavioral Science Unit. The Behavioral Science Unit was developed in response to an increase in serial homicides in the 1960s (Woodworth & Porter, 2000). Since its development, it continues to be a significant and important tool in crime investigations.

Media has caused more individuals to be aware of profiling – as well as behind-the-scenes law enforcement professionals and crime scene recovery. With media, the techniques or skills necessary to develop a profile or how to go about looking at evidence have been made visible to the public. Exposure to media can either influence criminal profiling and investigations with increasing accuracy or it can encourage perpetuated stereotypes. For example, Kocsis, Hayes, and Irwin (2002), suggested that increased exposure to crime dramas can create a bias that would decrease profile accuracy.

Profiling is not always accurate, but that can be because the information we believe to be true is falsely narrated in fictional media. For example, a criminal profile was created for the 2002 Beltway Sniper case in the Washington, D.C. area. The suspect was described as a White American male. This profile was inaccurate, however, and the sniper was later determined to be two African-American males (Bothe, 2002). The 2017 Las Vegas gunman was also an individual who did not fit the typical criminal profile of a mass murder or gunman. Criminal profilers, such as retired FBI Special Agent Pete Kilsmet, suggested that the Las Vegas gunman's characteristics and his personality was a

complete anomaly to what is typically viewed when building a criminal profile (Allen, 2017). Other criminal profilers and investigators have agreed on this as an anomaly, proving that it may be difficult to generate new criminal profiles. The idea of snipers or shooters being White males, or terrorists being Middle Eastern males, and African-American or Hispanic and Latino males being gang members are stereotypes that are perpetuated in media outlets. This view can cause law enforcement professionals, attorneys, and judges, as well as the average citizen who may have to serve as a juror one day, to have tunnel vision and focus on only one type of suspect, adhering to the theory that new criminal profiles cannot be built if these individuals only have one idea of what characteristics an offender displays when linked to a specific crime. Profiling is important to the criminal justice community and if individuals can overlook stereotypes depicted in media, then it is possible that its accuracy and validity will increase for researchers and members of law enforcement. This type of research is vital to the field and can contribute to law enforcement training to ensure time and resources are not wasted in creating a criminal profile that will have individuals searching for the wrong offender.

Barriers and Issues

Previous research has yielded various results in criminal profiling; however, several researchers agree that profiling is an important subject to research. The focus of profiling accuracy is important for law enforcement to determine if it should still be considered as a viable tool or if training should be modified. There are only a few studies that have been conducted on profiling, and even fewer about the connections between profiling and media influence.

While previous studies are few and far between, studies on media viewing and profiling including only law enforcement professionals of active and retired status are just as rare. Previous research has included comparing the profiling abilities and accuracy of college students and law enforcement professionals. These studies feature scholars such as Hodges and Jacquin (2008) who measured profile accuracy in naïve profilers, including factors that contribute to the enhancement or detriment of accuracy. Kocsis, Hayes, and Irwin (2002) researched if crime-themed television shows had the ability to decrease profiling accuracy by creating biased perceptions about criminal investigations or offenders. The researcher believes that while this is a unique idea, the results can lead to acknowledging which analytical or cognitive skills can develop over time, which sample group of participants produce the most accuracy when profiling, and which groups may be influenced in terms of media.

Measuring media influence and profiling accuracy may be problematic if there is not a high response rate from each participant group. Determining the effectiveness of profiling will not only depend on the participants, but also the review of previous literature. For this research, there were two categories, “what works” and “how well does it work.”

Purpose Statement

The purpose of this study was to investigate whether fictional media observed daily can influence a person’s perception to build a criminal psychological profile. Based on previous research studies, it has been reported that there can be inaccuracies in criminal profiling, yet there can also be a decrease in accuracy if the profiler has been exposed to crime-related media or television dramas creating potential bias toward the

offender. The researcher believes that the influx of fictional crime-related television dramas and other such media have caused for profilers to be unaware of how to determine who the next offender may be. Media viewing may also expose individuals to the idea of profiling and help to uncover the general concepts and ideas of this investigative technique, thus leading viewers to either advance their novice skills or acquire additional knowledge to produce criminal profiles – or at least make them believe that they or anyone else can be accurate in doing so.

The goal of this study was to examine the effects of watching fictional crime-related media on profiling accuracy. This study was specifically geared towards studying a sample of active and retired members of law enforcement at the local, state, and federal levels, as well as college students taking criminal justice and/or psychology courses. The study was tested to determine if media influences the ability of individuals to produce an accurate criminal profile. Utilizing the theory of Kocsis, Hayes, and Irwin (2002), it is believed that increased exposure to fictional media (including crime-related television dramas) will generate a bias that decreases profiling accuracy. The study tested the hypothesis by utilizing volunteers of student and current and retired members of law enforcement in local and state police departments as well as federal agencies. These participants were asked to watch one crime show, rate their self-exposure to fictional crime television shows, share their demographical information, read a solved homicide case and complete the *Offender Profiling Characteristics Questionnaire* based on the case given.

The ability to compare perception and profiling accuracies in regard to media influence and criminal profiling has been a subject that has a limited amount of previous

research. Due to the limitations of having fewer resources and studies to research, the author chose to create a new study, that combined previously used designs for similar profiling accuracy research with the author's ideas, in an effort to establish a study that produced a better validity in determining if fictional media influences profiling. Previous studies *have* provided fewer participants and those just with backgrounds in local law enforcement, psychology, and college students. The author believed that obtaining participants with backgrounds in local, state, and federal law enforcement and college students, that the accuracy and viability of the results could be more feasible to obtain. The researcher concluded that these participants provided a better context on profiling accuracy and media influence. The participants were also able to provide the researcher with a range of perspectives, demographics, educational backgrounds, professional backgrounds, and experiences which inherently increased the validity that previous studies tried to establish.

The current study used constructs such as questionnaires, a television show, and case synopsis. However, previous studies have only included one or two of these constructs to measure profiling accuracy and perceptions. Since all of these measures have not been previously used together in a study, previous results of these measures were not feasible to include as parameters of this study. Nevertheless, the results of this study yield towards highlighting issues within the field and continues the discussion for ongoing research on profiling accuracy and as the profiling construct to be used. This survey instrument was available in an online format, which allowed participants to complete it in a timely and easier fashion which was more pragmatic for participants and for data analyzation.

This study has been approved by Nova Southeastern University's Institutional Review Board (IRB) prior to data collection, especially since this study involved human subjects. The IRB process took approximately eleven weeks for final approval. The researcher then took approximately seven weeks for data collection to receive an adequate response of 123 participants.

An additional three weeks were taken to complete data analysis, finalize results, and complete the final chapters of the dissertation. The researcher believes that this was a feasible timeline for study completion. The researcher did not foresee any potential challenges with participants, because written approval of the project was received with anticipated start dates from the participants respective organizations, to aid in receiving IRB approval. However, the researcher was counteracted with delays and members from law enforcement agencies who were not able to participate due to time constraints and impeding investigations. Nevertheless, the researcher was able to gain participants from law enforcement agencies across the country due to hearing about the survey via word of mouth or email, consistent with snowball sampling.

The researcher was able adhere to providing confidentiality to participants and ensuring that their data was kept confidential during collection, analyzation, and result reporting, and will continue to be kept confidential under IRB standards. The researcher has also taken measures to ensure the confidential information of the case scenario was kept private. The researcher's goal of this dissertation was that the data yielded a strong validity and reliability for creating an impact in the criminal justice arena and the community, as well as for other researchers who may want to further research on the topics of crime, media, and criminal profiling.

Definitions

The technical terms that will be utilized throughout this dissertation are defined to provide the reader clarity.

CSI Effect. The phenomenon that claims television shows based on scientific crime solving causes jurors who are reluctant to vote to convict, when typically, forensic evidence is neither necessary or available.

Criminal Profiling. A technique where the probable characteristics of a criminal offender(s) are predicted based on the behaviors that were exhibited during the time of the crime.

Cultivation Theory. Details two components, (1) content of television programs present a systematic distortion of reality; (2) frequent exposure to distorted images will result in internalization.

FBI Model of Criminal Profiling. Used to detect and classify major behavioral characteristics of an individual based upon the analysis of the crime(s) the person committed.

Media. The main means of mass communication which collectively includes fictional and non-fictional items. The outlets include print, local and national news, television shows and movies, Internet, social media, blogs, music, and radio broadcasting.

Perception. A way of regarding, understanding, or interpreting something; a mental impression.

Social Constructionism. The ability to see reality in a different light and viewing knowledge as something that is socially created by people.

Chapter 2: Literature Review and Theoretical Framework

The Nature of Criminal Profiling

At its core, criminal profiling is an educated attempt to provide specific information about a certain type of suspect (Geberth, 1981). Vorpagel (1982) defines this as a biographical sketch of behavioral patterns, trends, and tendencies. Criminal profiling is one of the techniques used for law enforcement investigations to identify and apprehend suspected offenders. The technique has been utilized as a way of analyzing a crime scene and for the purposes of apprehending unknown suspected offenders before they are able to commit another offense of the same nature. While there are many different techniques law enforcement professionals use to investigate crimes, criminal profiling is one method that is the most publicized and in some cases scrutinized by scholars, the public, and even some members of law enforcement for its efficiency and accuracy.

To some, profiling may appear to be racially motivated. Racial profiling within law enforcement is defined as the idea that the members within an ethnic minority group are more likely to be stopped, frisked, searched, ticketed, and/or arrested in disproportionate proportions more than other races based primarily on their ethnicity (Joseph, 2005). According to Mucchetti (2005), racial profiling should not be generalized into criminal profiling because they are two different components. Racial profiling divides ethnicities into groups, a tactic to stereotype ethnicities and races, delivering the idea that one race may be prone to commit more crime or a certain type of crime than others. Whereas criminal profiling involves a multidisciplinary approach that examines and understands criminal behavior utilizing psychological and sociological perspectives.

Palmero (2002) describes criminal profiling in two stages. The first is called general profiling which is a part of a law enforcement officer's normal duties to investigate crime. The second is specific profiling which is a refined approach for law enforcement to evaluate investigations, evidence, and crime scenes. For a law enforcement officer, training in profiling is informal. It begins with training in the academy, where officers learn the basics in the foundation of procedures, laws, and skills necessary to investigate cases. It then continues as these individuals work various cases, learning the various elements of each crime and subject they encounter. Officers can receive formal training for skills in profiling through state law enforcement bureaus of investigation or the Federal Bureau of Investigation's (FBI) National Academy. The FBI states that this academy is a professional course of study for United States and international members of law enforcement who are nominated by their agency to provide them with knowledge and coursework in intelligence theory, terrorism and terrorist mindsets, management science, law, behavioral science, law enforcement communication, and forensic science to be able to improve the administration of justice within police departments and agencies worldwide (FBI, 2017). Members who attend this academy receive this vast array of knowledge, which they can carry back to their respective agencies to share with other individuals within their departments. With formal and informal training, members of law enforcement, as well as psychologists who aid in investigations, are enabled to develop their own style for their approach to their profiling technique. Owen (2004) explained that developing profiles are often most valuable in investigations where traditional methods are no longer effective in determining the characteristics of an unknown perpetrator. The information gathered by law enforcement

and/or psychologists lead those trained professionals to create an offender's criminal profile. Profiling methods often include an educated hypothesis of the unknown subject's most likely occupation, age range, socioeconomic background, family and relationship backgrounds, and other identifiable background, personal, or behavioral characteristics (Owen, 2004).

Historical Development of Criminal Profiling. Profiling can be defined as more than one type of investigative action (Gregory, 2005). Gregory (2005), shares that literature often uses a variety of terms to reference the investigative technique of profiling, such as: investigative psychology, criminal personality profiling, criminal psychological profiling, forensic psychiatry, psychological profiling, behavioral profiling, criminal behavioral analysis, and offender profiling, among many others. The nature of criminal profiling is most known as the practice of predicting an individual's behavioral, personality, and demographic characteristics based upon evidence received during an investigation or at a crime scene (Douglas, Ressler, Burgess, & Hartman, 1986).

Special Agents Howard Teten and Patrick Mullany have been credited with creating the earliest behavioral analysis (or profile) for cases that were difficult to solve. While criminal behavioral analysis or profiling is not a new concept, in the 1940s and 1950s, George Metksy also known as the "Mad Bomber" was profiled by a local New York City criminologist and psychiatrist – which aided in his eventual capture. According to the Federal Bureau of Investigation (FBI), the most prolific serial killer in United States history known as Theodore "Ted" Bundy, was profiled from a psychological assessment in 1977 by two FBI agents Howard Teten and Robert Ressler.

Historically before the aforementioned cases, the most prolific serial killer, Jack the Ripper, who was known for murdering multiple women during the 1800s in England, was essentially one of the first famous cases to be profiled. According to Miller (2014), the majority of the information that law enforcement agencies use to apprehend serial killers dates back to 1866, when Von Krafft-Ebing published *Psychopathia Sexualis*, where he detailed characteristics of serial killers. Some of these characteristics Krafft-Ebing stated offenders have included: a tendency of lying, humiliation or degradation of victims, taking souvenirs from crime scenes, and careful planning in avoiding detection. These signature characteristics Krafft-Ebing detailed for understanding serial killers have been noted to be the basis of modern criminal profiling in all types of cases (Miller, 2014).

Behavioral Science Unit. The two leading law enforcement agencies investigating crimes that utilize definitions, typographies, and motives to characterize a criminal profile include the National Center for the Analysis of Violent Crime (NCAVC) and the FBI's Behavioral Science Unit which is also known as the Behavioral Research and Instruction Unit (BRIU) (van Aken, 2015). In the United States, profiling originated officially within the FBI's Behavioral Science Unit (BSU) in the 1970s. It has also been known as the Behavioral Analysis Unit (BAU). During its inception, agents within this unit were tasked with obtaining and cataloging information using information received during interviews with incarcerated offenders who were convicted of various crimes. The results of the interviews were published for law enforcement in order for other police officers and investigators to be aware of known characteristics of various types of offenders, which aided in the profile creation for other cases.

Notable Profilers. Former Special Agent and Unit Chief with the FBI, John Douglas, is credited with becoming one of the first criminal profilers. Douglas (2003) wrote that he began his career within the FBI with an assignment on Detroit, Michigan's bank robbery investigations. After several years within the agency, Douglas was transferred to the Behavioral Science Unit in 1977. There, he and other agents were tasked with interviewing notorious serial killers, including Charles Manson, David Berkowitz, Ted Bundy, James Earl Ray, John Wayne Gacy, and Ed Kemper. Douglas formulated his theory on patterns that existed between each of the individuals he interviewed throughout his early career within the BSU and came to the realization that these behavioral and criminal patterns existed between all crimes. While Douglas' methods were first overlooked and ignored by those within the FBI and law enforcement community, eventually he gained support when fellow FBI agents viewed the validity within his methods. As being one of the first known credited FBI criminal profilers, Douglas continues to share his unique approach and 25-year history on entering within the minds of criminals to assist and solve investigations that had the potential to become a cold case if investigators did not have a criminal profile to rely on. His experience and profiling methods continue to prove why he is nicknamed "The Mindhunter" and why he and Robert Ressler continue to be the basis for fictional agents on television shows like *Mindhunter* (2017) and *Hannibal* (2013), as well as movies such as *Silence of the Lambs* (1991) and *The Lovely Bones* (2009).

Robert Ressler is a former FBI Special Agent who was instrumental in developing the BSU into what it has become today (Ramsland, 2006). Ressler had a hand in developing the many practices that are utilized in criminal profiling. Together with

Douglas, he aided in the organization of engaging in 36 interviews of incarcerated serial killers to find the various parallels between a criminal's crime, motives, and background. His interviewees included Jeffery Dahmer, Richard Chase, and Ted Bundy. Pistorius (2012) stated that Ressler has often been credited with coining the term "serial killer." Along with his contributions to the world of criminal profiling, Ressler and Pierce Brooks were instrumental in the establishment of the Violent Criminal Apprehension Program (ViCAP), which is a centralized computer database that contains information from local, state, and federal law enforcement agencies on unsolved homicides (Howlett et al., 1986). The program utilizes the basic profiling methodology, working on the basis that the majority of serial killers claim similar victims with similar *modus operandi* (MO) or method of operation. This idea, similar to criminal profiling, aids law enforcement in determining who a perpetrator of a crime might be by correlating known information with various agencies and departments.

Popularity of Criminal Profiling. The method of profiling is highly publicized and has often left individuals being sceptics of this type of art and science. American television shows such as *Criminal Minds* (2005) and *Mindhunter* (2017) perpetuate the popularity of criminal profiling and criminal profilers in general. Shows such as these often allow viewers to believe that a criminal profile can be derived from a single person or team of experts within a short period of time, often leading to a single perpetrator. However, Douglas and Olshaker (1995) argued that the main objective of profiling is to narrow a law enforcement agency's focus within a suspect pool and not toward a single specific offender.

Usage of Criminal Profiling. Profiling is used by local, state, and federal agencies to determine the identity of an offender, usually after an investigator has exhausted all resources and leads within an investigation. This analysis of the case and ultimate profile of the possible offender allows law enforcement to revisit suspects or create additional suspects to interview.

Douglas and Olshaker (1999) remained committed to the theory that “criminal profiling is used mostly by behavioral scientists and the police to narrow down an investigation to those who possess certain behavioral and personality features that are revealed by the way the crime was committed ... the primary goal is to aid local police in limiting and refining their suspect list so that they can direct their resources where they might do the most good.”

Behavior and the *modus operandi* are two items that are connected with the use of criminal profiling. The *modus operandi* allows for investigators to find clues from a particular crime scene or victim, which suggest whether or not the offender is more likely to repeat the committed crime using a similar or particular pattern (Grubin, 1995). The method of operation includes knowing the location of the attack, the weaponry used, the type of crime committed, characteristics of the victim, and the accessibility of the unknown subject's access to commit the crime. This idea is crucial in linking cases to build a criminal profile. Developing a criminal profile for an unknown suspect allows for not only law enforcement to narrow the suspect pool, but also opens the door for members within the community where the crime took place to be on the lookout for an

individual who matches the offender. This tactic allows the public to be more aware of their surroundings and to be more vigilant about individuals who may approach them, whether they are known or unknown to them.

Ted Bundy. Theodore “Ted” Bundy is known as a serial killer who murdered at least 30 women during the 1970s along the western coast of America. The FBI’s BSU developed a profile to warn young women who had dark hair and wore it parted down the middle, because they would resemble the women who were Bundy’s victims. The criminal profile of Bundy, was marked as the first instance where profiling had been utilized to warn the local members of the public about the details of a dangerous unknown subject (Philbin & Philbin, 2009). Since Bundy’s crimes spread across the west coast of the United States, the FBI began to believe centralized databases for all law enforcement agencies to share data needed to be created, proving the use of profiling and the need for ViCAP.

Effectiveness of Criminal Profiling. While profiling has been criticized by some, law enforcement personnel have found it to be useful in solving several cases. Experts such as Robert Ressler, Howard Teten, John Douglas, and Robert Keppel have successfully utilized profiling techniques to apprehend offenders who have evaded law enforcement. According to Theoharis (2000), separately each of these profilers have numerous years within law enforcement, either as officers (local or federal), and within the fields of criminal justice, forensics, or psychology.

Alison et al. (2003) tried to determine the accuracy and content of criminal profiles, which required police and forensic professionals to rate offender profiles. In this study, the results indicated that a professional profile was judged equally accurate in

comparison to a counterfeit profile. The researchers determined that despite empirical support, law enforcement professionals continue to have an apparent trust in any item that is labeled as an offender profile.

Research gearing toward the accuracy and effectiveness of criminal profiling is still limited, even though law enforcement agencies continue to utilize this as an investigative tool. For a brief period, law enforcement agencies decided to cease the use of profiling as an investigative tool after psychiatrists and psychologists were unable to accurately profile a notorious serial killer, the Boston Strangler (Schefflin, 1998). However, Schefflin (1998) specified that when murders continued to grow “stranger” in nature and appeared to be more difficult to solve, law enforcement agencies resumed profiling techniques.

The case depicting the Atlanta Child Murders, committed by Wayne Williams was profiled by John Douglas. His criminal profile on the then unknown offender was controversial within the community because Douglas did not believe the crimes were racially motivated, but his profile was effective and accurate in solving the crime. The Atlanta Child Murders was described as the case between the late 1970s and early 1980s where several bodies of African-American children, who were mostly males, were found discarded throughout the City of Atlanta, Georgia. Douglas created a criminal profile after the 16th body had been discovered, when local law enforcement were desperate to solve a case with no leading information. Douglas suggested in the profile that the unknown offender was a male, but not of Caucasian descent because the victim’s bodies were discovered in predominantly African-American communities – meaning the offender had to either be familiar with the neighborhoods or be someone who would

stand out within the community because they would not appear as though they belonged (Ramsland, 2006; Philbin and Philbin, 2009). Douglas also suggested that the unknown suspect's next victim would be dumped in the river. The information revealed from Douglas' criminal profile led investigators to Williams who was apprehended because he was caught in the act of dumping another victim. Even though Douglas' profile was accurate in securing Williams' apprehension, he does not believe that Williams is the responsible party that murdered all 22 victims found.

Cognitive Aspects Involved in Criminal Profiling. Kocsis et al. (2005) states that in order to create a profile, cognitive processing needed. Cognitive processing is related to mental associations with awareness, creating, judging, learning, memory, perceiving, reasoning, and recognition. Hazelwood et al. (1995) argue that profilers may need special skills in order to identify certain characteristics to build an accurate profile. These authors believe that there are four different attributes that are essential to an individual being able to profile: (1) the appreciation of the psychology of the criminal, which leads to the ability to understand the type of individual who would commit a particular crime; (2) investigative experience; (3) the ability to think objectively and logically, which means an individual should be thinking rationally and not let personal feelings obscure their judgement; and (4) intuition – the “sixth sense” about crimes and criminals (Hazelwood et al., 1995).

Critics of Criminal Profiling. While profiling has been noted as an art as well as a science, researchers of the subject have criticized why the investigative results are inaccurate in some cases. Critics agree that there appears to be more of an art form to criminal profiling, even though its intent has a scientific base. Snook et al. (2008) argue

whether criminal profiling is an illusion and that people have just been led to believe that profiling works because there is no significant empirical evidence that supports it. These authors believe that profilers overemphasize their predictions leading to why it should not be utilized as an investigative tool in crime solving until adequate support has been adapted. The authors further state that profiling is and will continue to be illusory due to the lack of theoretical grounding and support; and that it should be practiced critically because of its previous efforts in misleading law enforcement toward the wrong offender. Even though there are critics to profiling, the book *In the Minds of Murderers*, suggests that from the most insignificant clues, an experienced profiler can still determine an offender's sex, age, physical appearance, and the car they drive (Roland, 2017).

Types of Profiling

Profiling has been defined by several names, mostly which have been based upon the scholar, investigator, or professional's background. These typologies include offender or criminal profiling, psychological profiling, geographical profiling, criminological profiling, behavioral profiling, criminal personality profiling, socio-psychological profiling, and criminal psychological profiling. In this dissertation, the terms offender / criminal, psychological, and geographical profiling will be used.

