

Walden University Scholar Works

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies Collection

2018

Probation Officers' Attitudes on Illinois Electronic Monitoring Program for Drug Offenders

Erika J. Jones-Dilworth Walden University

Follow this and additional works at: https://scholarworks.waldenu.edu/dissertations

Part of the <u>Criminology Commons</u>, <u>Criminology and Criminal Justice Commons</u>, and the <u>Public Administration Commons</u>

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Erika Jones-Dilworth

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

Review Committee
Dr. Paul Rutledge, Committee Chairperson,
Public Policy and Administration Faculty

Dr. Anthony Fleming, Committee Member, Public Policy and Administration Faculty

Dr. Olivia Yu, University Reviewer, Public Policy and Administration Faculty

> Chief Academic Officer Eric Riedel, Ph.D.

> > Walden University 2018

Abstract

Probation Officers' Attitudes on Illinois Electronic Monitoring Program For Drug Offenders

by

Erika Jones-Dilworth

MPA, Governors State University, 2009 BS, Governors State University, 2007

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Public Policy & Administration

Walden University

November 2018

Abstract

Electronic monitoring (EM) of criminal offenders is seen by legislators as an effective method of monitoring offenders outside prison, though electronic monitoring is not required of all adjudicated offenders and it is not understood whether electronic monitoring has a positive impact on recidivism reduction, particularly among drug offenders. Although probation officers run the EM program, little research on EM has been conducted from the standpoint of the probation officer. Probation officers are not only responsible for monitoring, they are also responsible for the program's success. The purpose of this non-experimental study was to explore probation officers' attitudes concerning the use of EM for drug offenders, since drug offenders populate a high percentage of the EM population. Data were collected through the Modified Effective Evaluation of Electronic Monitoring survey from a sample of adult probation officers from a single probation office in the northcentral region of the United States (n = 40) to determine if there is a statistical association between probation officers' attitudes and the use of the EM program for drug offenders. Data analysis, using chi-square test indicated that there was a non-significant association (p-value = 0.15) between probation officers' attitudes and the EM program for drug offenders. The positive social change implications stemming from this research include recommendations to local probation officers to evaluate the EM program in their current state extensively. More widespread evaluation of current monitoring systems could contribute to the improvement of public safety outcomes in communities within the United States.

Probation Officers' Attitudes on Illinois Electronic Monitoring Program for Drug Offenders

by

Erika Jones-Dilworth

MPA, Governors State University, 2009 BS, Governors State University, 2007

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Public Policy & Administration

Walden University

November 2018

Dedication

I dedicate this dissertation to my wonderful family, particularly my four beautiful daughters and one handsome son, who motivated me throughout this entire process.

Thank you, Daizha Nyzhaè, Tamari Grace, Zuri Heidi-Ann, Zoey Izzabella, and CJ. I wanted to show you all that anything you put your mind to, you can accomplish. To the love of my life, Curtis Dilworth, Sr., my husband and the sole reason why I am completing my dissertation, you are my best friend and my king! I must also give special thanks to my study partner, Kristal Norwood-Watts; my mother, Barbara Batton; my father, Sylvester Jones, Sr.; my grandmother, Gloria Spagnola; and the three closest women in my life, Candace Griffin, Nysheria Haynes, and Cynthia O'Brien. I love you all so dearly and feel that each of you played a vital part in the completion of my dissertation, and for this, I am very grateful.

Acknowledgments

I would like to thank all of those people who helped make this dissertation possible. First, I wish to thank my advisor, Yoshihiko Yoshime, for all his guidance, support, and patience. I would also like to give special thanks to my chair, Dr. Paul Rutledge, for all his extra support and time, as well as to my second committee member, Dr. Anthony Fleming, and my URR, Dr. Olivia Yu, for pushing me so hard. I must thank the probation officers in Illinois for their participation. Last, I would like to acknowledge Walden University for the opportunity to be involved in such a great program.

Table of Contents

Lis	st of Tables	iv
Ch	apter 1: Introduction to the Study	1
	Background of the Study	3
	Problem Statement	4
	Purpose of the Study	5
	Research Questions and Hypotheses	6
	Theoretical Framework	7
	Deterrence Theory	7
	Nature of the Study	8
	Definition of Terms.	9
	Assumptions	. 10
	Limitations	. 11
	Scope and Delimitations	. 11
	Significance of the Study	. 12
	Implications of the Study to Advance Knowledge	. 14
	Summary	. 14
Chapter 2: Literature Review		16
	Literature Search Strategy	. 16
	Theoretical Foundation	. 17
	Deterrence Theory	. 17
	Conceptualizing Deterrence Theory	. 19
	Profile of Probation Officers	. 19

	Profile and Characteristics of Nonviolent Drug Offenders	21
	Characteristics of Offenders Who Recidivate	21
	Historical Overview of Electronic Monitoring	23
	Ethical and Legal Issues of Electronic Monitoring.	24
	Positive and Negative Effects of Electronic Monitoring	27
	Recidivism of Monitored and Unmonitored Offenders	30
	A Brief Overview of Electronic Monitoring in Illinois	31
	Comparing Electronic Monitoring in the Other States	33
	Comparing Electronic Monitoring in Other Countries	34
	The Relationship between Probation Officers and Nonviolent Drug Offenders	36
	The Future of Electronic Monitoring in Reducing Recidivism With Ex-Offenders	37
	Summary	39
Ch	napter 3: Research Method	41
	Research Design and Rationale	41
	Independent and Dependent Variables	41
	Population and Sample	41
	Sampling and Sampling Procedures	42
	Procedures for Recruitment, Participation, and Data Collection	42
	Instrumentation and Operationalization of Constructs	43
	Data Analysis Plan	43
	Research Questions and Hypotheses	43
	Threats to Validity	44
	Ethical Procedures	45

Ethical Concerns	46
Summary of Design and Methodology	47
Chapter 4: Results	48
Demographics	48
Chi-Square Test of Independence Results	56
Hypothesis Testing.	57
Hypothesis 1	57
Hypothesis 2	58
Hypothesis 3	59
Summary	61
Chapter 5: Discussion, Conclusion, and Recommendations	63
Summary of Findings	64
Chi-Square Summary	64
Probation Officers Summary	64
Discussion	65
Limitations	66
Recommendations	66
Implications for Social Change	67
Conclusion	67
References	69
Appendix A. Modified Evaluation About Electronic Monitoring Questionnaire	78

List of Tables

Table 1. Probation Officers' Demographics	50
Table 2. Attitudes on Effective Monitoring.	55
Table 3. Hypothesis 1 Chi-Square Tests	58
Table