Offender / Criminal Profiling. Offender profiling was devised as a term that the FBI used in the 1970s to describe their work on criminal investigative analysis (Canter, 1994). Kocsis (2008) defines criminal profiling as a technique where the probable characteristics of a criminal offender or offenders are predicted based on the behaviors that were exhibited during the time of the crime.

Psychological Profiling. Kocsis and Cooksey (2002) describe psychological profiling as an investigative technique involving the analysis of crime scene evidence and criminal behaviors to ultimately develop a description of the probable offenders who could have committed the crime(s) in question. This type of profiling can be dated back to the 1450s in the era of European witch hunts. Keppel (2006) and Turvey (2008) detail that the Catholic church blamed witchcraft for society's many problems and in order to remove these problems, a profile was created to identify which individuals were witches. This profile included females with no children, a birthmark of the devil, of poor status, a keeper of pets known as familiars, sufferers of mental illness and hallucinations, and has knowledge of herbal medicines.

Geographic Profiling. Geographic profiling is an investigative technique that utilizes the locations of crimes, which are connected, to determine the most probable target area that an offender resides in (Harries, 1999). Geographic profiling, also known as crime mapping, is generally used in crimes that involve robbery, rape, arson, serial murder, terrorism, and bombing cases. However, Harries (1999) states that geographic profiling can also be utilized in singular crimes that involve multiple crime scenes or those that contain significant geographical features that have the ability to be profiled. The use of geographic profiling allows investigators to determine whether or not the crime was opportunistic, or if the offender felt comfortable with his or her surroundings due to the familiarity of the geographic location. Geographic profiling is often paired with offender / criminal profiling, as well as psychological profiling to aid in developing the best profile to catch an offender (Wortley & Mazerolle, 2008).

Types of Media

Media can include fictional and non-fictional items found in print, local and national televised news, television shows and movies, music and radio, and the Internet to include social media and blogs. This media can be further broken down into the world of politics, crime, drama, news, comedy, and other genres. McGregor (1993) describes a synopsis of the literature in relation to media, crime, and policing which includes: the discrepancies between official accounts of criminal activity and the press report of crime; media over reporting serious crimes; the media can homogenize crime by focusing on a limited range of crimes, mainly violent crimes, and drawing facts from a limited range of sources (court and police reports); and the press can concentrate more on crime reportage on events rather than the issues or facts.

Print: Magazines, Newspapers, and Books. Print media can be classified into three general categories which include magazines, newspapers, and books. Wood and Barnard (2010) stated that print media has dated back to the first known print book in 868 A.D., but claims researchers have concluded that there were books printed earlier. Print media is known to be an excellent means to communicate the news, stories, and events, which often place an emphasis on focusing on various angles and topics.

Local and National Televised News. Local television news stations will follow national and regional news, but will tend to localize their news stories to encompass everyone. Local and national television news stations will present information that will be “straight to the point” because the news will be easily sharable because it can be short and also utilize soundbites (Feng, 2016). National television news programs often display

stories and interview individuals who are considered experts in their field, or those who have strong views about the subject matter (Hume, 1995).

Television Shows and Movies: Fiction and Non-Fiction. There are an abundance of television shows and movies in various genres that are either fictional or non-fictional based. Movies and television shows have the ability to stereotype, generalize, and represent and misrepresent different races and ethnicities in various portrayals. The conceptions about groups of individuals that are portrayed in these programs can cause profiling of these groups to be inaccurate (Kappeler and Potter, 2006).

Music and Radio. Radio stations feature news segments that are either live or taped over the air at any point of the day. Currently, music and news can be heard utilizing conventional radio, satellite radio, streaming radio, and podcasts. Broadcast of live and recorded music and media segments began to reach large audiences around the 1920s. Over the years, this has enabled live and recorded media to be listened to utilizing different audio formats which have evolved over time. In the last 70 years this evolution has included vinyl records, 8-track tapes, cassette tapes, floppy disks, compact disks (CDs), MP3, streaming media, and digital downloads (Günther, 2016). Radio and music are two examples of media intended to reach vast audiences of various backgrounds, musical, and political taste. Radio broadcasts now include stations that are geared toward a political climate or criminal justice.

Internet, Social Media, Blogs, and Podcasts. The Internet, social media, blogs, and podcasts each have the capability to directly communicate news, messages, events, articles, and other information to the public locally, nationally, and worldwide, as well as to other media outlets. This direct line of communication to the public has been

perpetuated with the use of computers, smartphones, tablets, smart watches, and other mobile devices. News outlets such as CNN, the New York Times, local news stations, and others have created applications (apps) for use on mobile devices for users to be able to retrieve current events faster than by watching it on television. Popular social media and blog websites such as Facebook, Instagram, Tumblr, WordPress have also created apps for use on mobile devices for users to be able to communicate easily and more frequently with each other. Podcasts are digital audio files made available on the internet to download on mobile devices or computers. With these types of networking opportunities, individuals also have the capability to share information that is either factual or non-factual, which means this information will not always be verified.

Media and Crime

How Profiling is Covered in the Media. Surette (2011) describes the relationship of the criminal justice system and media as a forced marriage. Within society, the media provides an immediate outlet of the current and past events, as well as fictional and non-fictional shows that can be accessed through the television or Internet. Society's interest in profiling has been sensationalized and capitalized on throughout media through movies, television shows, books, and journalism. Movies such as *The Silence of the Lambs* (1991), *Copycat* (1995), *Mindhunters* (2005), and *The Bone Collector* (1995); television shows such as *Criminal Minds*; and books such as *The Anatomy of Motive* by John Douglas have each portrayed the basics of criminal profiling.

Profiling can also be covered in the media negatively. For example, if African Americans are mostly portrayed as criminals in fictional television shows, then one could be led to believe that this group is more likely to be characterized and criminally profiled

as the offender for certain crimes. This can also be related to individuals of Middle-Eastern descent being portrayed as terrorists in the media. If society believes this to be true, then when a new case arises, the wrong individual may be labeled as the offender.

Notable criminal profilers such as John Douglas, Robert Kessler, Robert Keppel, Howard Teten, Patrick Mullany, Dayle Hinman, and Candice DeLong have long shaped the ideals of profiling. Some of these individuals have also been portrayed in fictional television shows, films, and novels. As mentioned previously, John Douglas has been portrayed to resemble the characters in the *Silence of the Lambs* as Jack Crawford, *Criminal Minds* as Jason Gideon, and in *Mindhunter* as Holden Ford.

Besides media creation to portray investigators and profilers, there are several fictional types of media that display portrayals of notorious offenders. This has included films and books about Dennis Rader, the infamous BTK Killer or BTK Strangler who murdered 10 individuals from 1974 to 1991 in Wichita, Kansas (*The Hunt for the BTK Killer (2005)*); George Metesky the Mad Bomber who planted bombs around New York City in the 1940s and 1950s (*Incendiary: The Psychiatrist, the Mad Bomber and the Invention of Criminal Profiling* by Michael Cannell (2017)); Ted Bundy who had a killing spree that lasted from 1974 to 1978 across seven states (*The Deliberate Stranger (1986)*); Wayne Williams who was known for the Atlanta Child Murders in the late 1970s (*The List* by Chett Dettlinger (1984)); Ed Gein known as the Butcher of Plainfield who was a murderer and body snatcher from the 1940s to 1950s (*Psycho (1960)*); and the Zodiac Killer who murdered victims between 1968 and 1968 in California, where the killer's identity remains unknown (*Zodiac (2007)*) (Ramsland, 2006; Philbin and Philbin, 2009; Rosewood, 2017).

The Stories Television Tells. Fictional television has the ability to shape our perceptions and personal values, giving society continuous definitions on what normalcy should be defined as. Shrum and Lee (2012) describe how the cultivation theory has two components that relate media to various outcomes. The first component explains that the content of television programs present a systematic distortion of reality. The second component explains that frequent exposure to distorted images will result in internalization. Since television is filled with various types of shows which include fiction and non-fiction depicting dramas, comedy, news, sports, and reality television – as a society we have many things that we can internalize which we begin to accept and continue to watch. According to Shrum and Lee’s theory, as individuals watch more television, their ideas, attitudes, beliefs, and values will collide to be more consistent to what is portrayed on television. The two components the authors described enables their theory, which includes motivation and the ability to process. If an individual cannot depict reality or does not have the motivation to search their memory or other outlets for relevant information, then this can lead one to be subjected to believing that all media (real and bogus) is true. This idea details the cultivation theory in relation to media and how it shapes perceptions within all individuals. Since it takes motivation and the ability to process to determine what is or isn’t real, bogus media can simply become *factual* when individuals choose not to sift through the various types of media.

The CSI Effect. The “CSI Effect” is defined as the phenomenon reported by prosecutors who claim that television shows based on scientific crime-solving causes jurors who are reluctant to vote to convict when typically, forensic evidence is neither necessary nor available (Cornell Law School, 2017). This phenomenon began with

popular television shows such as *CSI: Crime Scene Investigation*, *Law & Order*, *Cold Case*, *Criminal Minds*, *Numb3ers*, *Bones*, and others, allowing viewers to watch crime scenes being processed and investigated to solve various crimes in an hour or less. These shows distort the portrayal of the criminal justice system by producing “reality-based” crime fictional drama, where some shows utilize stories based upon news headlines. Shows such as *Dateline*, *Snapped*, and *48 Hours Mystery* are programs which show viewers real cases after all the crime scene evidence has been collected and other content that incorporates all aspects of the criminal justice system, within a one or two-hour timeframe. Each of the shows, whether fiction or those based upon real cases, all show the criminal justice system processes at an expedited rate. The expedited timeframe of these programs, which can omit critical criminal justice processes, is what causes attorneys, judges, journalists and reporters, jurors, and other viewers to wrongfully acquit or convict defendants based upon what they have learned from popular television shows. According to Shelton (2008) today’s jurors expect a DNA test, to have fingerprints for every case, and for law enforcement to utilize the best and most advanced technology possible like seen on television. However, these tools may not always be available to law enforcement, prosecutors, or defense attorneys.

Criminal Profiling Sensationalized in Media. Media has created a false sense of reality that criminal profiling is useful in all types of crimes. Criminal profiling has been mostly useful in cases that involve arson, hostage negotiations, kidnappings, rapists, serial bombings, serial killers, and sexual related murders. Since profiling is sensationalized in various television programs, movies, books, and magazines, the average individual may see a case and believe they know exactly the type of person who

did it, based on what previous shows display. While some television shows, such as *Criminal Minds* and *N.C.I.S.*, have consulted with the FBI and other law enforcement agencies to obtain some accurate information, these shows still neglect details – all while fast tracking information to give the viewer a thirty-minute-to-one-hour show.

Social Constructionism. The concept of social constructionism is defined by Surette (2015) as the ability to see reality in a different light and viewing knowledge as something that is socially created by people. Social constructionism allows individuals to tacitly agree to view the world in a specific way. This concept can be related to crime in the way that laws are enforced throughout society. In terms of criminal profiling, if society has an agreed social construct of who commits certain crimes, their behaviors, backgrounds, and target environments, then it is more likely that profiles will be geared toward what is believed to be true. As a society, we have the ability to obtain social constructs through four different sources: significant others (peers, family members, friends), personal experiences, other social groups and institutions (unions, schools, government agencies, churches), and through the media (Surette, 2015).

Popular Crime Series with Criminal Profiling

Crime television shows have been popular for several decades, and continue to hold its popularity within society by creating new shows geared towards criminal procedurals (Litcher et al., 1994; Dowler, 2016). Estep and MacDonald (1984) stated historically at least one-third of prime-time television has been devoted to crime related shows. This concept continues to be true today, *Newsweek* published an article stating that true crime documentaries and crime fiction shows are at an all time high with major networks like ABC, CBS, FOX, and NBC as well as with streaming services like Netflix,

Hulu, and Amazon (Watling, 2019). These procedural shows allow the viewers to receive a believable and realistic view of how members of law enforcement and the criminal justice system will solve a particular case or how it can be received in court. While these shows try to emulate a likeness of the criminal justice system, they do not provide complete accuracy, leaving viewers to speculate or believe what is seen on television can be reality. Shows like *Law & Order*, *Criminal Minds*, and *Live PD* continue to grow and why new shows like *The Fix*, *For the People*, *The Act*, and others will continue to emerge and thrive.

Criminal Minds. *Criminal Minds* is a television show known as an American police procedural crime drama that first premiered in 2005 on the CBS television network. This show is based on the Federal Bureau of Investigation's (FBI) Behavioral Analysis Unit (BAU), focusing on the ability of special agents in the unit to profile criminals on various types of cases to identify an unknown subject, or "unsub" as they are generally referred to as in the series.

The CBS Network has described *Criminal Minds* as a series revolving around an elite team of FBI profilers who analyze the country's most twisted criminal minds, anticipating their next moves before striking again. The team has changed during years of the series, but has included a group of special agents from various background to include: FBI BAU founder, former Army ranger, former FBI Fugitive Task Force, former prosecutor, forensic psychologist, expert in sexual offense crimes, communications, technical analyst, Interpol profiler, linguistics, special operations, undercover agent, as well as an agent with three bachelor's degrees in psychology, sociology, and philosophy and three doctorate degrees in chemistry, engineering, and mathematics. The network

further states that as the team evolves together, the team will continue its dedication to using their expertise to locate predator's motivations and to identify their emotional triggers in attempts to halt the suspects acts (CBS Network, 2018).

Criminal Minds has produced multiple spin-offs in its franchise, including *Criminal Minds: Suspect Behavior* (2005), *Criminal Minds: Beyond Borders* (2016), a *Criminal Minds* (2017) South Korean series, as well as a video game. Jim Clemente, a retired FBI supervisory special agent, profiler, and former New York City prosecutor, is one of the technical advisors and free-lance writers for *Criminal Minds*, as well as other crime shows which include *Secrets & Lies* (2015) and *Those Who Kill* (2014) (Clemente, 2015). With the aid of Clemente, shows like *Criminal Minds* have expert opinions on how to create and produce each episode that enables the ability to resemble FBI functionality on how profiling would be conducted.

Utilizing these expert opinions on *Criminal Minds* and other shows and films of the same nature, can enable viewers to believe that these media sources have some validity to them, which can perpetuate the ideas of the CSI Effect and social constructionism. The creation of new beliefs can be formed in the minds of the viewers watching these crime procedurals because of the spark created by these expert opinions and script writers who suspend or stretch reality. However, even though the show or film may be deemed as fictional, in some cases the viewer can still believe that the police procedures, amount of time to solve a case, and/or the collecting and analyzing of evidence is still valid as presented on the fictional program as it is in real life. The distortions on these fictional programs, whether big or small, in comparison to what happens in real life during law enforcement investigations, may continue to contribute to

the false beliefs and narratives about crime among viewers. This is only true if viewers cannot separate the distortions from reality, which will lead towards internalizing what they watch as what should be the norm.

Mindhunter. *Mindhunter* is a television show that first premiered October 2017 as a Netflix original series created by Joe Penhall. The show is adapted from the book “Mind Hunter: Inside the FBI’s Elite Serial Crime Unit,” written by former FBI profiler John E. Douglas and writer Mark Olshaker (Patterson, 2017).

Netflix states that the show’s premise is based in 1977, which is deemed the earliest days of criminal profiling as well as criminal and forensic psychology within the FBI. *Mindhunter* revolves around two FBI agents, Holden Ford and Bill Tench, and psychologist Wendy Carr. The team interviews imprisoned serial killers to determine and understand their mental processes with the aim of applying the knowledge to solving ongoing criminal cases (Chitwood, 2016). The show itself is based upon real individuals. The character Holden Ford is based on FBI Special Agent John E. Douglas, Bill Tench is based on FBI Special Agent Robert K. Ressler, and Dr. Wendy Carr is based on Dr. Ann Wolbert Burgess, a professor who has collaborated with the FBI Behavioral Science Unit and has procured grants to conduct research on child molesters, serial murders, and serial rapists to treat survivors and study the criminal mind’s thought process. The serial killers featured in the show are also modeled on actual convicted criminals and the show script includes prison scene dialogues depicted from real interviews (Holter, 2017; Tallerico, 2017).

Since *Mindhunter* depicts actual profilers, a psychologist, and serial killers, it is interesting to learn that the three main characters the show is based upon actually

collaborated on a research project together in 1988 entitled “Sexual Homicide: Patterns and Motives.” Their breakthrough study focused on the minds of homicidal psychopaths. This show displays what these three individuals, along with many others, have based their profession on, understanding and profiling the criminal mind. In the show *Mindhunter*, several serial killers have been depicted, including Dennis Rader as the “BTK Killer”, Ed Kemper as the “co-ed killer”, and Jerry Brudos as the “lust killer” and “shoe fetish slayer” (Tallerico, 2017).

Law & Order. *Law & Order* is a television series based on police and legal procedures. The show began in 1990 and expanded into a franchise with spin-off series to include *Law & Order: Special Victims Unit (SVU)* (1999), *Law & Order: Criminal Intent* (2001), *Law & Order: Trial by Jury* (2005), *Law & Order: UK* (2009), *Law & Order: LA* (2010), and *Law & Order: True Crime* (2017). Each episode of the scripted original series created by Dick Wolf follows detectives within the New York Police Department as they investigate various types of crimes. The spin-off series are dedicated to specific crimes, *SVU* focusing on special victims and sex crimes, *Criminal Intent* focusing on major cases and white-collar crimes, *Trial by Jury* focusing on the criminal trial of the accused, *UK* is a British adaptation which focused on all crimes within the United Kingdom, *LA* focused on all crimes within Los Angeles, and *True Crime* is an anthology series with its focus geared toward non-fictional cases.

In the *Law & Order* franchise, a criminal profiling element was added to the *Law & Order: SVU* series beginning in its second season. On the show, the fictional FBI Special Agent, Dr. George Huang, was added to assist the detectives in solving cases as

the resident forensic psychiatrist and criminal profiler. The Dr. Huang character provides detectives with expert analysis of various special victim crime scenes and suspects.

Previous Research

Pinizzotto and Finkel (1990) derived a similar study that assessed the accuracy of completing an offender questionnaire, the quality of a narrative criminal profile, processing differences when creating a profile, and the ability for trained detectives, FBI profilers, clinical psychologists, and college students to recall case information. In this study, the researchers provided each group of participants detailed case materials from two solved crimes and asked the participants to write profiles of the type of individuals who were most likely to commit such crimes, murder and rape. These profiles were compared to the actual profiles of the offenders who were convicted of each crime. Pinizzotto and Finkel found that the results were mixed; trained profilers wrote detailed and longer profiles and their profiles of rapists were more accurate than any other group. However, the researchers found that trained profilers fared no better on average than non-profilers with profiling murder.

Kocsis (2003) replicated Pinizzotto and Finkel's study and decided to expound on their work. He decided to use case studies from solved murder and arson investigations to test profilers, psychologists, police recruits, experienced police personnel, arson investigators, psychics, undergraduate students in science, and random control participants. With this study, Kocsis chose the various participants for the different skills sets needed for profiling – behavioral knowledge (psychologists), intuition (psychics), investigative experience (trained and experienced police, profilers, and arson investigators), and logical reasoning (undergraduate science students). Kocsis found that

profilers uniformly made more accurate predictions about offenders than any other group, however, they were not uniformly good at their jobs. He found that profilers also had the highest statistical variation among all the groups in terms of accuracy. Whereas, undergraduate science students were rated as the second-best, resulting in Kocsis believing logical reasoning is an important skill set required for profiling.

Research Question

The researcher sought to answer the following research question throughout the course of this dissertation study.

RQ: Does exposure to media and fictional information or crime television dramas cause a positive or negative impact for investigative techniques in profiling, a secondary question would be to investigate if the participants status as either students, active or retired law enforcers mediates the relationship.

Chapter 3: Methodology

In this chapter, the author will discuss how the data for this study was collected, analyzed, evaluated, and how it will be distributed for future research purposes. Criminal profiling has been recognized worldwide as one of law enforcement's investigative tools to apprehend unknown offenders. This research focused on the comparison of perceptions of criminal profiling among law enforcement professionals and non-professionals. The researcher believed that exposure to media would either influence criminal profiling and investigations with increasing accuracy or encourage the perpetuated stereotypes. This idea was explored further by comparing the participants views on media, criminal profiling, crime, fictional television, and a real case to understand how their perceptions may be influenced in creating their own criminal profile. The researcher also explored participant demographics such as work experience, education history, gender, and age, which were important to distinguish and analyze in the results phase.

Participants

This study utilized a multiple regression analysis approach to measure the perceptions, data, and knowledge of law enforcement professionals along with college students and criminal profiling. Systematic random sampling and voluntary sampling occurred to obtain participants, each participant should have an equal chance of being selected to participate within the research. Systematic random sampling occurred to target the chiefs and/or heads of departments and organizations, for these respective individuals to participate as well as distribute the survey to their entire department, organization, or training environment. This led to voluntary sampling and the snowball method, participants were to self-elect themselves into the study based on their interest in the topic

and each participant or even non-participant was able to forward the information to other individuals to complete the online survey instrument.

This research featured participants from various local, state, and federal law enforcement agencies around the country, retired law enforcement professionals from various law enforcement agencies, and students from Florida Atlantic University's undergraduate criminology and criminal justice program who were enrolled in a crime and media course. The individuals within these groups were recruited as participants for the sample due to their professional or academic relationship held with each law enforcement agency and university.

The participants were recruited by systematic and voluntary means through each of the various sources. The researcher specifically asked for participants at the FBI to be derived from the new hire investigative specialist class. New hires in this class normally have classes that range between 25 to 40 individuals, all the individuals in the class were asked to participate in this study voluntarily by the training course chair. The researcher also specifically asked for the Gainesville Police Department to participate, which included the police chief being able to recruit all of the law enforcement officers assigned within the department. According to their statistics, approximately 120 individuals are currently sworn within this department. The police chief asked all the officers to participate in the study voluntarily.

Active and retired law enforcement professionals from local and state police departments and federal agencies were also recruited through organizations that contain active and retired officers across the globe, such as the International Association of Retired Law Enforcement Officers Incorporated (IARLEO), Fraternal Order of Police

(FOP), the National Organization of Black Law Enforcement Executives (NOBLE), FBI Retired, the National Association of Police Organizations (NAPO), the National Latino Peace Officers Association (NLPOA), the International Crime Scene Investigators Association (ICSIA), the Federal Law Enforcement Officers Association, the Federal Criminal Investigators Association, International Association of Women Police (IAWP), the Society of Former Special Agents of the FBI, the National Sheriffs Association, and the National Asian Peace Officers Association (NAPOA). Their participation was purely voluntary, and these individuals also had the ability to recruit other retired and active law enforcement professionals for this study via word of mouth or electronic communication which is consistent of snowball sampling.

Undergraduate students who were taking a crime and media course at Florida Atlantic University were also asked to participate through the researcher's dissertation chair who teaches criminal justice courses. Each of these groups being recruited were all asked to do so on a voluntary basis.

The researcher aimed to obtain at least 30 individuals from each group to participate in this study. The three groups included students, active law enforcement, and retired law enforcement. Each of the respective participant sources (i.e. police chief, training chair, executive member, course instructor), were either contacted via phone or sent information electronically which contained the foundation of the research, its purpose, and its importance to criminal justice research to obtain their agreement to conduct this research within their respective agency or class. While 30 participants suggests a small sample size for each group, equaling 120 participants total, the researcher did not believe that it was too small to prevent the findings from being

extrapolated to produce valid data results. The researcher was able to gain a total of 123 responses for the study, including 4 individuals who opted to discontinue the survey, leaving the researcher with 119 participant responses to analyze.

Instruments

The participants within the sample were provided with a constructed questionnaire which included media exposure and demographical data, as well as a television show to watch. This survey instrument was available in an online format utilizing the SoGoSurvey platform, allowing for participants to complete it in a timely and easier fashion, rather than trying to gather participants into various sessions to present the survey instrument in a classroom format. The researcher created questionnaires based upon the academic literature presented in Chapter 2. The questionnaires utilized a Likert scale for certain questions, this required participants to choose answers that ranged from Strongly Disagree – Strongly Agree and those that gave scaled choices for television consumption questions. The researcher also included a questionnaire adapted from Kocsis et al. (2000), which was used in a similar study, to determine the accuracy of criminal profiling – paired with a case study so that the participants could generate a profile on an offender with the provided case information. The components of the survey instrument along with the research consent form and debriefing information in its entirety can be reviewed in Appendices A-G. The components of the survey instrument were chosen to expound on previous studies which have used these measures separately. The researcher believes that by using each of the components, the researcher would produce a better validity toward determining accurate profiling abilities with exposure to fictional media as a determining factor. The

questionnaires and tests that were utilized during this research are described below to provide the reader clarity.

Participant Demographics Questionnaire. This questionnaire, created by the researcher, asked participants to report their demographics which included race/ethnicity, age and gender. This questionnaire also asked for participants to disclose their current occupational status, educational status, degree earned and academic major. Additionally, questions related to the participant's overall television viewing status, whether fictional or non-fictional, were also asked.

Participant Media and Crime Related Exposure Questionnaire. This questionnaire, created by the researcher with adaptations from Lutfy (2013), asked for participants to report the number of hours they spent watching crime-related television programs, as well as time spent reading crime-related books or magazines. This questionnaire can be viewed in Appendix C. Two of the questions included three of the more popular fictional crime-themed shows, most related to profiling – *Criminal Minds*, *Law & Order*, and *CSI: Crime Scene Investigation*. Questions also included participants self-reported frequency of their television viewing and asked which specific shows participants may watch that are crime-related. Participants who watched crime-related shows frequently were placed in a high category, whereas those who watched crime-related shows less frequently or not at all were placed in a low category.

Profiling Offender Characteristics Questionnaire. Kocsis et al. (2000) created a 33-item profiling questionnaire that was adapted and utilized in this study, which can be reviewed in Appendix B. This questionnaire asked for participants to indicate characteristics of the offender which included physical characteristics, social history,

cognitive processes, psychological/behavioral state, and possible prior convictions of the offender. Since the case has already been solved, the correct answer to each question was based upon the characteristics of the known offender. Utilizing similar methods of previous studies (e.g. Kocsis et al., 2000; Jacquin & Hodges, 2007; and Hodges & Jacquin, 2008), a total score was calculated for each participant. In addition, these scores were calculated for each category (physical characteristics, cognitive processes, offense behaviors, social history and habits, and previous convictions) for profile accuracy.

Case Information (Media and Non-Fictional Cases). A fictional television show dealing with a homicide element along with profiling was given to the participant to watch. The synopsis of the show was given to each participant, which can be reviewed in Appendix E. The participant was also given information based on two solved cases (Appendix F), a homicide and attempted murder committed by the same offender in Gainesville, Georgia. The victims in the case included two females, whose identifying information was omitted from the study to ensure that participants were not able to identify the real case.

Procedures

Utilizing active and retired members of law enforcement, as well as criminal justice and psychology college students as participants, the researcher aimed to identify if these individuals were able to develop an accurate criminal profile of a predetermined solved case. These participants were asked questions via a questionnaire to determine their exposure to crime related television shows and fictional media, their views on profiling, demographical questions, and complete a profiling questionnaire based upon a non-fictional case. The goal equated to noting if their exposure to media influenced their

perception and if it influenced their ability to create an accurate criminal profile. Besides the groups the researcher designed for the initial survey (students, active law enforcement, and retired law enforcement), overall these participants were later divided into two groups, those with low exposure and those with high exposure to fictional media to determine profile accuracy.

The researcher measured the participants' ability to accurately profile utilizing three constructed questionnaires. First, the participant was required to read the Research Consent Form (Appendix A), which indicated their consent to participate and the confidentiality agreement between the researcher and the participant. Next, the participants were then asked to complete a Media and Crime Related Exposure Questionnaire (Appendix C), which was split into two phases, pre-media television show consumption and post-media television show consumption. The questions were split to gather information before and after the participant watched the given *Criminal Minds* season 7, episode 22 "Profiling 101" episode to watch. Pre-media delved into basic questions such as current television consumption, criminal profiling stereotypes, and investigative techniques. Post-media asked criminal profiling and investigative technique questions to determine if the participant's view after watching the episode. The researcher identified an episode from the *Criminal Minds* series that was closely related to the case synopsis and the episode also gave a general overview of criminal profiling (see Appendix E).

Profiling asks for the who, what, where, when, and why. Those individuals who specialize in profiling, indicate that all the pertinent information about the case must be given to complete a criminal profile. Since this is believed to be true, after answering the

questionnaires, the participants of this study were given a case synopsis provided to the researcher by the Gainesville Police Department based upon a homicide and assault cold case committed by the same offender that was later solved. After reading the synopsis, the participants completed the *Profiling Offender Characteristics Questionnaire* (Appendix B), which was adopted from Kocsis et al. (2000). This questionnaire surveyed the principle characteristics of the offender who committed the crimes. Participants answered the questionnaire based upon the case synopsis, which equated to the participant generating a criminal profile based on the information they had on the case, their background, and knowledge of profiling. The researcher had access to the true data and accurate profile description for analysis purposes.

The researcher generated two questionnaires to identify media and crime related exposure, views on profiling, and demographic information for control and exploratory purposes. After completing the Profiling Offender Characteristics Questionnaire, the participants completed the second part of the Media Exposure questionnaire (post-media consumption). Finally, the participants completed Participant Demographics Questionnaire (Appendix D) to obtain demographic information which included race, age, gender, occupation, and education. Demographic information was obtained for exploratory purposes. After the participant finished the questionnaires, they were able to see the Debriefing Information (Appendix G), which contained the information to thank the participant for their time and contact information to reach the researcher if necessary.

This study was by approved by Nova Southeastern University's Institutional Review Board (IRB) due to the involvement of human subjects who had to complete the survey instrument. Utilizing the IRB's checklist, the researcher believed that the

completion of the survey instrument could be categorized as a systematic investigation that led to generalizable knowledge. Following Creswell's (2013) ethical considerations, the researcher notes that the participation in this study was completely voluntary and that the participants had the ability to withdraw anonymously at any time without pressure. The researcher did not neglect to adhere to or acknowledge the respect of the participants time, views, values, and sensitivity could have been encountered during this study. This included (1) disclosing the purpose and process of this study to participants, (2) providing a written informed consent letter and requiring consent be provided from each participant before continuing to complete the survey instrument, (3) adhering to confidentiality standards and following ethical practices involving survey instrument completion, data analysis, and ensuring the confidentiality and safety of information for participants, (4) ensuring that the names of the offender, victims, and law enforcement involved in the real case scenario remain confidential, and (6) explaining the role of the researcher to participants, and (7) ensuring the researcher embodies and demonstrates respect for the research sites to be utilized, views and opinions of all participants, former conclusions of researchers from previous studies, and the opinions of the dissertation committee.

Data Analysis

Systematic random sampling and voluntary sampling occurred to obtain participants utilizing the researcher's sources to disseminate the research survey instrument. Each participant had an equal chance of being selected to participate within the research. The researcher was also able to gain participants from law enforcement agencies across the country due to hearing about the survey via word of mouth or email, consistent with snowball sampling.

The survey instrument for this research was formatted into an online outlet utilizing SoGoSurvey for the participants of various ages and backgrounds to be able to easily access the survey instrument to have enough time for completion during their own constructed time. The survey responses were kept confidential and the instrument itself was able to be accessed via a secure survey web address.

The data from the questionnaires and case study materials used for analysis were conducted with a Dell Inspiron 15 series laptop computer. The researcher utilized the Statistical Package for The Social Sciences Version 24.0 (SPSS) for data analysis. The researcher utilized a multiple regression analysis for this study for each group (students, active law enforcement, and retired law enforcement). The participants were also recorded utilizing their self-reported media exposure along with the exposure to the television show to determine any correlations with profile accuracy. The researcher utilized an independent t-test to analyze the demographic data. The standard deviation and means were also calculated for the Profiling Offender Characteristics Questionnaire.

The researcher expected that the participants who have low exposure to fictional media would create more accurate profiles than those who would not in terms of completing the *Profiling Offender Characteristics Questionnaire* with the necessary case information. It was expected that students displaying low-to-moderate exposure would perform better on the questionnaire because they may have received additional educational training and would have been taught mistakes that have occurred in solving crimes, as opposed to law enforcement professionals. For analysis, the low exposure group would determine no expected differences between law enforcement professionals and college students. The researcher believed that based on the belief that cognitive and

analytical reasoning aids in creating criminal profiles, those participants who scored the highest on the profiling offender characteristics questionnaire and those who have more years of experience in addition to their educational background would be the individuals who create the most accurate profile. Also, since Kocsis, Hayes, and Irwin (2002), suggested that increased exposure to crime dramas can create a bias that would decrease profile accuracy, the researcher believed that those participants who had high exposure to fictional television would create criminal profiles that are deemed inaccurate.

Dependent Variable (DV1): Profile Accuracy. This was measured utilizing the profiling offender characteristics questionnaire which was answered by participants, utilizing the information from the non-fictional case scenario. The results show what type of profiles are created based on the information provided. The more questions that the participant scored correctly on the questionnaire, the more accurate the profile. .

Independent Variable: Exposure to Media (IV1) and Access to Fictional Television Show (IV2). One independent variable for this study will be the participant's exposure to media. To determine the level of exposure, the researcher utilized the media and crime related exposure questionnaire to determine how many hours the participant exposes themselves to media. The second independent variable was the participant's ability to watch a fictional television show. The researcher provided the participant with a fictional television show that relates to profiling and the case scenario – essentially providing the media exposure to participants.

Data and Statistical Analysis. A multiple regression analysis was completed for each group (students, active law enforcement, and retired law enforcement). This analysis was used to determine whether exposure to media effects profiling decisions and

profiling investigative tactics (i.e. the ability to create a criminal profile) utilizing demographic information and the profiling characteristics questionnaire. All possible variables including demographics (age, education, profession, experiences/views), media consumption, media exposure, and profiling accuracy with the case synopsis were each analyzed with this study with one-way ANOVA analyses for each group to mediate the relationships presented. This aided in determining any diversities or similarities among participants in the results and provide the validity for the study.

Trustworthiness. Data validation was a crucial part to analyzing the accuracy on profiling techniques and determining if fiction influences perception. Along with utilizing research gathered with the survey instrument, the researcher sought the advice and listened to the views of the dissertation committee and individuals who have had years of training within the law enforcement field. The dissertation committee was comprised of three Nova Southeastern University professors who each had expertise in crime and media, technology and crime, research design and methods, assessments and measurements, public administration, and decades of experience as a member of law enforcement respectively. After the survey was completed, many current and former members of law enforcement communicated with the researcher about various opinions on criminal profiling, their views on the survey instrument being utilized in this study, the future of profiling, and how they believed fictional media and stereotypes may impact law enforcement training and fieldwork with investigations. The researcher also talked to two of the officers involved in the real case scenario to see if they believed media played a role in their case and if they believed fictional media can impact cases in the eyes of the public and/or law enforcement.

Chapter 4: Results

This dissertation was aimed toward discovering if fictional media can influence perception in terms of developing an accurate profile. Previous research has shown how criminal profiling has been utilized as an investigative tool in various areas in the world for several years. In determining profile accuracy, the researcher first determined the differences, as well as similarities, among the participants and if these correlations or lack thereof, would be mediated for each group with a regression analysis and one-way ANOVA analyses. The researcher decided to separate the participants into three groups which included students, active law enforcement, and retired law enforcement.

Participant Demographics

Approximately 123 participants chose to respond to the survey which included students, retired law enforcement, and active law enforcement. The researcher notes that only 119 participants completed the survey in its entirety, while four other respondents after reading the Participant Letter for Anonymous Surveys, decided not to participate in the study. The researcher used a preliminary analysis using descriptive statistics and independent t-tests to determine the mean scores for demographic diversities. Of the 119 participants who completed the demographic section, 55.5% (66) identified as female and 44.5% (53) identified as male. Race and ethnicity affiliation included 36.1% Black or African American, 34.5% Caucasian, 20.2% Hispanic or Latino, 2.5% American Indian or Alaska Native, 1.7% Middle-Eastern, 0.8% Asian, 4.2% checked other or nationality is not defined in either of the categories, and none of the participants identified as Native Hawaiian or other Pacific Islander. Participants ranged from 19 – 67 years of age, and approximately 22.7% (27) ranged from 23 – 27 years of age. In the demographics

portion, the participants were asked where they lived, the participants ranged from twenty different states Alabama – 3.4% (4), California – 1.7% (2), Connecticut – 0.8% (1), District of Columbia – 0.8% (1), Florida – 48.7% (58), Georgia – 22.7% (27), Hawaii – 0.8% (1), Illinois – 0.8% (1), Indiana 0.8% (1), Maryland – 5.0% (6), Michigan – 0.8% (1), Mississippi – 2.5% - (3), New Jersey – 0.8% (1), New York – 0.8% (1), North Carolina – 0.8% (1), Oklahoma – 0.8% (1), South Carolina – 0.8% (1), Texas 0.8% (1), Virginia – 4.2% (5), and West Virginia 0.8% (1), and one participant listed other and that they were located in South Africa (0.8%).

Table 1. Participant Ethnicity Demographics Between Groups.

		Active	Retired	Student	Total
How would you describe yourself?	American Indian or Alaska Native	1	1	1	3
	Asian	0	0	1	1
	Black or African American	14	9	20	43
	Caucasian	16	12	13	41
	Hispanic or Latino	7	1	16	24
	Middle-Eastern	1	0	1	2
	Native Hawaiian or Other Pacific Islander	0	0	0	0
	Other / Not Defined	2	0	3	5
Total		41	23	55	119

Table 2. Participant Gender Demographics Between Groups.

		Active	Retired	Student	Total
Gender:	Female	22	6	38	66
	Male	19	17	17	53
Total		41	23	55	119

Of the total participants, they were each asked of their law enforcement or student status. This resulted in 55 participants identifying as a student, 41 identifying as an active professional in law enforcement or the criminal justice field, 23 identifying as a retired professional in law enforcement. The researcher notes that there were approximately eight active law enforcement professionals, eight students, and two retired law enforcement professionals as participants who at some point in the demographic portion of the survey identified as both a law enforcement professional and current student, however their primary status when participants' chose an answer to the question 'Are you a student or professional in law enforcement' was used for research purposes. According to other demographic data regarding educational matters, the participants varied in the question of which degree they have obtained (see Tables 3 and 4). Of the total participants, 44 received an associates degree, with 39 of those being students, three active law enforcement professionals, and two retired law enforcement professionals. Approximately 39 participants received a bachelor's degree, which included 17 active law enforcement professionals, 12 retired law enforcement professionals, and 10 students. Approximately 21 participants received a master's degree, which included 14 active law enforcement professionals, six retired law enforcement professionals, and one student. One active law enforcement professional identified having a Juris Doctorate. Approximately four participants identified with having a Doctorate which included two active and two retired law enforcement professionals. The researcher notes that as far as educational identifiers, those who selected obtaining an associate degree, bachelor's degree, and master's degree were a majority among all participants. Educational demographics can be marked as cognitive and analytical abilities in terms of academia

degree achievements parallel with deduction and observation skills that has been written previously to be necessary for profilers.

Table 3. Type of Degree Obtained Between Groups.

Degree Obtained	Active	Retired	Student	Total
High School Diploma	4	0	5	9
Associates Degree	3	2	39	44
Bachelor's Degree	17	12	10	39
Master's Degree	14	6	1	21
Juris Doctorate Degree	1	0	0	1
Doctorate Degree	2	2	0	4
Total	41	22	55	119

Table 4. Type of Degree Obtained Between Gender.

	Gender:		
	Female	Male	Total
High School Diploma	4	5	9
Associates Degree	29	15	44
Bachelor's Degree	19	20	39
Master's Degree	12	9	21
Juris Doctorate Degree	1	0	1
Doctorate Degree	0	4	4
Total	66	53	119

When addressing the demographic of 'degree obtained,' the researcher was able to perform a one-way ANOVA (see Table 6). For the question 'What degree have you obtained,' a mean score of 3.27 was generated for active law enforcement professionals,

3.35 for retired law enforcement professionals, and 2.13 for students. The difference between these groups produced a p-value of < 0.01 , which at the 0.05 significance level means that the results were highly significant and unlikely to have occurred by chance alone. The effect size for degree obtained indicated 0.29.

Table 5. Level of Education Completed Between Groups.

		Active	Retired	Student	Total
What level of education have you completed?	High School	1	1	0	2
	1 year of college	0	0	1	1
	2 years of college	4	2	8	14
	3 years of college	2	1	33	36
	4 years of college or more	34	19	13	66
Total		41	23	55	119

For the question ‘What level of education have you completed,’ a mean score of 3.66 was generated for active law enforcement professionals, 3.61 for retired law enforcement professionals, and 3.05 for students. The difference between these groups produced a p-value of .001, which at the 0.05 significance level means that the results statistically significant. The effect size for level of education completed indicated 0.12. From this question, the researcher learned that between all groups the majority of all participants had at least completed three or more years of college (see Tables 5 and 6).

Table 6. Educational Demographic Based Questions (ANOVA).

		Sum of				
		Squares	df	Mean Square	F	Sig.
What degree have you obtained?	Between Groups	40.558	2	20.279	24.157	.000
	Within Groups	97.375	116	.839		
	Total	137.933	118			
What level of education have you completed?	Between Groups	10.197	2	5.098	7.830	.001
	Within Groups	75.534	116	.651		
	Total	85.731	118			

The researcher notes that even though students were recruited for participation through their crime and media course, approximately 11 of those participants were active and retired law enforcement professionals. Participants who stated that they were currently in college listed various academic majors such as applied intelligence, biology, criminal justice, education, health administration, hospitality, law, liberal arts, psychology, public service administration, social work, and sociology. Approximately 39 of those participants listed criminal justice as their major.

Participants varied in the number of years they have spent in law enforcement. The researcher believes those who were listed as active and retired law enforcement professionals had a higher number of individuals whose years ranged from either 0-5, 6-10, 21-30, and more than 30 years of experience. Active law enforcement professionals had a mean score of 3.37, retired law enforcement professionals had a mean score of 4.39, and students at 5.27. For those students who were also either active or retired law enforcement professionals, their data was taken into account because these individuals selected the answer choice that defined their years in law enforcement and also chose not

applicable when necessary. When conducting the one-way ANOVA to analyze the difference between these groups, a p-value of .001, which at the 0.05 significance level was produced, is statistically significant (see Table 8).

Table 7. Participants' Total Number of Years in Law Enforcement Between Groups.

		Active	Retired	Student	Total
What is the number of years you have been in law enforcement?	0 - 5 years	9	4	15	28
	6 - 10 years	11	0	1	12
	11 - 15 years	2	1	0	3
	16 - 20 years	5	4	0	9
	21 - 30 years	7	6	0	13
	More than 30 years	3	8	0	11
	Not Applicable	4	0	39	43
Total		41	23	55	119

Table 8. Employment Demographics with Law Enforcement Between Groups (ANOVA).

		Sum of Squares	df	Mean Square	F	Sig.
For those in the law enforcement / criminal justice field are you employed on the federal, state, or local level? If retired or not active, what level of government were you last employed at?	Between Groups	68.004	2	34.002	42.203	.000
	Within Groups	93.459	116	.806		
	Total	161.462	118			
What is the number of years you have been in law enforcement?	Between Groups	85.495	2	42.748	7.774	.001
	Within Groups	637.900	116	5.499		
	Total	723.395	118			

Table 8 also discussed the level of government participants reported being employed at between each of the three groups. Active law enforcement professionals had

a mean score of 1.83, retired law enforcement professionals had a mean score of 1.65, and students at 0.25. According to Table 9, active law enforcement had more participants reporting at the local and federal level producing the numbers 15 and 18 respectively. However, 48 students chose the answer ‘not applicable.’ For students, this contradicts approximately eight participants who chose ‘0-5’ for the number of years they had been in law enforcement in the previous question, however, with looking at these individual’s answers, the researcher was able to observe that these individuals listed that they were interns at various law enforcement agencies. When conducting the one-way ANOVA to analyze the difference of the level of government each participant is employed at between these groups, a p-value of < 0.01 , which at the 0.05 significance level was produced, indicates that the results were highly significant and unlikely to have occurred by chance alone (see Table 8).

Table 9. Level of Government Employed at Between Groups.

		Active	Retired	Student	Total
For those in the law enforcement / criminal justice field are you employed on the federal, state, or local level? If retired or not active, what level of government were you last employed at?	Not Applicable	2	3	48	53
	Federal	18	8	3	29
	State	6	6	1	13
	Local	15	6	3	24
Total		41	23	55	119

The questions regarding the detailed law enforcement information of a participant’s current or previous rank or title, as well as their current or previous agency

name were discarded. This was because a number of participants either chose not to answer their exact position, or the answers highly varied among all participants which would cause for numerous additional variables to compute between active and retired law enforcement professionals specifically.

Crime Related Media Consumption Information

The researcher asked participants to indicate their types of crime related media consumption. As evident in Tables 10 and 11, the researcher utilized one-way ANOVA analysis to determine the significance of each of the crime related media consumption questions between the three groups. The question “How often do you watch crime-related television shows” generated a mean of 4.05 for active law enforcement professionals, 4.30 for retired law enforcement professionals, and 4.22 for students. The difference between these groups produced a p-value of .741, which is above the 0.05 significance level, meaning there is no statistically significance between groups when compared with this question. With this question both active and retired law enforcement professionals chose the answer ‘more than once a month, but less than once a week’ for a mode of 22 participants and 7 participants respectively, while students chose ‘once a week or more’ for a mode of 15 participants. The question “Approximately how many days in the past month have you watch a crime show” generated a mean of 1.78 for active law enforcement professionals, 1.78 for retired law enforcement professionals, and 2.20 for students. The difference between these groups produced a p-value of .106, which is above the 0.05 significance level, meaning there is no statistically significance between groups when compared with this question. With this question all three groups chose the answer ‘0-5 hours’ for a mode of 22 active participants, 11 retired participants, and 21 student

participants. The question “How often do you watch crime-related movies” generated a mean of 3.59 for active law enforcement professionals, 3.39 for retired law enforcement professionals, and 3.49 for students. The difference between these groups produced a p-value of .829, which is above the 0.05 significance level, meaning there is no statistically significance between groups when compared with this question. With this question both active law enforcement professionals chose the answer ‘more than once a month, but less than once a week’ for a mode of 12 participants, 16 students chose ‘once a month or less’ and retired law enforcement professionals had a mode that was split between ‘once a month or less’ and ‘more than once a month, but less than once a week’ with 6 in each category. The question “How often do you read crime-related books/novels/magazines” generated a mean of 2.54 for active law enforcement professionals, 2.70 for retired law enforcement professionals, and 2.35 for students. The difference between these groups produced a p-value of .573, which is above the 0.05 significance level, meaning there is no statistically significance between groups when compared with this question. With this question the demographics varied among groups, active law enforcement professionals had 15 participants choosing ‘once a year or less’, retired law enforcement professionals were split with 6 participants respectively choosing ‘not at all’ and ‘more than once a month, but less than one a week’, and 20 students chose ‘not at all’. The question “How often do you watch any of the *Criminal Minds* series” generated a mean of 3.22 for active law enforcement professionals, 2.74 for retired law enforcement professionals, and 2.96 for students. The difference between these groups produced a p-value of .504, which is above the 0.05 significance level, meaning there is no statistically significance between groups when compared with this question. With this question active participants were

split with 11 respectively choosing 'once a month or less' and 'once a week or more', while 8 retired participants and 16 students chose 'not at all.' The question "How often do you watch any of the *Law and Order* series" generated a mean of 3.15 for active law enforcement professionals, 3.22 for retired law enforcement professionals, and 2.85 for students. The difference between these groups produced a p-value of .549, which is above the 0.05 significance level, meaning there is no statistically significance between groups when compared with this question. With this question active participants chose the answer 'once a month or less' for a mode of 9 participants, 6 retired participants chose 'once a week or more' and students chose 'not at all' for a mode of 15 participants. The question "How often do you watch any of the *CSI: Crime Scene Investigation* series" generated a mean of 2.54 for active law enforcement professionals, 2.13 for retired law enforcement professionals, and 2.64 for students. The difference between these groups produced a p-value of .393, which is above the 0.05 significance level, meaning there is no statistically significance between groups when compared with this question. With this each group chose the answer 'not at all' for a mode of 16 active participants, 11 retired participants, and 16 student participants respectively.

Table 10. Crime-Related Media Consumption Based Questions.

					95% C.I. for				
					Mean				
				Std.	Std.	Lower	Upper		
		N	Mean	Deviation	Error	Bound	Bound	Minimum	Maximum
How often do you watch crime-related television shows?	Active	41	4.05	1.378	.215	3.61	4.48	1	6
	Retired	23	4.30	1.259	.263	3.76	4.85	1	6
	Student	55	4.22	1.423	.192	3.83	4.60	1	6
	Total	119	4.18	1.369	.126	3.93	4.43	1	6
Approximately how many days in the past month have you watched a crime show	Active	41	1.78	1.013	.158	1.46	2.10	1	4
	Retired	23	1.78	.902	.188	1.39	2.17	1	4
	Student	55	2.20	1.161	.157	1.89	2.51	1	4
	Total	119	1.97	1.077	.099	1.78	2.17	1	4
How often do you watch crime-related movies?	Active	41	3.59	1.224	.191	3.20	3.97	1	6
	Retired	23	3.39	1.196	.249	2.87	3.91	1	5
	Student	55	3.49	1.260	.170	3.15	3.83	1	6
	Total	119	3.50	1.227	.113	3.28	3.73	1	6
How often do you read crime-related books/novels/magazines?	Active	41	2.54	1.286	.201	2.13	2.94	1	5
	Retired	23	2.70	1.363	.284	2.11	3.29	1	5
	Student	55	2.35	1.493	.201	1.94	2.75	1	6
	Total	119	2.48	1.395	.128	2.23	2.73	1	6
How often do you watch any of the Criminal Minds Series?	Active	41	3.22	1.458	.228	2.76	3.68	1	5
	Retired	23	2.74	1.544	.322	2.07	3.41	1	5
	Student	55	2.96	1.753	.236	2.49	3.44	1	6
	Total	119	3.01	1.613	.148	2.72	3.30	1	6
How often do you watch any of the Law and Order television series?	Active	41	3.15	1.542	.241	2.66	3.63	1	6
	Retired	23	3.22	1.622	.338	2.52	3.92	1	6
	Student	55	2.85	1.615	.218	2.42	3.29	1	6
	Total	119	3.03	1.586	.145	2.74	3.31	1	6
How often do you watch any of the CSI: Crime Scene Investigation television series?	Active	41	2.54	1.567	.245	2.04	3.03	1	5
	Retired	23	2.13	1.392	.290	1.53	2.73	1	5
	Student	55	2.64	1.483	.200	2.24	3.04	1	6
	Total	119	2.50	1.495	.137	2.23	2.78	1	6

Table 11. Pre-Exposure Media Consumption Based Questions (ANOVA).

		Sum of		Mean Square	F	Sig.
		Squares	df			
How often do you watch crime-related television shows?	Between Groups	1.140	2	.570	.300	.741
	Within Groups	220.154	116	1.898		
	Total	221.294	118			
Approximately how many days in the past month have you watched a crime show	Between Groups	5.187	2	2.593	2.284	.106
	Within Groups	131.737	116	1.136		
	Total	136.924	118			
How often do you watch crime-related movies?	Between Groups	.573	2	.286	.188	.829
	Within Groups	177.175	116	1.527		
	Total	177.748	118			
How often do you read crime-related books/novels/magazines?	Between Groups	2.196	2	1.098	.560	.573
	Within Groups	227.501	116	1.961		
	Total	229.697	118			
How often do you watch any of the Criminal Minds Series?	Between Groups	3.605	2	1.803	.689	.504
	Within Groups	303.386	116	2.615		
	Total	306.992	118			
How often do you watch any of the Law and Order television series?	Between Groups	3.053	2	1.527	.603	.549
	Within Groups	293.871	116	2.533		
	Total	296.924	118			
How often do you watch any of the CSI: Crime Scene Investigation television series?	Between Groups	4.217	2	2.108	.942	.393
	Within Groups	259.531	116	2.237		
	Total	263.748	118			

The researcher chose approximately fifty television shows that have a fictional or non-fictional basis to determine if the participants had previously watched them. These television shows were chosen because they have been reported to be among the popular crime television shows watched by various audiences. An independent sample t-test was performed to determine any correlation between each of the fifty television shows and all

of the participants. The researcher was able to determine a p-value of < 0.01 , which at the 0.05 significance level means that the results were highly significant and unlikely to have occurred by chance alone (see Table 12 and Appendix C reference with the television shows listed in the television consumption question). Based on Table 12, the researcher notes that shows such as *20/20*, *Criminal Minds*, *C.S.I.: Crime Scene Investigation*, *Dateline*, *First 48*, *Law & Order*, and *N.C.I.S.* produced an n of approximately 50 or more, meaning that number of participants previously watched that particular show. There was also at least one person who had watched each of the television shows provided. Participants were also able to self-report any other television shows that they favorite that may or may not have been included in the list, the shows that they listed that were not included in the list were *Hawaii Five-O*, *How to Get Away with Murder*, *In the Heat of the Night*, *LIVE PD*, *Magnum P.I.*, *Shades of Blue*, *Shooter*, and *Taken*.

The researcher conducted a one-way ANOVA between the three groups and the seven television shows that had 50 or more participants who self-reported that they previous watched that particular show. The researcher utilized the values “1= never watched” and “2= name of show watched” for the variable values. The television show *20/20* generated a p-value of < 0.01 with an effect size of 0.14, *Criminal Minds* generated a p-value of .565, *C.S.I.: Crime Scene Investigation* generated a p-value of .665, *Dateline* generated a p-value of .024 with an effect size of 0.06, *First 48* generated a p-value of .771, *Law & Order* generated a p-value of .764, and *N.C.I.S.* generated a p-value of .161 all at the 0.05 significance level (see Table 13). The shows *20/20* and *Dateline* were both statistically significant between the groups, and the researcher notes that these are both non-fictional television shows.

Table 12. Number of Participants Who Watch Specific Crime-Related Television Shows.

Television Show	<i>n</i>	Television Show	<i>n</i>	Television Show	<i>n</i>	Television Show	<i>n</i>	Television Show	<i>n</i>
20/20	58	Chicago P.D.	28	First 48	65	Murder, She Wrote	17	Shots Fired	10
American Crime Story	18	Cold Case	37	Forensic Files	48	N.C.I.S.	52	Snapped	21
American Justice	12	Columbo	20	Hannibal	16	Nightmare Next Door	6	The FBI Files	22
Blue Bloods	36	Covert Affairs	9	I (Almost) Got Away With It	38	Numb3rs	15	The Inspectors	5
Bones	35	Criminal Minds	72	Law & Order	74	Person of Interest	15	The Investigators	8
Breaking Bad	39	C.S.I.	67	Lie to Me	15	Profiler	3	The Killing	12
Broadchurch	3	Dateline	53	Luther	7	Quantico	29	To Catch A Predator	21
Bull	16	Deadly Women	25	Major Crimes	17	Rizzoli & Isles	13	True Detective	10
Castle	18	Dexter	48	Making of a Murderer	26	S.W.A.T.	30	Unsolved Mysteries	51
Catching Killers	8	Elementary	11	Mindhunter	18	Sherlock	16	Unusual Suspects	10

Note: The number of observations recorded with each television show is recorded using *n*.

Table 13. Number of Participants Reported with the Seven Highest Observed Shows Between Groups.

		Sum of Squares	df	Mean Square	F	Sig.
20/20	Between Groups	4.195	2	2.097	9.527	.000
	Within Groups	25.536	116	.220		
	Total	29.731	118			
Criminal Minds	Between Groups	.278	2	.139	.573	.565
	Within Groups	28.159	116	.243		
	Total	28.437	118			
CSI: Crime Scene Investigation	Between Groups	.205	2	.103	.409	.665
	Within Groups	29.072	116	.251		
	Total	29.277	118			
Dateline	Between Groups	1.825	2	.912	3.838	.024
	Within Groups	27.570	116	.238		
	Total	29.395	118			
First 48	Between Groups	.132	2	.066	.260	.771
	Within Groups	29.364	116	.253		
	Total	29.496	118			
Law & Order	Between Groups	.130	2	.065	.270	.764
	Within Groups	27.854	116	.240		
	Total	27.983	118			
N.C.I.S.	Between Groups	.907	2	.453	1.854	.161
	Within Groups	28.371	116	.245		
	Total	29.277	118			

Pre-Exposure to Television Show: Question Information

Participants were asked 11 questions related to their beliefs and perceptions on criminal profiling, forensic science, and crime scene investigation procedures before they were exposed to watching the *Criminal Minds* television show. One-way ANOVA analyses were conducted to determine the significance of each of the pre-exposure related

questions between the three groups. The researcher split the results of the 11 pre-exposure questions into three tables (see Tables 14 – 16 for reference).

Table 14. Pre-Exposure to Media Related Questions Towards Criminal Profiling, Forensic Science, and Crime Scene Investigation Procedures Part A (ANOVA).

		Sum of				
		Squares	df	Mean Square	F	Sig.
Pre: Based on the type of victim, investigators are able to determine an offender's marital status.	Between Groups	15.502	2	7.751	9.020	.000
	Within Groups	99.675	116	.859		
	Total	115.176	118			
Pre: The majority of criminal cases are solved because of DNA evidence found at the crime scene.	Between Groups	3.415	2	1.708	1.430	.243
	Within Groups	138.517	116	1.194		
	Total	141.933	118			
Pre: The majority of criminal cases are solved because of fingerprint evidence found at the crime scene.	Between Groups	2.544	2	1.272	1.311	.274
	Within Groups	112.566	116	.970		
	Total	115.109	118			
Pre: Forensic scientist produce the most crucial evidence during an investigation.	Between Groups	3.142	2	1.571	2.083	.129
	Within Groups	87.497	116	.754		
	Total	90.639	118			

The question related towards investigators determining marital status generated a mean of 2.32 for active law enforcement professionals, 2.30 for retired law enforcement professionals, and 3.04 for students. The difference between these groups produced a p-

value of < 0.01 , at the 0.05 significance level, indicating that the results were highly significant and unlikely to have occurred by chance alone, where the effect size indicated 0.13. A Tukey post hoc test revealed that the question on determining marital status was statistically significantly lower for law enforcement professionals of active ($p = .001$) and retired ($p = .005$) status compared to students. There was no statistically significant difference between the active and retired law enforcement professionals groups ($p = .989$). The question related to the perception of criminal cases being solved because of DNA evidence generated a mean of 2.95 for active law enforcement professionals, 3.30 for retired law enforcement professionals, and 3.31 for students. The difference produced a p-value of .243, at the 0.05 significance level, indicating that the results were not statistically significant between the three groups. The question related to the perception of criminal cases being solved because of fingerprint evidence generated a mean of 3.12 for active law enforcement professionals, 3.52 for retired law enforcement professionals, and 3.35 for students. The difference between these groups produced a p-value of .274, at the 0.05 significance level, indicating that the results were not statistically significant between the three groups. The question related to the perception of forensic scientist producing the most crucial evidence during an investigation generated a mean of 3.39 for active law enforcement professionals, 3.83 for retired law enforcement professionals, and 3.65 for students. The difference between these groups produced a p-value of .129, at the 0.05 significance level, indicating that the results were not statistically significant between the three groups.

Table 15. Pre-Exposure to Media Related Questions Towards Criminal Profiling, Forensic Science, and Crime Scene Investigation Procedures Part B (ANOVA).

		Sum of	df	Mean Square	F	Sig.
		Squares				
Pre: Intuition is a key skill set for an investigator.	Between Groups	3.822	2	1.911	2.277	.107
	Within Groups	97.354	116	.839		
	Total	101.176	118			
Pre: Investigators learn more from a deceased victim of the crime, than from a witness.	Between Groups	10.838	2	5.419	7.815	.001
	Within Groups	80.439	116	.693		
	Total	91.277	118			
Pre: An investigation does not have to take longer than a month to solve.	Between Groups	2.600	2	1.300	.958	.387
	Within Groups	157.333	116	1.356		
	Total	159.933	118			

The question related to the perception of intuition as a skill generated a mean of 3.83 for active law enforcement professionals, 3.78 for retired law enforcement professionals, and 3.45 for students. The difference between these groups produced a p-value of .107, at the 0.05 significance level, indicating no statistical significance between the three groups. The question related to the perception of investigators ability to learn more from a deceased victim than from a witness generated a mean of 3.17 for active law enforcement professionals, 2.57 for retired law enforcement professionals, and 3.38 for students. The difference between these groups produced a p-value of .001 at the 0.05 significance level and an effect size of 0.12, showing that the results were highly significant between groups. A Tukey post hoc test revealed that this question was statistically significantly lower for law enforcement active professionals ($p = .006$) and students ($p < .001$) status compared to retired professionals. There was no statistically

significant difference between the students and active law enforcement professionals groups ($p = .222$). The question related to the perception on investigations not needing to take longer than a month to solve generated a mean of 2.59 for active law enforcement professionals, 3.00 for retired law enforcement professionals, and 2.78 for students. The difference between these groups produced a p-value of .387, at the 0.05 significance level, indicating that the results were not statistically significant between the three groups.

Table 16. Pre-Exposure to Media Related Questions Towards Criminal Profiling, Forensic Science, and Crime Scene Investigation Procedures Part C (ANOVA).

		Sum of				
		Squares	df	Mean Square	F	Sig.
Pre: Based on the location of the crime, investigators are able to predict an offender's intelligence level	Between Groups	9.014	2	4.507	4.434	.014
	Within Groups	117.910	116	1.016		
	Total	126.924	118			
Pre: Criminal profilers can accurately predict the characteristics and personality of a suspect.	Between Groups	3.142	2	1.571	2.083	.129
	Within Groups	87.497	116	.754		
	Total	90.639	118			
Pre: Criminal profilers contribute useful information that can move a stalled investigation forward.	Between Groups	.717	2	.359	.847	.431
	Within Groups	49.131	116	.424		
	Total	49.849	118			
Pre: Criminal profilers can provide credible information about a suspect during an investigation.	Between Groups	1.923	2	.962	1.940	.148
	Within Groups	57.489	116	.496		
	Total	59.412	118			

The question related to the perception of investigators being able to predict an offender's intelligence level based on the location of the crime generated a mean of 2.49 for active law enforcement professionals, 2.48 for retired law enforcement professionals, and 3.04 for students. The difference between these three groups produced a p-value of .014, at the 0.05 significance level, indicating that this is statistically highly significant. A Tukey post hoc test revealed that this question was statistically significantly lower for law enforcement professionals of active ($p = .026$) and retired ($p = .070$) status compared to students. There was no statistically significant difference between the active and retired law enforcement professional groups ($p = .999$). The question related to the perception of criminal profilers being able to accurately predict the characteristics and personality of a suspect generated a mean of 3.39 for active law enforcement professionals, 3.83 for retired law enforcement professionals, and 3.65 for students. The difference between these groups produced a p-value of .129 at the 0.05 significance level, indicating that this provided no statistical significance between groups. The question related to the perception that criminal profilers contribute useful information that can move a stalled investigation forward generated a mean of 3.83 for active law enforcement professionals, 3.65 for retired law enforcement professionals, and 3.67 for students. The difference between these groups produced a p-value of .431 at the 0.05 significance level, indicating the results as not statistically significant between the three groups. The question related to the perception that criminal profilers can provide credible information about a suspect during an investigation generated a mean of 3.83 for active law enforcement professionals, 3.96 for retired law enforcement professionals, and 3.64 for students. The difference between these groups produced a p-value of .148 at the 0.05

significance level, indicating the results as not statistically significant between the three groups.

Post-Exposure to Television Show Question Information

Participants were asked 16 questions related to their beliefs and perception on criminal profiling, forensic science, and crime scene investigation procedures after they were given an episode of the *Criminal Minds* television show to watch. One-way ANOVA analyses were conducted to determine the significance of each of the post-exposure related questions between the three groups. The researcher split the results of the 16 pre-exposure questions into five tables (see Tables 17 – 21 for reference).

Table 17. Post-Exposure to Media Related Question Based on the *Criminal Minds* Episode and Actual Investigative Procedures (ANOVA).

Post: Indicate to what extent you believe the episode to be realistic and true to actual investigative procedures.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.952	2	.976	1.029	.360
Within Groups	109.981	116	.948		
Total	111.933	118			

According to the data provided in Table 17, there is no statistical significance between active law enforcement professionals, retired law enforcement professionals, and students in regards to these participants believing that the *Criminal Minds* “Profiling 101” episode was realistic and true to actual investigative procedures. Active law enforcement professionals generated a mean of 3.12, 3.13 for retired law enforcement professionals,

and 3.38 for students with a p-value of .360. The researcher notes that between the three groups, participants were more likely to choose the answer “Neutral” or “Agree” when answering this question, which can be divided into Active: Neutral = 14, Agree = 15; Retired: Neutral = 9, Agree = 9; and Students: Neutral = 13, Agree = 26.

Table 18. Post-Exposure to Media Related Questions Towards Criminal Profiling, Forensic Science, and Crime Scene Investigation Procedures Part A (ANOVA).

		Sum of				
		Squares	df	Mean Square	F	Sig.
Post: Based on the type of victim, investigators are able to determine an offender’s marital status.	Between Groups	3.630	2	1.815	1.876	.158
	Within Groups	112.219	116	.967		
	Total	115.849	118			
Post: The majority of criminal cases are solved because of DNA evidence found at the crime scene.	Between Groups	5.116	2	2.558	2.635	.076
	Within Groups	112.632	116	.971		
	Total	117.748	118			
Post: The majority of criminal cases are solved because of fingerprint evidence found at the crime scene.	Between Groups	1.795	2	.897	.929	.398
	Within Groups	112.054	116	.966		
	Total	113.849	118			
Post: Forensic scientist produce the most crucial evidence during an investigation.	Between Groups	3.937	2	1.969	2.728	.070
	Within Groups	83.710	116	.722		
	Total	87.647	118			

The question related towards investigators determining marital status generated a mean of 2.52 for active law enforcement professionals, 2.61 for retired law enforcement professionals, and 2.91 for students. The difference between these groups produced a p-

value of .158, indicating no statistical significance. The question related to the perception of criminal cases being solved because of DNA evidence generated a mean of 2.93 for active law enforcement professionals, 3.30 for retired law enforcement professionals, and 3.38 for students. The difference between these groups produced a p-value of .076, at the 0.05 significance level, indicating nearly statistically significant findings. The question related to the perception of criminal cases being solved because of fingerprint evidence generated a mean of 3.00 for active law enforcement professionals, 3.35 for retired law enforcement professionals, and 3.15 for students. The difference between these groups produced a p-value of .398, at the 0.05 significance level, indicating no statistical significance. The question related to the perception of forensic scientist producing the most crucial evidence during an investigation generated a mean of 3.32 for active law enforcement professionals, 3.83 for retired law enforcement professionals, and 3.56 for students. The difference between these groups produced a p-value of .070, at the 0.05 significance level, indicating nearly significant findings.

Table 19. Post-Exposure to Media Related Questions Towards Criminal Profiling, Forensic Science, and Crime Scene Investigation Procedures Part B (ANOVA).

		Sum of		Mean		
		Squares	Df	Square	F	Sig.
Post: Intuition is a key skill set for an investigator.	Between Groups	2.079	2	1.039	1.399	.251
	Within Groups	86.207	116	.743		
	Total	88.286	118			
Post: The most qualified investigator tends to be the one who will solve the case and get the job done.	Between Groups	3.079	2	1.539	1.477	.233
	Within Groups	120.905	116	1.042		
	Total	123.983	118			
Post: Law enforcement agencies are well equipped to solve any criminal investigation.	Between Groups	2.889	2	1.444	1.685	.190
	Within Groups	99.464	116	.857		
	Total	102.353	118			
Post: In many cases, a suspect's motive remains unclear, even after reviewing the crime scene.	Between Groups	.983	2	.491	.607	.547
	Within Groups	93.841	116	.809		
	Total	94.824	118			

The question related to the perception that intuition is a key skill set generated a mean of 3.88 for active law enforcement professionals, 3.74 for retired law enforcement professionals, and 3.58 for students. The difference between these groups produced a p-value of .251, indicating no statistical significance. The question related to the perception of the most qualified investigator tends to be the one to solve the case and get the job done generated a mean of 2.90 for active law enforcement professionals, 3.22 for retired law enforcement professionals, and 2.78 for students. The difference between these groups produced a p-value of .233, at the 0.05 significance level, indicating no statistically significant findings. The question related to law enforcement agencies being well equipped to solve any criminal investigation generated a mean of 3.02 for active law enforcement professionals, 3.43 for retired law enforcement professionals, and 3.05 for

students. The difference between these groups produced a p-value of .190, at the 0.05 significance level, indicating no statistical significance. The question related to the perception that a suspect's motive remains unclear, even after reviewing the crime scene generated a mean of 3.68 for active law enforcement professionals, 3.65 for retired law enforcement professionals, and 3.49 for students. The difference between these groups produced a p-value of .547, at the 0.05 significance level, indicating no significant findings.

Table 20. Post-Exposure to Media Related Questions Towards Criminal Profiling, Forensic Science, and Crime Scene Investigation Procedures Part C (ANOVA).

		Sum of				
		Squares	df	Mean Square	F	Sig.
Post: The age of the offender cannot be predicted based on the age of the victim.	Between Groups	2.222	2	1.111	1.159	.317
	Within Groups	111.190	116	.959		
	Total	113.412	118			
Post: Criminal profilers can accurately predict the characteristics and personality of a suspect.	Between Groups	.553	2	.277	.312	.733
	Within Groups	102.909	116	.887		
	Total	103.462	118			
Post: Criminal profilers contribute useful information that can move a stalled investigation forward.	Between Groups	.412	2	.206	.460	.632
	Within Groups	51.941	116	.448		
	Total	52.353	118			
Post: Criminal profilers can provide credible information about a suspect during an investigation.	Between Groups	.201	2	.101	.161	.851
	Within Groups	72.354	116	.624		
	Total	72.555	118			

The question related to the perception of how the age of an offender cannot be predicted based on the age of the victim generated a mean of 3.29 for active law enforcement professionals, 2.96 for retired law enforcement professionals, and 3.31 for students. The difference between these three groups produced a p-value of .317, at the 0.05 significance level, indicating no statistical significance. The question related to the perception of criminal profilers being able to accurately predict the characteristics and personality of a suspect generated a mean of 3.27 for active law enforcement professionals, 3.39 for retired law enforcement professionals, and 3.42 for students. The difference between these groups produced a p-value of .733 at the 0.05 significance level, indicating that this provided no statistical significance. The question related to the perception that criminal profilers contribute useful information that can move a stalled investigation forward generated a mean of 3.80 for active law enforcement professionals, 3.96 for retired law enforcement professionals, and 3.91 for students. The difference between these groups produced a p-value of .632 at the 0.05 significance level, indicating the results as not statistically significant. The question related to the perception that criminal profilers can provide credible information about a suspect during an investigation generated a mean of 3.85 for active law enforcement professionals, 3.83 for retired law enforcement professionals, and 3.76 for students. The difference between these groups produced a p-value of .851 at the 0.05 significance level, indicating the results as not statistically significant.

Table 21. Post-Exposure to Media Related Questions Towards Criminal Profiling, Forensic Science, and Crime Scene Investigation Procedures Part D (ANOVA).

		Sum of		Mean		
		Squares	Df	Square	F	Sig.
Post: Based on the type of crime and how the scene was left, investigators can tell if a suspect has a mental disorder.	Between Groups	6.429	2	3.215	3.469	.034
	Within Groups	107.503	116	.927		
	Total	113.933	118			
Post: Crime scene evidence often narrows the suspect pool.	Between Groups	1.406	2	.703	1.254	.289
	Within Groups	65.031	116	.561		
	Total	66.437	118			
Post: An offender will always leave behind some type of forensic evidence at the scene of the crime.	Between Groups	3.921	2	1.961	1.705	.186
	Within Groups	133.356	116	1.150		
	Total	137.277	118			

The question related to the perception with if based on the type of offender and how the crime scene was left, if investigators can tell if a suspect has a mental disorder generated a mean of 3.12 for active law enforcement professionals, 2.78 for retired law enforcement professionals, and 3.40 for students. The difference between these three groups produced a p-value of .034, at the 0.05 significance level, indicating that this was highly significant. -. The question related to the perception if crime scene evidence often narrows a suspect pool generated a mean of 3.88 for active law enforcement professionals, 3.78 for retired law enforcement professionals, and 3.64 for students. The difference between these groups produced a p-value of .289 at the 0.05 significance level, indicating that this provided no statistical significance. The question related to the perception that an offender will always leave behind some type of forensic evidence at the scene of the crime generated a mean of 3.44 for active law enforcement professionals,

3.78 for retired law enforcement professionals, and 3.29 for students. The difference between these groups produced a p-value of .186 at the 0.05 significance level, showing that the results are not statistically significant.

Correlations Between Pre and Post Exposure Question Information

Eight questions were given to the participants in both the pre and post media exposure questionnaires. These questions were given in both areas to determine if participants changed their views on items related to characteristics regarding criminal profiling and law enforcement investigations. The researcher conducted a paired samples t-test to determine if there is any statistical difference between the two identical eight pre and post exposure questions with all of the participants (see Table 22 for reference).

Table 22. Paired Samples T-Test on Eight Identical Pre and Post-Exposure to Media Related Questions with Participants Views Related to Criminal Profiling

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Based on the type of victim, investigators are able to determine an offender's marital status.	-.076	.976	.089	-.253	.101	-.846	118	.399
Pair 2	The majority of criminal cases are solved because of DNA evidence found at the crime scene.	-.025	.970	.089	-.201	.151	-.284	118	.777
Pair 3	The majority of criminal cases are solved because of fingerprint evidence found at the crime scene.	.168	.933	.085	-.001	.337	1.966	118	.052
Pair 4	Forensic scientists produce the most crucial evidence during an investigation.	.067	.927	.085	-.101	.236	.791	118	.431
Pair 5	Criminal profilers can accurately predict the characteristics and personality of a suspect.	.235	1.110	.102	.034	.437	2.312	118	.023
Pair 6	Intuition is a key skill set for an investigator.	-.067	.810	.074	-.214	.080	-.905	118	.367
Pair 7	Criminal profilers contribute useful information that can move a stalled investigation forward.	-.160	.813	.075	-.307	-.012	-2.143	118	.034
Pair 8	Criminal profilers can provide credible information about a suspect during an investigation.	-.042	.729	.067	-.174	.090	-.628	118	.531

Pair 1 provided the differences for the pre and post media exposure question “Based on the type of victim, investigators are able to determine an offender’s marital status.” This pair indicated that it was weakly and negatively correlated ($r = .514, p = .399$). There was no significant difference between the pre and post question ($t_{118} = -.846, p = .399$) and on average the pre-exposure question was $-.076$ lower than the post-exposure question. Pair 2 provided the differences for the pre and post media exposure question “The majority of criminal cases are solved because of DNA evidence found at the crime scene.” This pair indicated that it was weakly and negatively correlated ($r = .575, p = .777$). There was no significant difference between the pre and post question ($t_{118} = -.284, p = .777$) and on average the pre-exposure question was $-.025$ lower than the post-exposure question. Pair 3 provided the differences for the pre and post media exposure question “The majority of criminal cases are solved because of fingerprint evidence found at the crime scene.” This pair indicated that it was weakly and positively correlated ($r = .552, p = .052$). There was a significant average difference between the pre and post question ($t_{118} = 1.966, p = .052$) and on average the pre-exposure question was $.168$ higher than the post-exposure question. Pair 4 provided the differences for the pre and post media exposure question “Forensic scientists produce the most crucial evidence during an investigation.” This pair indicated that it was weakly and negatively correlated ($r = .431, p = .431$). There was no significant difference between the pre and post question ($t_{118} = .791, p = .431$) and on average the pre-exposure question was $.067$ higher than the post-exposure question. Pair 5 provided the differences for the pre and post media exposure question “Criminal profilers can accurately predict the characteristics and personality of a suspect.” This pair indicated that it was weakly and positively correlated

($r = .251, p = .023$). There was a significant average difference between the pre and post question ($t_{118} = 2.312, p = .023$) and on average the pre-exposure question was .235 higher than the post-exposure question. Pair 6 provided the differences for the pre and post media exposure question “Intuition is a key skill set for an investigator.” This pair indicated that it was weakly and negatively correlated ($r = .593, p = .367$). There was no significant difference between the pre and post question ($t_{118} = -.905, p = .367$) and on average the pre-exposure question was -.067 lower than the post-exposure question. Pair 7 provided the differences for the pre and post media exposure question “Criminal profilers contribute useful information that can move a stalled investigation forward.” This pair indicated that it was weakly and positively correlated ($r = .237, p = .034$). There was a significant average difference between the pre and post question ($t_{118} = -2.143, p = .034$) and on average the pre-exposure question was -.160 lower than the post-exposure question. Pair 8 provided the differences for the pre and post media exposure question “Criminal profilers can provide credible information about a suspect during an investigation.” This pair indicated that it was weakly and negatively correlated ($r = .527, p = .531$). There was no significant difference between the pre and post question ($t_{118} = -.628, p = .531$) and on average the pre-exposure question was -.042 lower than the post-exposure question.

For these questions the significant differences for each paired test dealt with students, active, and retired law enforcement participants changing their answers. Each group tended to change their answers after watching the television show and the researcher believes this is based from the statistical results that were gained from media consumption as it relates to criminal profiling and investigative procedures.

Profiling Offender Characteristics Questionnaire Information

A multiple regression analysis was utilized to examine which factors would predict characteristics for offenders. The variables selected to measure the profiling offender characteristics questionnaire included the number of hours participants had to fictional crime related media (books, television shows, and movies), total hours spent watching television, and their status as active, retired, or student. These factors did individually and collectively account for any variances in the profiling offender characteristics questionnaire (see Table 23). In the multiple regression, the R equaled .397, which indicates the strong relationship, which shows this model is a relatively good predictor of the outcome. The R^2 equaled .158, showing that approximately 15.8% of the variance in the data can be explained by those predictor variables. The results from the model was a significant predictor of fictional crime related media, total hours spent watching television, and their status as active, retired, or student and the performance and accuracy to the profiling offender characteristics questionnaire, $F(12,106) = 1.653$, $p = .088$.

Further analysis with a Pearson correlation determined that there was a statistically significant linear relationship ($p = .009$). The direction of the relationship was positive (active, retired, or student status positively correlated with profiling offender characteristics), indicating that these variables tend to increase together (i.e. status or affiliation with law enforcement is associated with profiling offender characteristics).

Table 23. Regression Model Summary of Profiling Characteristics

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	290.057	12	24.171	1.653	.088 ^b
	Residual	1549.674	106	14.620		
	Total	1839.731	118			
Model	R	R Square	Adj. R Square	Std. Error of Est.		
1	.397 ^a	.158	.062	3.82355		

a. Dependent Variable: Participants exam performance from profiling characteristics questionnaire (profile accuracy)

b. Predictors: (Constant), hours spent with fictional crime related media; active, retired, or student status; exposure to crime television show; hours spent watching television

The researcher conducted a qualitative analysis on the responses received from the profiling offender characteristics questionnaire. Overall, no participant received a 100% score on the questionnaire. Approximately 71 participants received 50% or better on the questionnaire, resulting in approximately 59.7% of all participants (active = 30, retired = 13, students = 28). Overall, this indicates that approximately 73.2% of active law enforcement professionals, 56.5% of retired law enforcement professionals, and 50.9% of students received a 50% or better accuracy when profiling the offender in the case study (Appendix F) utilizing the profiling offender characteristics questionnaire. The researcher notes that only one individual received an 80% or better in profile accuracy and this participant identified as a female Caucasian with a Juris Doctorate and active law enforcement at the local level with 0 – 5 years of experience. Overall, males appeared to perform better than females (males = 32, 60.4%, females = 39, 59.1%) when interpreting scores with a 50% or better accuracy. Although many of the participants answered many of the most common answers correctly, this was not always proven to be the case for each of the 33 question items listed on the profiling offender characteristics questionnaire

(see Tables 24 and 25). Also, instead of creating an accurate profile that was closely related to the offender, there were approximately ten individuals who created a profile that was similar to the offender portrayed in the *Criminal Minds* “Profiling 101” episode.

Table 24. Percentage of Responses from All Participants on the Profiling Offender Characteristics Questionnaire Sample.

Characteristics of Offender	Correct Answer to Offender Profile	Number of Participants with Correct Answer	Valid % of Participants with Correct Answer
Gender	1-A Male	108	90.8%
Age Range **	5-E 36 – 45 years old **	59	49.6%
Ethnicity	1-A African American	78	65.5%
Physical Build	2-B Average	79	66.4%
Height	3-C Average	69	58.0%
Hair Color	4-D Black	77	64.7%
Location Familiarity	1-A Yes, highly familiar	90	75.6%
Felt Comfortable	1-A Yes	108	90.8%
Prior Relationship	2-B Mutual Acquaintances	32	26.9%
Primary Motive	3-C Show of Power / Control	33	27.7%
Offense Planned	1-A Unplanned	24	20.2%
Killing Fantasies	2-B Yes, sometimes	56	47.1%
Remorse	3-C No	79	66.4%
Lived Locally	1-A Yes	97	81.5%
Protecting Identity	2-B No	84	70.6%
Approach to Victim	1-A Slowly or casually	32	26.9%
Use of Force	2-B To gain control over victim	85	71.4%
Altered Body	1-A Yes	73	61.3%
Altered Crime Scene	2-B No	91	76.5%
Victim Possessions	1-A Yes	45	37.8%
Marital Status	1-A Single	87	73.1%
Education	4-D Dropped out of High School	52	43.7%
Employment History	2-B Mostly Unemployed	50	42.0%
Religious Belief	2-B Christianity	41	34.5%
Prior Romantic Relationships	2-B Very few brief casual relationships	56	47.1%
Non-romantic Friendships	2-B Very few brief casual friendships	62	52.1%
Served in Armed Forces	2-B No, but thought of	61	51.3%
Alcohol Consumption	4-D In binges	34	28.6%
Vehicle (How Old)	1-A No vehicle owned	58	48.7%
Vehicle (Model)	1-A Does not apply	73	61.3%
Work Habits	4-D Misses work frequently, works poorly when present	30	25.2%
Juvenile Record	2-B Yes, one or two offenses	55	46.2%
Adult Record	2-B Yes, one or two offenses	45	37.8%

** At the time of the first offense the offender was in the range of 26 – 35 years of age, however at the time of the second offense and arrest leading to conviction, the offender was in the range of 36 – 45 years of age.

Table 25. Percentage of Responses from Each Group on the Profiling Offender Characteristics Questionnaire Sample.

Characteristics of Offender	Active Law Enforcement		Retired Law Enforcement		Students	
	<i>n</i> with Correct Answer	Valid %	<i>n</i> with Correct Answer	Valid %	<i>n</i> with Correct Answer	Valid %
Gender	40	97.6%	22	95.7%	46	83.6%
Age Range **	20	48.8%	9	39.1%	30	54.5%
Ethnicity	28	68.3%	13	56.5%	37	67.3%
Physical Build	28	68.3%	18	78.3%	33	60.0%
Height	27	65.9%	13	56.5%	29	52.7%
Hair Color	27	65.9%	16	69.6%	34	61.8%
Location Familiarity	36	87.8%	16	69.6%	38	69.1%
Felt Comfortable	40	97.6%	20	87.0%	48	87.3%
Prior Relationship	11	26.8%	9	39.1%	12	21.8%
Primary Motive	14	34.1%	10	43.5%	9	16.4%
Offense Planned	10	24.4%	6	26.1%	8	14.5%
Killing Fantasies	20	48.8%	11	47.8%	25	45.5%
Remorse	26	63.4%	15	65.2%	38	69.1%
Lived Locally	37	90.2%	17	73.9%	43	78.2%
Protecting Identity	31	75.6%	18	78.3%	35	63.6%
Approach to Victim	10	24.4%	4	17.4%	18	32.7%
Use of Force	28	68.3%	17	73.9%	40	72.7%
Altered Body	24	58.5%	15	65.2%	34	61.8%
Altered Crime Scene	34	82.9%	19	82.6%	38	69.1%
Victim Possessions	12	29.3%	8	34.8%	25	45.5%
Marital Status	32	78.0%	16	69.6%	39	70.9%
Education	21	51.2%	9	39.1%	22	40.0%
Employment History	19	46.3%	7	30.4%	24	43.6%
Religious Belief	16	39.0%	15	65.2%	10	18.2%
Prior Romantic Relationships	16	39.0%	12	52.2%	28	50.9%
Non-romantic Friendships	23	56.1%	15	65.2%	24	43.6%
Served in Armed Forces	20	48.8%	15	65.2%	26	47.3%
Alcohol Consumption	15	36.6%	6	26.1%	13	23.6%
Vehicle (How Old)	26	63.4%	12	52.2%	20	36.4%
Vehicle (Model)	27	65.9%	13	56.5%	33	60.0%
Work Habits	13	31.7%	6	26.1%	11	20.0%
Juvenile Record	23	56.1%	7	30.4%	25	45.5%
Adult Record	17	41.5%	7	30.4%	21	38.2%

** At the time of the first offense the offender was in the range of 26 – 35 years of age, however at the time of the second offense and arrest leading to conviction, the offender was in the range of 36 – 45 years of age.

Participant Views and Prior Experience with Criminal Profiling

Thirteen exploratory questions were given to the participants regarding their views and prior experience with criminal profiling. These questions were given to determine their overall consensus on the subject and to pair the findings with new areas to research, policy recommendations, and the determination of using criminal profiling for investigations. The researcher utilized one-way ANOVA analyses to determine the significance of each of these questions between the three groups (see Tables 26 – 28 for reference).

Table 26. Participant Views and Prior Experience with Criminal Profiling Questions Part A (ANOVA).

		Sum of		Mean		
		Squares	df	Square	F	Sig.
Please indicate your level of personal knowledge and experience with criminal profiling before this research study.	Between Groups	21.762	2	10.881	11.018	.000
	Within Groups	114.557	116	.988		
	Total	136.319	118			
Please indicate your level of personal knowledge and experience with the criminal justice system before this research study.	Between Groups	56.416	2	28.208	32.573	.000
	Within Groups	100.457	116	.866		
	Total	156.874	118			
Building a criminal profile can take several months to generate.	Between Groups	.023	2	.012	.011	.989
	Within Groups	121.556	116	1.048		
	Total	121.580	118			
Criminal profiles exclusively consist of data that describes the offender who committed the crime (i.e	Between Groups	4.116	2	2.058	2.078	.130
	Within Groups	114.876	116	.990		
	Total	118.992	118			

The question relating to the participants personal level of knowledge and experience with criminal profiling before this research study generated a mean of 3.54 for active law enforcement professionals, 3.74 for retired law enforcement professionals, and 2.76 for students. The difference between these groups produced a p-value of < 0.01 , at the 0.05 significance level, indicating that the results were highly significant and unlikely to have occurred by chance alone. The question related to the participants personal level of knowledge and experience with the criminal justice system before this study generated a mean of 4.32 for active law enforcement professionals, 4.57 for retired law enforcement professionals, and 3.04 for students. The difference between these groups produced a p-value of < 0.01 , at the 0.05 significance level, indicating that the results were highly significant and unlikely to have occurred by chance alone. The question related to the participant's perception that building a criminal profile can take several months to generate produced a mean of 3.54 for active law enforcement professionals, 3.57 for retired law enforcement professionals, and 3.53 for students. The difference between these groups produced a p-value of .989 at the 0.05 significance level, indicating that this provided no statistical significance. The question related to the participant's perception that criminal profiles exclusively consist of data that describes the offender who committed the crime produced a mean of 3.22 for active law enforcement professionals, 3.30 for retired law enforcement professionals, and 3.62 for students. The difference between these groups produced a p-value of .130 at the 0.05 significance level, showing that the results as not statistically significant.

Table 27. Participant Views and Prior Experience with Criminal Profiling Questions Part B (ANOVA).

		Sum of		Mean		
		Squares	df	Square	F	Sig.
Do you believe information used to create new criminal profiles derived from preconceived notions (stereotypes)?	Between Groups	1.195	2	.598	.837	.435
	Within Groups	82.788	116	.714		
	Total	83.983	118			
Do you believe fictional media can influence how an individual creates a criminal profile?	Between Groups	1.333	2	.667	1.041	.356
	Within Groups	74.247	116	.640		
	Total	75.580	118			
Do you believe non-fictional media can influence how an individual creates a criminal profile?	Between Groups	1.626	2	.813	1.573	.212
	Within Groups	59.954	116	.517		
	Total	61.580	118			
Law enforcement agencies rely heavily on profiling as an investigative tool when searching for an offender.	Between Groups	1.239	2	.619	1.006	.369
	Within Groups	71.400	116	.616		
	Total	72.639	118			

The question relating to if participants believed information used to create new criminal profiles derived from preconceived notions (stereotypes) generated a mean of 3.49 for active law enforcement professionals, 3.74 for retired law enforcement professionals, and 3.67 for students. The difference between these groups produced a p-value of .435 at the 0.05 significance level, showing that the results as not statistically significant. The question relating to if participants believed fictional media can influence how an individual creates a criminal profile generated a mean of 4.02 for active law enforcement professionals, 3.74 for retired law enforcement professionals, and 3.85 for students. The difference between these groups produced a p-value of .356 at the 0.05 significance level, showing that the results as not statistically significant. The question relating to if participants believed non-fictional media can influence how an individual

creates a criminal profile generated a mean of 4.02 for active law enforcement professionals, 3.70 for retired law enforcement professionals, and 3.87 for students. The difference between these groups produced a p-value of .212 at the 0.05 significance level, showing that the results as not statistically significant. The question related to the participant's perception on if law enforcement agencies rely on profiling as an investigative tool when searching for an offender produced a mean of 3.34 for active law enforcement professionals, 3.26 for retired law enforcement professionals, and 3.51 for students. The difference between these groups produced a p-value of .369 at the 0.05 significance level, showing that the results as not statistically significant.

Table 28. Participant Views and Prior Experience with Criminal Profiling Questions Part C (ANOVA).

		Sum of		Mean		
		Squares	df	Square	F	Sig.
Criminal profiling is a tool that should only be used by federal agencies.	Between Groups	12.701	2	6.351	6.882	.001
	Within Groups	107.047	116	.923		
	Total	119.748	118			
Law enforcement agencies can benefit from criminal profiling techniques.	Between Groups	4.468	2	2.234	3.366	.038
	Within Groups	76.994	116	.664		
	Total	81.462	118			
Criminal profiling is an effective investigative tool that should be implemented in all police departments.	Between Groups	5.029	2	2.514	2.826	.063
	Within Groups	103.190	116	.890		
	Total	108.218	118			
Criminal profiling has helped with the advancement of law enforcement agencies' ability to apprehend offenders.	Between Groups	2.156	2	1.078	1.560	.214
	Within Groups	80.163	116	.691		
	Total	82.319	118			
I have confidence in the criminal profiling concept to apprehend all offenders.	Between Groups	3.250	2	1.625	1.976	.143
	Within Groups	95.389	116	.822		
	Total	98.639	118			

The question relating to the participant's belief if criminal profiling should only be a tool used by federal agencies generated a mean of 2.02 for active law enforcement professionals, 1.74 for retired law enforcement professionals, and 2.55 for students. The difference between these three groups produced a p-value of .001, at the 0.05 significance level, indicating that this was highly significant. The question relating to if participants believed that law enforcement agencies could benefit from criminal profiling techniques generated a mean of 4.07 for active law enforcement professionals, 4.17 for retired law enforcement professionals, and 3.73 for students. The difference between these groups produced a p-value of .038 at the 0.05 significance level, indicating that this was highly significant. The question relating to if participants believed criminal profiling is an effective tool that should be implemented in all police departments generated a mean of 3.71 for active law enforcement professionals, 4.04 for retired law enforcement professionals, and 3.49 for students. The difference between these groups produced a p-value of .063 at the 0.05 significance level, indicating that this was nearly significant. The question relating to if participants believed criminal profiling has helped with the advancement of law enforcement agencies' ability to apprehend offenders generated a mean of 3.90 for active law enforcement professionals, 3.91 for retired law enforcement professionals, and 3.64 for students. The difference between these groups produced a p-value of .214 at the 0.05 significance level, showing that the results as not statistically significant. The question related to the participant's confidence in the criminal profiling concept to apprehend all offenders produced a mean of 3.49 for active law enforcement professionals, 3.65 for retired law enforcement professionals, and 3.24 for students. The

difference between these groups produced a p-value of .143 at the 0.05 significance level, showing that the results as not statistically significant.

Table 29. Regression Model Summary of Media Consumption and Perceptions Towards Criminal Profiling.

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	904.247	28	32.295	3.107	.000 ^b
	Residual	935.484	90	10.394		
	Total	1839.731	118			

Model	R	R Square	Adj. R Square	Std. Error of Est.
1	.701 ^a	.492	.333	3.22401

a. Dependent Variable: Participants exam performance from profiling characteristics questionnaire (profile accuracy)

b. Predictors: (Constant), media consumption between groups (active, retired, students), participants attitudes, perceptions, and beliefs of criminal profiling and the criminal justice system/investigations

A multiple regression analysis was also utilized to examine which factors would predict profile accuracy among participants. The variables selected to measure the profiling offender characteristics questionnaire accuracy included media consumption hours between the three groups of active, retired, and student, participant’s responses with their attitudes, perceptions, and beliefs of criminal profiling. These factors did individually and collectively account for any variances in the profiling offender characteristics questionnaire (see Table 29). In the multiple regression, the *R* equaled .701, which indicates the strong relationship, which shows this model is a relatively good predictor of the outcome. The *R*² equaled .492, showing that approximately 49.2% of the variance in the data can be explained by those predictor variables. The results from the model was a significant predictor of media consumption, their status as active, retired, or

student, their attitudes, perceptions, and beliefs of criminal profiling and investigations in the criminal justice system, and the performance and accuracy to the profiling offender characteristics questionnaire, $F(28,90) = 3.107, p < .001$. A Tukey post hoc test revealed that this multiple regression analysis was statistically significantly lower for active law enforcement professionals ($p = .022$) when compared to students. There was no statistically significant difference between the active and retired law enforcement professional groups ($p = .795$) and students and retired professionals ($p = .259$).

Chapter 5: Discussion

The current dissertation research set forth to combat the idea if exposure to media and fictional information or crime television dramas caused a positive or negative impact for investigative techniques in criminal profiling. The researcher used part of Kocsis *et al.* (2000 and 2002) previous research on criminal profiling accuracy constructs by creating new research to determine this theory. The researcher decided to incorporate active and retired law enforcement professional as well as students to mediate the relationship of fictional media influencing profile accuracy.

In Chapter 2, the author outlined the previous research and literature on criminal profiling, as well as the theoretical framework including methodology and effectiveness regarding this topic. The author also outlined the areas regarding media in relation to criminal profiling and crime, the CSI Effect, social constructionism, sensationalism, and popular television shows that depict criminal profiling.

Chapter 3 detailed the methodology for the study. The researcher created a survey instrument for participants to take, which included students from Florida Atlantic University, as well as both active and retired law enforcement professionals from various agencies. These participants were able to complete the survey instrument online utilizing SoGoSurvey, an application designed to create and distribute surveys and assessments. The collected data was then analyzed utilizing Statistical Package for The Social Sciences Version 24.0 (SPSS). To mediate the relationship of fictional media influencing profile accuracy each group of participants (students, active law enforcement, and retired law enforcement), the researcher utilized a multiple regression analysis and one-way ANOVA analyses for this study. The mediation between groups determined any differences and

similarities among the participants. Independent t-tests and descriptive statistics were utilized as preliminary analysis to determine the mean scores for the demographic similarities between groups and participants. A paired samples t-test was conducted to determine if there was any statistical significance between pre and post exposure with participants. Also, the researcher conducted a qualitative analysis utilizing the *Profiling Offender Characteristics Questionnaire* from Kocsis et al. (2000) based on the responses received from participants.

Participants self-reported their number of hours they spend watching television each week which mostly fell between the ranges 0 - 40 hours across each group, which is an average amount compared to the number of hours total in a week equaling to 168. In 2017, Nielsen reported that an average United States consumer spends 238 minutes or three hours and 58 minutes per day watching television, while adults spend approximately five hours and four minutes per day on average which equates to approximately 35.5 hours per week, slightly more than 77 days per year (Nielsen, 2018). This indicating that the participants for this study fell within the national average. Previous research to include Lufty (2013) and Kocsis et al (2002), has indicated that general research involving attitudes towards criminal justice investigations or criminal profiling could not significantly correlated with consumption due to the possible wording of questions and self-reporting. The researcher did attempt to mitigate and change this by creating questions that were easier to interpret with first order questions for frequency and probability and second order questions to determine attitudes, perceptions, and beliefs as indicated by Shrum and Lee (2012). The researcher believed this helped because in the regression analysis for active law enforcement professionals, retired law enforcement professionals, and students, there

was a highly statistical significance ($p < .001$) between the average media consumption between groups and their attitudes, perceptions, and beliefs of criminal profiling and their ability to profile accurately utilizing the profiling offender characteristics questionnaire.

The researcher notes that while the number of hours did not vary highly between groups, those with more years of education or a bachelor's degree or higher did perform well utilizing the profiling offender characteristics questionnaire by being able to accurately profile the basic identifiers such as gender, age, race, height, hair color, location familiarity, feeling comfortable in the location to commit the offense, fantasies about killing, identity protection, use of force, altering body and crime scene, marital status, education, non-romantic friendships, previous military history, previous offenses, and the offender having a vehicle. Even though the participants were exposed to media during the course of this research, the researcher chose the television episode *Criminal Minds* and the "Profiling 101" episode specifically because not only did it give an entertainment view of solving a crime, but it gave an overview to what profiling may appear to consist of within law enforcement, especially with the Federal Bureau of Investigation.

The data analysis showed some questions not being able to have enough significant value within the research and this was due to participants not varying with their answer choices. In terms of personal knowledge with criminal profiling, majority of active and retired law enforcement professionals self-reported that they were either familiar or very familiar, while more students self-reported being either neutral or unfamiliar. However, the majority of participants self-reported that they were at least familiar or very familiar or used with the criminal justice system. Between all groups the majority self-reported that they agreed or strongly agreed with the perception of building

a criminal profile can take several months to generate, believed that non-fictional and fictional media influenced how an individual would develop a criminal profile, believed criminal profiling can be an effective investigative tool that should be implemented in all police departments, and that law enforcement agencies can benefit from criminal profiling techniques. The majority of participants disagreed with the notion of criminal profiling techniques and practices only being restricted to federal law enforcement agencies and also with the idea that law enforcement agencies rely heavily on profiling as an investigative tool. Participants also varied between neutral and agreeing to having confidence in the criminal profiling concept to apprehend all offenders. While the questions on participants views or number of hours of television viewing or crime dramas were not all significant between groups because of similar responses given, they were still associated as a collective with media influence, criminal profiling, and profile accuracy.

The goal of the study in answering the proposed research question caused the researcher to agree that exposure to media and fictional information or crime television dramas does cause an impact for investigative techniques. Utilizing the literature of Kocsis, Hayes, and Irwin (2002), the researcher was able to generate the bias of inducing exposure to decrease profiling accuracy. The results indicated that there can be a negative impact that can occur from media as it relates to investigative techniques, however it can be positive or have no effect when participants are educated on practices regarding investigation procedures and criminal profiling. Researching whether the participant's status as either students, active or retired law enforcement professionals mediated the relationship between exposure to media causing a negative or positive impact on

investigative techniques provided varied results between groups. The results indicated active law enforcement professionals would be more likely to accurately profile an offender than retired law enforcement professionals, leaving students being the last group to profile with at least 50 percent accuracy.

Statistically Significant Findings

As indicated previously, the researcher found that the regression analysis conducted showed a highly statistical significance with $p < .001$, between the average media consumption between groups and their attitudes, perceptions, and beliefs of criminal profiling and their ability to profile accurately utilizing the profiling offender characteristics questionnaire. The researcher also noted that there was only one individual who received an 80% or better in profile accuracy, whereas this participant was identified as a female Caucasian with a Juris Doctorate and active law enforcement at the local level with 0 – 5 years of experience. This participant appeared to be the outlier, indicating that higher education appeared to outweigh the years of experience suggested as an ideal qualification to accurately produce a criminal profile. The researcher did find that years of experience did not always lead to accurate profiling due to the data indicating that 56.5% of retired law enforcement professionals received a 50% or better on the profiling offender characteristics questionnaire, whereas 73.2% of active law enforcement professionals and 50.9% of students produced the same level of accuracy. Overall, males appeared to perform better than females (males = 32, 60.4%, females = 39, 59.1%) when interpreting scores with a 50% or better accuracy which is consistent with previous research findings. There were also approximately ten individuals who created a profile that was similar to the offender portrayed in the *Criminal Minds* “Profiling 101” episode

instead of the offender identified in the non-fictional case scenario provided in the survey instrument.

Demographics. The researcher found that of the 119 participants who completed the study, approximately 55.5% identified as female, where as 44.5% identified as male. Race and ethnicity seemed to correlate with previous studies who have had Black or African Americans and Caucasians being the dominant majority in the study, however this study also had a large population of those who identified with being Hispanic or Latino. This study, unlike others, had participants spanning from a larger age bracket to include those ranging from 16 – 67 years of age. Also, unlike previous studies, the researcher received a response from participants that ranged from approximately twenty different states and one from outside of the United States. This study found that a majority of all participants either had a degree or have attended college to obtain some form of higher education. This is important for the researcher to note since most local and state law enforcement agencies require at least a high school diploma. Instead of measuring analytical, cognitive, deduction, and observation skills with tests that have been known to measure aptitude, personality, or performance, the researcher decided to correlate education with cognitive and analytical abilities in terms of academia degree achievements to parallel with deduction and observation skills that have been noted in the literature as skills necessary for profilers. Doing this reduced the time participants needed to respond to the survey. The researcher also believed that even though the participants may have all answered these items similarly and correctly to establish a baseline, that standardized test can still be difficult to interpret if individuals have a deficiency in this area or also having it become difficult to a national average where those responses may

vary because of age or education. The researcher believes that having the knowledge of each of these demographic characteristics can aid with future studies for the researcher, and also help those who may decide to create larger studies to understand various perspectives from different parts of the country or world, ethnicities, educational experiences, and experiences especially since the nature of criminal profiling, offender profiling, or psychological profiling is not limited to those in law enforcement, federal law enforcement, or those residing in the one part of the world.

Crime Related Media Consumption. As indicated previously there was no statistical significance between groups when determining if participants previous exposure to crime-related television shows, movies, books, or material, however at least all participants have watched at least one crime-related television show or movie and read some form of crime-related material either for school or their professional career.

The researcher decided to add a different concept in this type of study. This involved incorporating a question to the survey instrument, determining if participants previously watched certain television shows, whether fictional or non-fictional, from a list of approximately fifty popular crime television shows watched by various audiences. The researcher found that this was a significant correlation among participants. The findings for this particular question also showed that there were approximately 50 or more participants who previously watched fictional or non-fictional shows which included *20/20*, *Criminal Minds*, *C.S.I.: Crime Scene Investigation*, *Dateline*, *First 48*, *Law & Order*, and *N.C.I.S.*

Pre-Exposure to Television Show. The researcher found the questions related to investigators being able to determine an offender's marital status; investigators learning

more from a deceased victim of crime than from a witness; and investigators being able to predict an offender's intelligence level based on the location of the crime being those with the highest statistical significance. The researcher found that participants varied with these questions. Participants between all groups either chose that they agreed, disagreed, or was neutral to these beliefs.

Post-Exposure to Television Show. The researcher found the questions related to believing that the majority of criminal cases are solved because of DNA evidence found at the crime scene; forensic scientist producing the most crucial evidence during an investigation; and investigators being able to tell if a suspect has a mental disorder based on how the crime scene was left being those with the highest statistical significance. The researcher found that participants varied with these questions. Participants between all groups either chose that they agreed, disagreed, or was neutral to these beliefs.

Correlations Between Pre and Post Exposure. Through a paired samples t-test, the researcher was able to notate that three of the eight paired questions produced some type of statistical significance. These three questions included the belief that the majority of criminal cases are solved because of fingerprint evidence found at the crime scene; criminal profilers being able to accurately predict the characteristics and personality of a suspect; and criminal profilers contributing useful information to move a stalled investigation forward. This appeared to be because participants changed their answers between pre and post exposure to the *Criminal Minds* "Profiling 101" episode.

Participant Views and Prior Experience with Criminal Profiling. Although producing no statistical significance, the researcher was able to find that the majority of participants between each group believed that believed criminal profiling can be an

effective investigative tool that should be implemented in all police departments and that law enforcement agencies can benefit from criminal profiling techniques. This was significant to the researcher because previous studies involving media and criminal profiling found participants disagreed on this matter, with law enforcement officers and students varying vastly on this opinion. Another finding which produced no statistical significance, indicated that the majority of participants believed non-fictional and fictional media influenced how an individual would develop a criminal profile. The researcher believed this to be an important finding for current and future research, as well as an idea that can aid in helping the law enforcement and criminal justice community to change the social constructs and characteristics that may be tied to media and the role or influence it can have regarding criminal profiling.

Overall, the researcher found significant correlations with media influence, criminal profiling, perceptions, and profile accuracy. However, the researcher believes that there is still a significant amount of research that still needs to be contributed into this area. With new shows such as *United Shades of America* (2016) and *Trigger Warning* (2019) trying to get society to change their overall thinking and set social constructs with examining cultural taboos and stereotypes so that individuals can see past what is often viewed in the media, this can be an added token to changing how we use different ideas and constructs to relate toward profiling offenders. Surette (2015) described social constructionism as an effect that allows individuals to agree to view the world in a specific way. Television shows, other forms of media, and research that try to defy these constructs help to create new ideas to profiling and interpreting characteristics. There have been crimes that simply could not be profiled accurately due to profilers not

being able to use the “status quo” for who the offender could be. A retired FBI special agent who has worked in the area of profiling for more than 30 years analyzing solved and unsolved crimes, stated that the 2017 Las Vegas gunman did not even fit the typical profile for a mass shooter and believed that while they also may never find a motive to his crimes, that the mold of the profiling concept was completely rejected (Allen, 2017). The same was also true for the 2002 Beltway Sniper case in the Washington, D.C. area and other missed profiled cases. The literature from Schefflin (1998) has even suggested that law enforcement agencies tried to cease profiling techniques at one point because the Boston Strangler was unable to be profiled. As Schefflin (1998) described, even though murders may continue to grow “stranger” or complex in nature and appearing to be more difficult to solve as new crimes surface, the researcher believes that profiling techniques still should be continued and perfected as researchers, psychologists, law enforcement professionals, and those in the criminal justice field alike continue to study and enhance this craft to produce a higher accuracy and validity. Ultimately each offender can and will still be different individually by their circumstances, experiences, and crimes, but they still have the ability to share similar characteristics which aid in the ability for those to create a criminal profile. The concept of criminal profiling should continue to morph into an investigative technique that does not provide singularity towards crimes committed by certain groups, races, or ethnicity, but should deconstruct the norm and social constructionism provided in media. This will enable researchers and law enforcement professionals alike to adapt and react to new ideas and profile more characteristics that have not previously been observed in the average offender of a certain crime.

Limitations

This research has had several limitations and strengths. Finding an appropriate number of participants to produce research with a strong validity did prove to be difficult, due to the active and law enforcement professionals as well as students having enough personal time to complete the survey instrument's array of questionnaires. To minimize this limitation the researcher decided to distribute the questionnaires in the SoGoSurvey online format instead of formal setting to create easy accessibility and serve as a time saver for participants to work at their own pace. However, even though the researcher gained an adequate number of participants as originally planned for that would be valid for research, the accessibility still hindered some participants from participating due to the length of the survey and the space and time they were able to complete it. For some active and retired law enforcement professionals, the snowball method of recruiting additional participants proved to be helpful, but even these participants had trouble being able to complete the survey in the month timeframe given by the researcher due to heavy work caseloads or technology constraints with participants.

Participants had to self-report their exposure to fictional media and this self-reporting was a construct that was subjected to error. There were some participants who could have been biased to fictional television, especially crime-related shows which potentially caused for subjectivity in data analyzation. The researcher did mediate this with questions geared toward exposure which essentially exposed potential bias.

Previous studies have suggested that there is no appropriate control group, which is a limitation in social constructionism, cultivation, and criminal profiling with media research (Rossman & Brosius, 2004). Lutfy (2013), further explains this with media by

stating that is because any participant who has experienced television may experience cultivation effects cannot be considered a control group, however any participant who is unfamiliar or who has not watched television is not a representation of any western culture or population would be inappropriate for becoming a comparison group. The researcher believes the same concept is true with social constructionism, media, and criminal profiling research with all participants. This is because social constructionism allows individuals to see reality in a different light and what we have viewed previously has been socially created by other people causing individuals to hold what we know as certain characteristics or in this case profiling constructs to be true because of social constructs. This inherently means if participants have not been influenced by social constructs, then they cannot be a representation of any population.

Contributions to the Field

Despite some insignificant findings, the overall study still proved to be of significance to the area in research towards criminal profiling. Criminal profiling will still hold much value in media and in law enforcement. While there are many who do not believe the actual criminal profiling technique is used for routine investigations, it still is. Police officers, agents, and other various law enforcement professionals have to have the inept ability to be able to investigate, which causes those individuals to be able to “profile” what or who they need to look for. Research continues to determine how accuracy is obtained, and this research aimed to provide some proclivity as to providing perspectives from active and retired law enforcement professionals as well as college students. With the rise of new television shows leading in crime dramas and those dealing with stereotypes and cultural differences, other researchers are more inclined to delve

into related research topics to gain further knowledge and determine its continued acceptance in the criminal justice community. Other studies have use cognitive measures and intelligence test to measure profile accuracy, but the researcher believes this can be substituted for ones utilized in this study such as level of education with degrees and the number of years spent in college paired with experiences.

In terms of the perceptions between participants between all groups, it is clear to the researcher that law enforcement agencies and universities need to educate professionals and students on criminal profiling. All media and preconceived notions still have the ability to warp the public's perception and knowledge on criminal profiling and the way various agencies conduct investigations. Those in the field and those studying should be better educated and trained to better understand the criminal justice system, criminal profiling, and investigations for implementation and functionality purposes for all investigations. These individuals also need to understand the community it serves to understand its people, the population in its entirety, by community policing to help mediate and reduce perpetuating stereotypes and perceptions to avoid apprehending the wrong offender and inducing societal and cultural conflicts when the community faults law enforcement agencies for profiling errors because the media has portrayed individuals in a negative light leading to ingrained society concepts, cultivation, and perceptions.

Special Agent James Clemente stated that those who profile at the FBI, are in a think tank mentality, and that they attack crime from their different perspectives. He further stated that profiling is basically reverse engineering in crime, where profilers look at the behavior that is exhibited from a crime scene and work backwards towards the type

of personality of the person who would commit that crime. Typical law enforcement officers may only see a serial crime one in their career, whereas those agents who profile in the FBI may see them every week (Roland, 2017). Training in the area of criminal profiling should be emphasized in all law enforcement agencies across the local, state, and federal levels which could be offered in the training academy and reinforced by utilizing educational seminars or training academies from the Federal Bureau of Investigation since they lead in law enforcement for profiling techniques, and education paired with experience and training on the job. Training within all agencies may be able to assist those smaller departments and agencies who have had difficulties in crime solving with cases that they have never observed before. Educating students who take criminal profiling and/or behavioral science courses on how crime and media can impact one another, especially with profiling is important. The goal is not to rid the criminal justice community of important concepts that aid law enforcement, but to help a system continue to grow and change for the better in community relations, media perceptions of law enforcement, media and societal perceptions of possible offenders, and in profiling accuracy. Research should be continued to incorporate several agencies at the local, state, and federal level in different areas with varied demographic populations and across states or even countries.

This study contributes to criminal profiling, crime, and media literature and research. By focusing on media consumption and social constructs as it relates to perception, the concepts and theories regarding accuracy in profiling techniques can be expanded. From a practitioner's standpoint, and as a person who is in the law enforcement field, the researcher still believes research in crime in media, especially

involving profiling, social constructionism, and the cultivation theory are important. The roots of criminal profiling and its practices should be emphasized in the future education and training of future profilers, law enforcement professionals, and researchers.

Future Research

This research was aimed towards evaluating media effects on criminal profiling and if criminal profiling's accuracy and effectiveness to continue as a premier law enforcement investigative tool. Research in media, crime, and criminal profiling collectively are important because together it helps to assess whether one influences another, in this case media's influence on criminal profiling. Research in criminal profiling has been limited and has been lacking in empirical support, however its practice is still utilized by agencies worldwide (Bennell et al., 2008). The researcher believes that future research in this area should also incorporate individuals in film and mass communications to gain perspectives of those students and professionals in the field of media. This will aid in understanding why media depicts items regarding crime in different lights and could help change the narrative to aid with profiling and for others to understand how crime solving and media works in its truer form. Gaining perspectives from judges and lawyers can also prove to be fruitful. Expanding this research to former jurors or those with little to no law enforcement experience may give a different perspective, understand, and results on how media impacts criminal profiling. Research in this area should continue to be replicated and produced for scholars, criminologists, researchers, and those in the criminal justice arena to be able to identify the problems, gaps, and current successes within the field of profiling. While there are many offenders who have been captured due to criminal profiling, there have also been those who have

been undetected due to a profile that was inaccurate. Scholarly journals, books, articles, and conferences devoted to crime, media, criminal justice, and profiling are important to utilize as dissemination methods to release the findings of this research. Researchers, students, law enforcement professionals, and trained profilers alike will continue to need research like this for the growing society of tomorrow that continues to advance in media and technology influences.

Appendix A

Participant Letter for Anonymous Surveys

Participant Letter for Anonymous Surveys
NSU Consent to be in a Research Study Entitled
*“Media Effects and Criminal Profiling:
How Fiction Influences Perception and Profile Accuracy.”*

Who is doing this research study?

This person conducting this study is Asha Bolton, a doctoral student in Nova Southeastern University’s College of Arts, Humanities, and Social Sciences in the Department of Justice and Human Services. They will be supervised by the student’s dissertation chair Dr. Kendra Gentry.

Why are you asking me to be in this research study?

You are being asked to take part in this research study because you are a criminal justice or psychology student, a professional in the criminal justice community, or active/retired member of law enforcement. Your opinions are valued due to your education and/or experience in your field.

Why is this research being done?

The purpose of this study is to investigate and determine whether media and fictional information that is observed can influence an individual’s perception in creating a criminal profile. Also, if profiling techniques can still be accurate enough to use in investigations as well its admissibility in court.

Profiling is important to the criminal justice community and if individuals can overlook stereotypes depicted in media, then it is possible that its accuracy and validity will increase for researchers and members of law enforcement. This type of research is vital to the field and it can help with law enforcement training to ensure time and resources are not wasted in creating a profile that will have individuals searching for the wrong offender.

What will I be doing if I agree to be in this research study?

You will be taking a one-time, anonymous survey. The survey will take approximately 3 - 4 hours to complete. This survey is **self-paced** and includes answering a series of questionnaires and watching a fictional television show.

Specifically, this study will include a series of questionnaires to determine your exposure to crime related television shows and media, your views on profiling, and if the exposure

influences their perception on the subject. You will be asked to complete an assessment to determine your cognitive reasoning and analytical skills. Participants will also watch a fictional show based around profiling and then be given a case scenario. From this, participants will be asked to provide a 'criminal profile' based on information given using a case scenario and utilizing your background (employment and/or educational).

Are there possible risks and discomforts to me?

This research study involves the possibility of emotional distress becoming a minimal risk to you. This minimal risk has the potential to occur when participants read the case synopsis of a previously solved crime. This minimal risk may also occur when the participant views the television episode of the fictional television show. The minimal risk may occur if participants have never observed the episode, cannot separate fiction from reality, or have previously been involved in or knows an individual who has been involved in the type of crime in the case scenario and/or television show. However, to the best of our knowledge, the things you will be doing have no more risk of harm than you would have in everyday life.

Participation is anonymous, therefore your decision to participate or not will have no impact on your employment status, organizational status and/or grades in your course. Your professor or supervisor will not know which individuals have completed this study.

What happens if I do not want to be in this research study?

You can decide not to participate in this research and it will not be held against you. You can exit the survey at any time.

Will it cost me anything? Will I get paid for being in the study?

There is no cost for participation in this study. Participation is voluntary and no payment will be provided.

How will you keep my information private?

Your responses are anonymous. Information we learn about you in this research study will be handled in a confidential manner, within the limits of the law. Data will be kept privately on a computer and through the survey website database. This information will be secured by password protection. This data will be available to the researcher, the Institutional Review Board and other representatives of this institution, and any granting agencies (if applicable). All confidential data will be kept securely on the investigator's laptop and flash drive that are both password protected. Survey responses retrieved from the SoGoSurvey website will be exported into files which include Microsoft Excel and Social Sciences (SPSS) for data analyzation documents.

SoGoSurvey website privacy policy states that they have a business principle in protecting the privacy of its customers and survey participants. The company provides

data encryption for participants and the investigator, to keep survey participant responses, as well as the information pertaining to the participant and investigator confidential and secure during the administration of the survey and for data transfers.

All data will be kept for a minimum of 36 months from the end of the study and destroyed after that time by file deletion of documents.

Who can I talk to about the study?

If you have questions, you can contact the student investigator, Asha Bolton at (954)667-9036 or ab2406@mynsu.nova.edu. You may also contact Dr. Kendra Gentry, who will supervise the student, at (954)262-7955 or kgentry1@nova.edu.

If you have questions about the study but want to talk to someone else who is not a part of the study, you can call the Nova Southeastern University Institutional Review Board (IRB) at (954) 262-5369 or toll free at 1-866-499-0790 or email at IRB@nova.edu.

Do you understand and do you want to be in the study?

If you have read the above information and voluntarily wish to participate in this research study, please utilize the website link given by the researcher. The research study will be powered by the SoGoSurvey website.

(Link to be provided here)

<https://survey.sogosurvey.com/r/cCNfJE>

NSU IRB APPROVED:

Approved: October 16, 2018

Expired: October 15, 2019

IRB#: 2018-522-Non-NSU

Appendix B

Profiling Offender Characteristics Questionnaire Sample

Instructions: This questionnaire is the *Profiling Offender Characteristics Questionnaire* adapted from Kocsis et al. (2000). This questionnaire surveys the principle characteristics of the offender who committed the crimes. For each item, indicate your prediction of the offender's characteristics by circling the appropriate number. If you think you know the correct answer but your answer is not among one of the options, choose the option that is closest to your answer. If you are unsure of the correct answer, simply guess. Please answer every question.

1. The offender is (1) male or (2) female.

2. The offender is aged
 - (1) 1 – 12 years
 - (2) 13 – 17 years
 - (3) 18 – 25 years
 - (4) 26 – 35 years
 - (5) 36 – 45 years
 - (6) 45 – 55 years
 - (7) Older than 56 years

3. The offender's ethnic background is:
 - (1) African American
 - (2) Asian
 - (3) Caucasian
 - (4) Hispanic / Latino(a)
 - (5) Middle-Eastern
 - (6) Native American
 - (7) Other

4. The offender's general build is:
 - (1) Thin
 - (2) Average
 - (3) Solid
 - (4) Fat

5. The offender's height is:
- | | |
|----------------|---------------|
| (1) Very Short | (4) Tall |
| (2) Short | (5) Very Tall |
| (3) Average | |
6. The offender's hair color is:
- | | |
|------------|-----------------|
| (1) Blonde | (4) Black |
| (2) Red | (5) Gray |
| (3) Brown | (6) None / Bald |
7. Prior to the offense, was the offender familiar with the location where the offense took place?
- (1) Yes, highly familiar
 - (2) Yes, vaguely familiar
 - (3) No
8. Did the offender feel comfortable in the area where the offense took place?
- (1) Yes
 - (2) No
9. The previous relationship between the offender and the victim was:
- (1) Blood Relatives
 - (2) Mutual Acquaintances, but not related by blood
 - (3) Offender knew the victim, but victim did not know offender
 - (4) Complete Strangers

10. What was the primary motive for the offense?

- | | |
|--------------------------------------|--|
| (1) Revenge | (6) Jealousy |
| (2) Uncontrollable Impulse | (7) Hatred toward a certain type of person |
| (3) Show of power / Need for control | (8) Pleasure (sexual or other) |
| (4) Feelings of inadequacy | (9) Other |
| (5) Frustration | |

11. The offense was:

- (1) Totally unplanned or spontaneous
- (2) Thought of previously, but never actually planned
- (3) Some planning involved
- (4) Carefully planned

12. Prior to the offense, did the offender have fantasies about killing someone?

- | | |
|--------------------|---------------------|
| (1) No | (3) Yes, Often |
| (2) Yes, Sometimes | (4) Yes, Constantly |

13. Did the offender experience any remorse about the offense?

- (1) Yes, a great deal
- (2) Yes, some
- (3) No

14. At the time of the offense, did the offender live within a five-mile radius of the location where the offense took place?

- | | |
|---------|--------|
| (1) Yes | (2) No |
|---------|--------|

15. Did the offender take any precautions to protect his or her identity from the victim?

- | | |
|---------|--------|
| (1) Yes | (2) No |
|---------|--------|

16. How did the offender initially approach the victim?

- (1) Slowly or casually
- (2) Belligerently
- (3) With a con or ploy to detain the victim
- (4) By surprise (e.g., from behind or during sleep)

17. Did the offender use force before committing the actual offense?

- (1) No
- (2) Yes, primarily to gain control over the victim
- (3) Yes, primarily to intimidate the victim
- (4) Yes, primarily to see the victim suffer
- (5) Yes, primarily in a drive for revenge
- (6) Yes, primarily in anger

18. After the offense, did the offender alter the victim's body in any way (e.g., rearrange clothing, reposition body)?

- (1) Yes
- (2) No

19. After the offense, did the offender do anything to alter the crime scene (e.g., remove evidence, clean up)?

- (1) Yes
- (2) No

20. Did the offender take away any of the victim's possessions from the crime scene?

- (1) Yes
- (2) No

21. The offender's marital status is:

- (1) Single
- (2) Married
- (3) Common Law Relationship
- (4) Divorced

22. The offender's highest level of education is:

- | | |
|-------------------------------------|--|
| (1) None | (5) Completed High School |
| (2) Did not complete primary school | (6) Completed Technical College |
| (3) Completed primary school | (7) Some college, but no Degree |
| (4) Dropped out of High School | (8) Completed College, Obtained Degree |

23. The offender's general employment history is:

- | | |
|-------------------------------------|-------------------------------|
| (1) Student, Not yet employed | (5) Regular Semi-skilled work |
| (2) Mostly Unemployed | (6) Regular Skilled work |
| (3) Irregular, Part-time Employment | (7) Professional |
| (4) Regular work as a laborer | |

24. The offender's current religious belief is:

- | | |
|--------------------|------------------------------|
| (1) Protestant | (6) Buddhist |
| (2) Catholic | (7) Taoist |
| (3) Greek Orthodox | (8) None (Atheist, Agnostic) |
| (4) Jewish | (9) Other |
| (5) Muslim | |

25. The offender's history of romantic relationships includes:

- (1) No prior relationships
- (2) Very few brief casual relationships
- (3) A few relatively long casual relationships
- (4) Many short casual relationships
- (5) Many long casual relationships
- (6) A few relatively short serious relationships
- (7) A few relatively long serious relationships
- (8) Many short serious relationships
- (9) Many long serious relationships

26. The offender's history of non-romantic friendships includes:

- | | |
|--|---|
| (1) No friendships | (6) A few relatively short deep friendships |
| (2) Very few brief casual friendships | (7) A few relatively long deep friendships |
| (3) A few relatively long casual friendships | (8) Many short deep friendships |
| (4) Many long casual friendships | (9) Many long deep friendships |

27. Did the offender ever serve in the armed forces?

- (1) Yes
- (2) No, but thought of it
- (3) No

28. The offender's alcohol consumption includes:

- | | |
|------------|---------------|
| (1) None | (4) In binges |
| (2) Low | (5) High |
| (3) Medium | |

29. How old is the offender's vehicle?

- | | |
|----------------------|----------------------------|
| (1) No vehicle owned | (4) 6 – 10 years old |
| (2) 1 – 2 years old | (5) More than 10 years old |
| (3) 3 – 5 years old | |

30. Condition and model of the offender's car:

- (1) Does not apply
- (2) Flashy model in excellent condition
- (3) Conservative model in excellent condition
- (4) Flashy model in good condition
- (5) Conservative model in good condition
- (6) Flashy model in poor condition
- (7) Conservative model in poor condition

31. The offender's work habits include:

- (1) Steady, dependable, hard worker
- (2) Misses work frequently, but works well when present
- (3) Attends work frequently, but works poorly when present
- (4) Misses work frequently, and works poorly when presents
- (5) Does not work at all

32. Does the offender have a juvenile record of assaults?

- (1) Yes, Several
- (2) Yes, One or two
- (3) No

33. Does the offender have adult convictions for assault?

- (1) Yes, Several
- (2) Yes, One or two
- (3) No

Appendix C

Participant Media and Crime Related Exposure Questionnaire Sample

Instructions: Please answer the following questions to the best of your knowledge by circling the correct response or filling in the blank as the questions relate to what you believe to be true about yourself. This questionnaire asks questions about your viewing of crime-related television programs, books, movies, etc. This includes both fiction (e.g. *Criminal Minds*, *Law & Order*, *CSI* are fictional crime-related shows) and non-fiction (e.g. *48 Hours*, *Forensic Files* are non-fictional or real-life crime related shows). ***Please answer every question.***

Television Consumption

1. How often do you watch crime-related television shows?
 - a. Not at all
 - b. Once a year or less
 - c. Once a month or less
 - d. More than once a month, but less than once a week
 - e. Once a week or more
 - f. Once a day or more

2. Approximately how many days in the past month have you watched a crime-related television show?
 - a. 0 – 5
 - b. 6 – 10
 - c. 11 – 20
 - d. 21 – 31

3. How often do you watch crime-related movies? (Includes watching at the theater, at home on computer/DVD/VHS, Amazon Prime/Hulu/Netflix or other, or movies on television)

- a. Not at all
- b. Once a year or less
- c. Once a month or less
- d. More than once a month, but less than once a week
- e. Once a week or more
- f. Once a day or more

4. How often do you read crime-related books/novels/magazines?

- a. Not at all
- b. Once a year or less
- c. Once a month or less
- d. More than once a month, but less than once a week
- e. Once a week or more
- f. Once a day or more

5. How often do you watch any of the *Criminal Minds* television series? (Includes *Criminal Minds*, *Criminal Minds: Suspect Behavior*, and *Criminal Minds: Beyond Borders*.)

- a. Not at all
- b. Once a year or less
- c. Once a month or less
- d. More than once a month, but less than once a week
- e. Once a week or more
- f. Once a day or more

6. How often do you watch any of the *Law & Order* television series? (Includes: *Law & Order*, *SVU*, *Criminal Intent*, *Trial by Jury*, *True Crime*, *LA*, and *UK*).

- a. Not at all
- b. Once a year or less
- c. Once a month or less
- d. More than once a month, but less than once a week
- e. Once a week or more
- f. Once a day or more

7. How often do you watch any of the *CSI: Crime Scene Investigation* television series? (Includes: *CSI*, *CSI: Miami*, *CSI: NY*, and *CSI: Cyber*).

- a. Not at all
- b. Once a year or less
- c. Once a month or less
- d. More than once a month, but less than once a week
- e. Once a week or more
- f. Once a day or more

8. Please check which of the following crime-related television shows you have watched. Includes fictional and non-fictional television shows.

<input type="checkbox"/>	20/20	<input type="checkbox"/>	Chicago P.D.	<input type="checkbox"/>	First 48	<input type="checkbox"/>	Murder, She Wrote	<input type="checkbox"/>	Shots Fired
<input type="checkbox"/>	American Crime Story	<input type="checkbox"/>	Cold Case	<input type="checkbox"/>	Forensic Files	<input type="checkbox"/>	N.C.I.S.	<input type="checkbox"/>	Snapped
<input type="checkbox"/>	American Justice	<input type="checkbox"/>	Columbo	<input type="checkbox"/>	Hannibal	<input type="checkbox"/>	Nightmare Next Door	<input type="checkbox"/>	The FBI Files
<input type="checkbox"/>	Blue Bloods	<input type="checkbox"/>	Covert Affairs	<input type="checkbox"/>	I (Almost) Got Away With It	<input type="checkbox"/>	Numb3rs	<input type="checkbox"/>	The Inspectors
<input type="checkbox"/>	Bones	<input type="checkbox"/>	Criminal Minds	<input type="checkbox"/>	Law & Order	<input type="checkbox"/>	Person of Interest	<input type="checkbox"/>	The Investigators
<input type="checkbox"/>	Breaking Bad	<input type="checkbox"/>	C.S.I.	<input type="checkbox"/>	Lie to Me	<input type="checkbox"/>	Profiler	<input type="checkbox"/>	The Killing
<input type="checkbox"/>	Broadchurch	<input type="checkbox"/>	Dateline	<input type="checkbox"/>	Luther	<input type="checkbox"/>	Quantico	<input type="checkbox"/>	To Catch A Predator
<input type="checkbox"/>	Bull	<input type="checkbox"/>	Deadly Women	<input type="checkbox"/>	Major Crimes	<input type="checkbox"/>	Rizzoli & Isles	<input type="checkbox"/>	True Detective
<input type="checkbox"/>	Castle	<input type="checkbox"/>	Dexter	<input type="checkbox"/>	Making of a Murderer	<input type="checkbox"/>	S.W.A.T.	<input type="checkbox"/>	Unsolved Mysteries
<input type="checkbox"/>	Catching Killers	<input type="checkbox"/>	Elementary	<input type="checkbox"/>	Mindhunter	<input type="checkbox"/>	Sherlock	<input type="checkbox"/>	Unusual Suspects

9. Is there a crime-related show that you watch most often? (Fiction or non-fiction).

a. Yes

b. No

If yes, please list the title of the show _____.

Pre-media television show synopsis questionnaire

10. Based on the type of victim, investigators are able to determine an offender's marital status.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

11. The majority of criminal cases are solved because of DNA evidence found at the crime scene.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

12. The majority of criminal cases are solved because of fingerprint evidence found at the crime scene.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

13. Based on the location of the crime, investigators are able to predict an offender's intelligence level.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

14. Forensic scientists produce the most crucial evidence during an investigation.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

15. Criminal profilers can accurately predict the characteristics and personality of a suspect.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

16. Intuition is a key skill set for an investigator.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

17. Criminal profilers contribute useful information that can move a stalled investigation forward.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

18. Criminal profilers can provide credible information about a suspect during an investigation.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

19. Investigators learn more from a deceased victim of the crime, than from a witness.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

20. An investigation does not have to take longer than a month to solve.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Post-media television show synopsis questionnaire

21. Indicate to what extent you believe the episode to be realistic and true to actual investigative procedures.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

22. Criminal profilers contribute useful information that can move a stalled investigation forward.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

23. In many cases, a suspect's motive remains unclear, even after reviewing the crime scene.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

24. The most qualified investigator tends to be the one who will solve the case and get the job done.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

25. Intuition is a key skill set for an investigator.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

26. Criminal profilers can provide credible information about a suspect during an investigation.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

27. Based on the type of crime and how the scene was left, investigators can tell if a suspect has a mental disorder.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

28. Forensic scientist produce the most crucial evidence during an investigation.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

29. Law enforcement agencies are well equipped to solve any criminal investigation.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

30. Crime scene evidence often narrows the suspect pool.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

31. Based on the type of victim, investigators are able to determine an offender's marital status.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

32. The majority of criminal cases are solved because of DNA evidence found at the crime scene.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

33. The majority of criminal cases are solved because of fingerprint evidence found at the crime scene.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

34. An offender will always leave behind some type of forensic evidence at the scene of the crime.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

35. Criminal profilers can accurately predict the characteristics and personality of a suspect.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

36. The age of the offender cannot be predicted based on the age of the victim.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

7. If you are currently in school what is your academic major?

8. If you have graduated from college, what **was** your academic major?

9. **For those in law enforcement only.** What is the number of years you have been in law enforcement?

- 0 – 5 years
- 6 – 10 years
- 11 – 15 years
- 16 – 20 years
- 21 – 30 years
- More than 30 years

10. **For those in law enforcement only.** What is your rank or title?

- Officer
- Sergeant / Lieutenant
- Captain
- Special Agent
- Investigative Specialist
- Retired

- Other

11. Please indicate on average the amount of hours you spend watching television every week. (Includes: television and movies watched in home whether online, computer, DVD, TV, etc.) Note there are 168 hours in a week.

- | | |
|------------|----------------------|
| a. 0 – 5 | g. 51 – 60 |
| b. 6 – 10 | h. 61 - 70 |
| c. 11 – 20 | i. 71 - 80 |
| d. 21 – 30 | j. 81 - 90 |
| e. 31 – 40 | k. 91 - 100 |
| f. 41 - 50 | l. 100 or more hours |

12. Of those hours, please indicate how many hours you spend watching crime-related television shows?

- a. 0 – 5
- b. 6 – 10
- c. 11 – 20
- d. 21 – 30
- e. 31 – 40
- f. 41 - 50
- g. 51 – 60
- h. 61 - 70
- i. 71 - 80
- j. 81 - 90
- k. 91 - 100
- l. 100 or more hours

13. Please list your favorite crime-related shows. Note that you do not have to fill out each line, also you may list shows that may no longer air on television.

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____
- f. _____
- g. _____
- h. _____

14. Do you or any of your close friends/relatives have experience working within the criminal justice system?

- a. Yes
- b. No

If yes, please list the occupation and relation to the individual. Or list self, if the individual is you. _____.

15. Please indicate by circling your level of personal knowledge and experience with criminal profiling before this research study.

Very Unfamiliar	Unfamiliar	Neutral	Familiar	Very Familiar
1	2	3	4	5

16. Please indicate by circling your level of personal knowledge and experience with the criminal justice system before this study.

Very Unfamiliar	Unfamiliar	Neutral	Familiar	Very Familiar
1	2	3	4	5

17. Have you previously seen the episode of this Criminal Minds episode?

- Yes
- No
- Unsure

Appendix E
Media Case Study Synopsis

Instructions: The following synopsis details television shows with a profiling element that can be utilized for this research.

Criminal Minds, Season 7, Episode 22, “Profiling 101”

This episode details the BAU criminal profiling team, presenting a case to an undergraduate criminology class. While presenting the case, they allow the class to follow the details of a 17-year-long chase for a murderer of one of the longest-tenured serial killer cases. The case details a serial killer who abducted victims and kept them for days before killing them by removing their reproductive organs.

Criminal Minds, Season 9, Episodes 23 and 24, “Angels” and “Demons”

Section Chief Mateo Cruz of the Federal Bureau of Investigation’s Behavioral Analysis Unit (BAU) criminal profiling team is asked to investigate a case involving the murder and post-mortem mutilations of a prostitute in Texas. The team discovers that there are three prostitutes killed with the same *modus operandi* (MO) including one male prostitute. Each of the murders have religious overtones.

The episode begins with a prostitute crying in the back seat of a truck, pleading for her life and unable to escape. The unknown subject (unsub) opens the door and drags her out. As she tries to escape, the unsub is close behind her and ends up shooting her. Her body is discovered in a dumpster where etchings in the victim’s skin were found in her back. Throughout the episode the other victims are discovered in the same fashion.

Criminal Minds, Season 2, Episode 11, “Sex, Birth, Death”

A vigilante starts killing prostitutes when he feels that his efforts to clean up the city and remove prostitutes from the streets are not being appreciated. The prostitutes that are attacked and murdered are being stabbed and their hair is being cut off post mortem. Within the same episode, a young male high school student seeks out the help from Special Agent Dr. Spencer Reid, to help him understand the murderous urges he has had his whole life, especially about killing prostitutes.

Appendix F

Case Study Information

Instructions: Please read the following case information and crime description based on the detailed interviews and investigation of an actual offender. Imagine that you have been hired by the Police Department as their expert criminal profiler. The department is trying to solve a cold case and current attempted murder. Review the details of this case, victim(s) information, and facts that have been collected by the department. After reading the case, please utilize the Offender Characteristics Questionnaire and follow the instructions provided to describe the offender's characteristics to your best ability.

Saturday, April 7th, a body of a black female was found on a vacant lot near the intersection of First and Popular Street. The female, identified as Sky Bailey (nickname: Star), appeared to have been drugged to a concealed location. The victim, Sky, was an African American female, 37 years of age, of medium stature, approximately 5'6" and 148 lbs, and was known by others within the community to be able to defend herself and resist an assault by fighting back accordingly. She was not married and she did not have any children. She was known to be unemployed and receiving government assistance to support herself. According to her friends and family, Sky had no known enemies, was considered a "tomboy" who sometimes dressed in masculine clothing, possessed significant physical strength, often carried a box cutter in her pocket, and previously had a relationship with one or two men.

Investigators on Bailey's case determined that she was of high-risk to become a victim of a violent crime. This is due to the fact of her being known to accept rides from anyone, walk the streets alone at night in high crime areas, and engage in sexual activities in exchange for drugs. Around the time of the incident, Bailey was witnessed to be walking alone during the hours of darkness in a semi-secluded area of the community, known for prostitution, heavy drug traffic, and several unsolved homicides.

Several individuals came forth to attest to Sky Bailey's life, stating that she was a good person who wouldn't cause any harm. There were also a few individuals who came forth as witnesses as some of the last people that saw her that on Friday.

Late Friday April 6th, Bailey was at the residence of her boyfriend until the late hours playing card games with him and a few friends, but left prior to midnight. Note that the boyfriend stated that the two did not engage in sexual activity and had not for at least three days. After leaving his apartment, Bailey went to her male cousin's home, and drank beer with him and another male cousin. Around 2:00 to 2:30 a.m., Bailey left on bicycle to purchase more beer from a well known "bootlegger." However, when Bailey did not return to her cousin's residence, it was assumed that she just went home. Bailey still met with the bootlegger, who sold her three twelve ounce cans of beer, but upon her departure was overheard arguing with an unknown male. Bailey was discovered between 7:10 and 7:15 a.m. on Saturday morning. A Caucasian male discovered her body, and this male said he had been for a morning walk, walking on a path near the lot when her body was discovered.

Sky's body was left in a display (supine) position, leaving her almost completely disrobed and staged to appear as a sexual assault. Her arms were extended over her head, right leg was extended, and left leg slightly bent at the knee. The back of her t-shirt was pulled up over a portion of her head covering her eyes but exposing her breasts, and two socks and one shoe were left on the body. There was a presence of intact sperm found around her vagina and she also tested positive for cocaine being in her system. Bailey was believed to be attacked, bludgeoned, and ultimately killed – noting that she had been struck several times in the face and head, sustaining several lacerations and abrasions. Her matching shoe was located near her right foot. Her other articles of clothing to include her windbreaker jacket, blue jean shorts, underwear, and brown belt were found near the body. The bicycle was located 6 to 8 feet from her body and the bag of beer she purchased was approximately 1.5 yards from the body. Several other beer cans were also found at the scene. Bailey was also discovered less than 0.5 miles of her cousin's home where she was supposed to be returning to. The Medical Examiner reported Sky's cause of death as blunt force trauma to the head, with the manner of death ruled as a homicide.

Investigators were unable to capture a suspect for this case. Bailey's case was subsequently entered into the Violent Criminal Apprehension Program (ViCAP) with the following information detailed about the case.

Case Type: Murder – Victim Deceased and Identified

Probable Crime Type(s) and/or Motive(s) based on current results of investigation:
Argument/Conflict, Drug-Related, Gang-Related, and Sexual Motivation

Gender: Female

Race: Black

Age: 37

Height: 5'6

Weight: 148

Hair Color / Length: Black / Shorter than Collar Length

Occupation: None Known

Affiliation with group or organization relevant to crime: None

Victim's General Lifestyle(s) / Characteristics: Prostitute, Drug User/Seller

Was the victim's lifestyle(s)/characteristics a contributing factor in this crime: Yes

Victim's Last Known Location: Single-Family Dwelling (relative's home)

Initial Contact Location: Unknown

Murder/Assault Location: Vacant Lot

Body Recovery Location: Vacant Lot

Evidence of Sexual Activity or Attempted Sexual Activity with the Victim: Yes

Type of Sexual Activity: Vaginal

Semen Identification: Semen was discovered in victim's vagina, possibly offender's, DNA was unknown

Offender's Use of Weapon: Yes, 8" stick of wood

Eleven years later on December 5th, Veronica Lee was attacked in a similar fashion and was the attack was approximately 100 yards from the site of the previous homicide. During the time of the attack, Veronica was walking from her apartment to her father's home that was approximately less than two miles away. She was struck with a concrete block/rock, and the perpetrator attempted to move her in a similar fashion. Lee was able to fight back and fortunately escaped this attacker.

Veronica stated that while she was walking the offender had tried to talk to her, but she decided to ignore him. A few minutes later, Veronica stated that her attack began when the offender caught up with her and decided to grab her while she was walking, and proceeded to grab her breasts, shirt, pants, and purse. She stated that she believed the offender was trying to rape her on the street, but since she fought back, the offender ran and took her purse in the process.

Lee's case description is as follows:

Case Type: Robbery by Force/Theft by Taking, Aggravated Assault, and Sexual Battery

Probable Crime Type(s) and/or Motive(s) based on current results of investigation: Argument/Conflict, Drug-Related, Gang-Related, and Sexual Motivation

Gender: Female

Race: Black

Age: 39

Height: 5'6

Weight: 148

Hair Color / Length: Black / Shorter than Collar Length

Occupation: None Known

Affiliation with group or organization relevant to crime: None

Victim's General Lifestyle(s) / Characteristics: Prostitute, Drug User/Seller

Was the victim's lifestyle(s)/characteristics a contributing factor in this crime: Yes

Victim's Last Known Location: Single-Family Dwelling / Apartment

Initial Contact Location: Unknown

Murder/Assault Location: Vacant Lot

Body Recovery Location: Vacant Lot

Evidence of Sexual Activity or Attempted Sexual Activity with the Victim: Yes

Type of Sexual Activity: Vaginal

Semen Identification: None

Offender's Use of Weapon: Yes, Concrete / rock block

Investigators believe these two incidents were committed by the same person. They also believe this individual may have committed other similar crimes in the Gainesville and metro Atlanta areas. With the information provided, please create your own profile of the offender.

Appendix G
Debriefing Information

**MEDIA EFFECTS AND CRIMINAL PROFILING: HOW FICTION
INFLUENCES PERCEPTION, CAN PROFILING STILL BE ACCURATE**

Asha Bolton, Doctoral Dissertation

Department of Justice and Human Services, Nova Southeastern University

The purpose of this dissertation research was to investigate whether media and fictional information that is observed daily can influence perception to build a criminal profile. The investigation materials you were provided was information that was of an actual solved homicide investigation that took place several years ago. The offender is currently serving a life sentence within a secure facility. The offender plead guilty but mentally ill to charges the cold case murder and a separate assault. The offender will not be eligible for parole until 2044. All the names related to this case were changed and the identifying information was modified or redacted out of respect for all the parties involved.

Thank you for your participation in this dissertation research. Your participation, along with the participation from others, will aid in criminal justice research and help all researchers to better understand accurate and reliable methods and information needed to build a criminal profile. This research contributes to the field of crime and media because it aids in law enforcement training as well as criminal justice and psychology studies to ensure time and resources are invested correctly, ensuring that individuals are creating a criminal profile that will not have law enforcement searching for the wrong offender. The results of this study will expound on previous profiling research to determine if profiling should continue to be considered as a viable tool.

If you have any questions, please feel free to ask the researcher at this time, or thereafter you may reach Asha Bolton at (954)667-9036.

Appendix H

List of Books, Films, and Television

Books

- Cannell, M. (2017). *Incendiary: The Psychiatrist, The Mad Bomber, and The Invention of Criminal Profiling*. New York: Minotaur Books.
- Dettlinger, C. and Prugh, J. (1984). *The List*. Atlanta: Philmay Enterprises.
- Douglas, J. E. and Olshaker, M. (1995). *Mind Hunter: Inside the FBI's Elite Serial Crime Unit*. New York: Mindhunters.
- Douglas, J. E. and Olshaker, M. (1999). *The Anatomy of Motive: The FBI's legendary mindhunter explores the key to understanding and catching violent criminals*. New York: Scribner.
- Krafft-Ebing, R. von, and Frye, N. (1965). *Psychopathia Sexualis: With especial reference to the antipathic sexual instinct*. New York: Bantam.
- Roland, P. (2017). *In the Minds of Murderers: The Inside Story of Criminal Profiling*. China: Arcturus Holdings Limited.

Films

- Bregman, M., Bregman, M., and Stroller, L. A. (Producers) and Noyce, P. (Director). (1999). *The Bone Collector* [Motion picture]. United States: Universal Pictures.
- Chomsky, M. (Producer). (1986). *The Deliberate Stranger* [Motion picture]. United States: Warner Bros.
- Cunningham, C., Walsh, F., Jackson, P., and Peyronnet, A. (Producers) and Jackson, P. (Director). (2009). *The Lovely Bones* [Motion picture]. United States: DreamWorks Pictures.
- Medavoy, M., Messer, A. W., Fischer, B. J., Vanderbuilt, J., Chaffin, C. (Producers) and Fincher, D. (Director). (2007). *Zodiac* [Motion picture]. United States: Paramount Pictures.
- Hitchcock, A. (Producer) and Hitchcock, A. (Director). (1960). *Psycho* [Motion picture]. United States: Paramount Pictures and Universal Pictures.
- Kay, S. (Director). (2005). *The Hunt for the BTK Killer* [Motion picture]. United States: CBS.

Milchan, A. and Tarlov, M. (Producers) and Amiel, J. (Director). (1995). *Copycat* [Motion picture]. United States: Warner Bros.

Utt, K., Saxon, E., and Bozman, R. (Producers) and Demme, J. (Director). (1991). *Silence of the Lambs* [Motion picture]. United States: Orion Pictures.

Television

Bell, W. K. (2016). *United Shades of America*. [Television series]. Atlanta, GA: CNN Network.

Bellisario, D. P. (Producer). (2003). *N.C.I.S.* [Television series]. Los Angeles, CA: Belisarius Productions.

Bruckheimer, J. (Producer). (2003). *Cold Case* [Television series]. Hollywood, CA: Jerry Bruckheimer Television and CBS Television Studios.

Busfield, T. (Producer). (2015). *Secrets and Lies* [Television series]. Burbank, CA: ABC Studios.

Corvo, D. and Cole, L. (Producers). (1992). *Dateline* [Television series]. New York, NY: Peacock Productions.

Diaz-Gant, E, et al. (Producers). (2004). *Snapped* [Television series]. New York, NY: Jupiter Entertainment.

Fuller, B., et al. (Producer). (2013). *Hannibal* [Television series]. Los Angeles: Dino De Laurentiis Company.

Gordon, M. (Producer). (2005). *Criminal Minds* [Television series]. Hollywood, CA: CBS Television Studios.

Gordon, M. and Messer, E. (Producer). (2015). *Criminal Minds: Beyond Borders* [Television series]. Hollywood, CA: CBS Television Studios.

Grazer, B. and Morgan, G. (Producers). (2014). *Those Who Kill* [Television series]. New York, NY: One Two One Three Pictures and 20th Television.

Hanson, H. (Producer). (2005). *Bones* [Television series]. Santa Monica, CA: Josephson Entertainment.

Mundy, C. (Producer). (2011). *Criminal Minds: Suspect Behavior* [Television series]. Hollywood, CA: CBS Television Studios.

Kono, B, et al. (Producers). (2017). *Mindhunter*. [Television series] Retrieved from Netflix.

Render, M. (2019). *Trigger Warning With Killer Mike*. [Television series]. Retrieved from Netflix.

- Scott, R. and Scott, T. (Producers). (2005). *Numb3rs* [Television series]. Los Angeles, CA: Scott Free Productions and CBS Television Studios.
- Tae-won, J. (Producer). (2017). *Criminal Minds (South Korea)* [Television series]. South Korea: tvN and ABC Studios.
- Wolf, D. (Producer). (1990). *Law & Order* [Television series]. Universal City, California: Wolf Films.
- Wolf, D. (Producer). (1999). *Law & Order: Special Victims Unit (SVU)* [Television series]. Universal City, California: Wolf Films.
- Wolf, D. (Producer). (2001). *Law & Order: Criminal Intent* [Television series]. Universal City, California: Wolf Films.
- Wolf, D. (Producer). (2005). *Law & Order: Trial by Jury* [Television series]. Universal City, California: Wolf Films.
- Wolf, D. (Producer). (2009). *Law & Order: UK (United Kingdom)* [Television series]. Universal City, California: Wolf Films.
- Wolf, D. (Producer). (2010). *Law & Order: Los Angeles (LA)* [Television series]. Universal City, California: Wolf Films.
- Wolf, D. (Producer). (2017). *Law & Order True Crime* [Television series]. Universal City, California: Wolf Films.
- Zuiker, A. (Producer). (2000). *CSI: Crime Scene Investigation* [Television series]. Hollywood, CA: Jerry Bruckheimer Television and CBS Television Studios.
- Zirinsky, S. (Producer). (1988). *48 Hours Mystery* [Television series]. New York, NY: CBS News.

References

- Alison, L., Smith, M., and Morgan, K. (2003). Interpreting the accuracy of offender profiles. *Psychology, Crime, & Law*, 9(2), 185-195.
- Allen, E. (2017) Retired FBI profiler calls Las Vegas shooter “an anomaly.” Fox31 Denver. Retrieved from <http://kdvr.com/2017/10/06/retired-fbi-profiler-calls-las-vegas-shooter-an-anomaly/>
- Bandura, A. (2009). Social Cognitive Theory of Mass Communication. In B. Jennings, and M. B. Oliver (Eds.), *Media Effects: Advances in Theory and Research* (3rd ed., pp. 94-124). New York: Routledge.
- Bothe, E. (2002) Facing the Beltway snipers, profilers were dead wrong. *The Baltimore Sun*. Retrieved from http://articles.baltimoresun.com/2002-12-15/entertainment/0212160297_1_van-zandt-serial-killers-snipers
- Canter, D. (1994). *Criminal Shadows*. London: Harper Collins.
- CBS Network. (2018). About Criminal Minds. Criminal Minds Show. Retrieved from https://www.cbs.com/shows/criminal_minds/about/
- Chitwood, A. (2016). David Fincher Sets Anna Torv, Holt McCallany to Lead Netflix Series ‘Mindhunter’. Collider. Retrieved from <http://collider.com/anna-torv-holt-mccallany-david-fincher-netflix-mindhunter/>
- Clemente, J. (2015). Jim Clemente – His Story. Retrieved from <http://jimclemente.com/>
- Creswell, J. W. (2013). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches* (3rd ed.). Washington, D.C.: Sage.
- Douglas, J. E. and Olshaker, M. (1995). *Mind Hunter: Inside the FBI's Elite Serial Crime Unit*. New York: Mindhunters.
- Douglas, J.E., Ressler, R. K., Burgess, A. W., and Hartman, C. R. (1986). Criminal Profiling from crime scene analysis. *Behavioral Sciences and the Law*, 4, 401-421.
- Estep, R. and MacDonald, P. T. (1984). “How Prime-Time Crime Evolved on TV, 1976 to 1983”. In R. Surette (ed.), *Justice and the Media*, pp. 110-123.
- Educational Testing Service (ETS). (2017). *The Official Guide to the GRE General Test*. 3rd ed. McGraw Hill Education.
- Educational Testing Service (ETS). (2017). GRE Guide to the Use of Scores. Retrieved from https://www.ets.org/s/gre/pdf/gre_guide.pdf
- Federal Bureau of Investigation. (2017). National Academy. Retrieved from <https://www.fbi.gov/service.gov/services/training-academy/national-academy>

- Feng, D. (2016). Doing “Authentic” News: Voices, Forms, and Strategies in Presenting Television News. *International Journal of Communication*, 10, pp. 4239-4257.
- Geberth, V. J. (1981). Psychological profiling. *Law and Order*, September Issue: 46-49.
- Gregory, N. (2005). Offender Profiling: A review of the literature. *The British Journal of Forensic Practice*, 7, 29-34.
- Grubin, D. (1995). Offender Profiling. *Journal of Forensic Psychology*, 259.
- Günther, P. (2016). Transformation of the Recorded Music Industry to the Digital Age.
- Harries, K. (1999). *Mapping Crime: Principle and Practice*. Washington, D.C.: U.S. Department of Justice, Office of Justice Programs, National Institute of Justice.
- Hazelwood, R. R., Ressler, R. K., Depue, R. L., and Douglas, J. C. (1995). Criminal investigative analysis: An overview. In R. R. Hazelwood & A. W. Burgess (Eds.), *Practical aspects of rape investigation: A multidisciplinary approach* (2nd ed., 115-126). Boca Raton, FL: CRC Press.
- Holter, L. (2017). “Mindhunter Modeled This Character on a Female Psychologist & Living Legend.” Refinery29. Retrieved from <http://www.refinery29.com/2017/10/176664/mindhunter-character-wendy-based-on-real-person>
- Howlett, J. B., Hanfland, K. A., and Ressler, R. K. (1986). Violent Criminal Apprehension Program – VICAP: A Progress Report. *FBI Law Enforcement Bulletin*, 55 (12): 14-22.
- Hume, E. (1995). Tabloids, Talk Radio and the Future of News. Annenberg Washington Program, Washington.
- Jackson, D.N. (2003). *Multidimensional Aptitude Battery-II*. Sigma Assessment Systems, Inc.
- Joseph, T. (2005). *Contextualizing Racial Profiling Vehicle Stop Data: Going Beyond the Numbers*. Paper presentation at Southwestern Psychological Association 51st Annual Convention, Memphis, TN.
- Kappeler, V. E., and Potter, G. W. (2006). *Constructing Crime: Perspectives on Making News and Social Problems* (2nd ed.). Prospect Heights, Illinois: Waveland Press.
- Keppel, R. D. (Ed.). (2006). *Offender profiling* (2nd ed.). Mason, OH: Thompson.
- Kocsis, R. N. (2003). An empirical assessment of content in criminal psychological profiles. *International Journal of Offender Therapy and Comparative Criminology*, 47(1), 37-46.
- Kocsis, R. N. (2004). Profiling the criminal mind: does it actually work? *Medicine, Crime, and Punishment*. December 2004, 364, 14-15.

- Kocsis, R. N. (2008). Psychological Evaluations for the Courts: A Handbook for Mental Health Professionals and Lawyers (3rd ed) by G. B. Melton, J. Petrila, N. G. Poythress, and C. Slobogin, review by Richard N. Kocsis. *International Journal of Offender Therapy and Comparative Criminology*, 53(5), 607-608.
- Kocsis, R. N. and Cooksey, R. W. (2002). Criminal Psychological Profiling of Serial Arson Crimes. *International Journal of Offender Therapy and Comparative Criminology*, 46(6), 631-656.
- Kocsis, R. N., Hayes, A. F., and Irwin, H. J. (2002). Investigative experience and accuracy in psychological profiling of violent crime. *Journal of Interpersonal Violence*, 17, pp. 811-823.
- Kocsis, R. N., Irwin, H. J., Hayes, A. F., and Nunn, R. (2000). Expertise in psychological profiling. *Journal of Interpersonal Violence*, 15(3), 311-331.
- Kocsis, R. N., Middledorp, J., and Try, A. C. (2005). Cognitive process in criminal profile construction: A preliminary study. *International Journal of Offender Therapy and Comparative Criminology*, 49 (6), 662-681.
- Litcher, S. R., Litcher, L. S., and Rothman, S. (1994). *Prime-Time: How TV Portrays American Culture*. Washington, D.C.: Regenery Publishing, Inc.
- Lufty, M. (2013). How Fictional Representations Influence the Perception of Police Efficacy.
- McGregor, J. (1993). *Crime News as Prime News in New Zealand's Metropolitan Press* (Publication No. 36), Auckland, New Zealand: Legal Research Foundation.
- Miller, L. (2014). Serial Killers: I. Subtypes, patterns, and motives. *Aggression and Violent Behavior* 19, 1-11.
- Mucchetti, A. (2005). Driving while brown: A proposal for ending racial profiling in emerging Latino communities. *Harvard Latino Law Review*, 1: 1-32.
- Nielsen. (2018). Time flies: U.S. adults spend nearly half a day interacting with media. Retrieved from <https://www.nielsen.com/us/en/insights/news/time-flies-us-adults-now-spending-nearly-half-a-day-interacting-with-media.html>
- Owen, D. (2004). *Criminal Minds: The Science and Psychology of Profiling*. Lyndhurst, NJ: Barnes & Noble, Inc.
- Palmero, G. B. (2002). Criminal profiling: The uniqueness of the killer. *International Journal of Offender Therapy and Comparative Criminology*, 46, 383-385.
- Patterson, T. (2017). "Mindhunter" and the Presentation of the Serial Killer in Everyday Life. *The New Yorker*. Retrieved from <https://www.newyorker.com/culture/on-television/mindhunter-and-the-presentation-of-the-serial-killer-in-everyday-life>

- Philbin, T. and Philbin, M. (2009). *The Killer Book of Serial Killers: Incredible Stories, Facts and Trivia from the World of Serial Killers*. Naperville, IL: Sourcebooks.
- Pistorius, M. (2012). *Catch me a killer: Serial murders – a profiler’s true story*. London, UK: Penguin Global.
- Pinizzotto, A. J. and Finkel, N. J. (1990). Criminal personality profiling: An outcome and process study. *Law and Human Behavior*, 14, 215-233.
- Profiling. (n. d.). Dictionary.com Unabridged. Retrieved from Dictionary.com website.
- Ramsland, K. (2006). *Inside the Minds of Serial Killers: Why They Kill*. Westport, Connecticut: Greenwood Publishing Group.
- Roland, P. (2017). *In the Minds of Murderers: The Inside Story of Criminal Profiling*. China: Arcturus Holdings Limited.
- Rosewood, J. (2017). *The Big Book of Serial Killer Files of the World’s Worst Murderers: An Encyclopedia of Serial Killers*. CreateSpace Publishing.
- Rossmann, C. and Brosius, H.B. (2004). The problem of causality in cultivation research. *Communications*, 29, 379-397.
- Schefflin, A. W. (1998). Book review of criminal detection and the psychology of crime by David V. Canter and Laurence J. Alison and interrogation and confession: Images of the police-suspect dynamic by Ian Byran. *Santa Clara Law Review* 38(4), 1293-1301.
- Shelton, D. (2008). The ‘CSI Effect’: Does It Really Exist? *National Institute of Justice Journal*, 259, 1-7.
- Shrum, L. J. and Lee, J. (2012). “Television’s Persuasive Narratives: How Television Influences Values, Attitudes, and Beliefs,” in *The Psychology of Entertainment Media: Blurring the Lines between Entertainment and Persuasion* (2nd ed.), ed. L. J. Shrum. New York: Taylor and Francis, 147-167.
- Snook, B., Cullen, R. M., Bennell, C., Taylor, P. J., and Gendreau, P. (2008). The Criminal Profiling Illusion: What’s Behind the Smoke and Mirrors? *Criminal Justice and Behavior*, 35(10), 1257-1276.
- Surette, R. (2011). *Mass Media, Crime and Justice*. Ed. R. Rosenfeld. New York: Oxford University Press.
- Surette, R. (2015). *Media, Crime, and Criminal Justice: Images, Realities and Policies* (5th ed). Belmont, CA: Cengage.
- Tallerico, B. (2017). “The Real FBI Agents and Serial Killers Who Inspired Netflix’s Mindhunter.” *Vulture*. Retrieved from <http://www.vulture.com/2017/10/mindhunter-netflix-real-serial-killers.html>

- Theoharis, A.G. (2000). *The FBI: A Comprehensive Reference Guide*. Phoenix: Oryx Press.
- Trail, K. (2008). Cognitive Assessment in Criminal Profiling by University Students and Law Enforcement Officers. Retrieved from ProQuest. (1458391)
- Turvey, B. E. (2008). "The Persistence of Faith-Based Profiling." *Criminal Profiling: An Introduction to Behavioral Evidence Analysis* (3rd ed). San Diego: Academic Press.
- van Aken, C. (2015). "The Use of Criminal Profilers in the Prosecution of Serial Killers," *Themis: Research Journal of Justice Studies and Forensic Science*: Vol. 3, Article 7.
- Vorpagel, R. E. (1982). Painting psychological profiles: Charlatanism, charisma or a new science? Official proceedings of the 88th Annual IACP Conference. *The Police Chief*, 156-159.
- Watling, E. (2019). The Best True Crime Documentaries and Docuseries. *Newsweek*.
- Wood, F. and Barnard, M. (2010). *The Diamond Sutra: The Story of the World's Earliest Printed Book*. London: The British Library.
- Woodworth, M. and Porter, S. (2000). Historical foundations and current applications of criminal profiling in violent crime investigations. *Expert Evidence*, 7, pp. 241-264.
- Wortley, R. and Mazerolle, L. (2008). Environmental criminology and crime analysis: Situating the theory, analytic approach and application. In R. Wortley and L. Mazerolle (eds). *Environmental criminology and crime analysis*. Cullompton, UK: Willan.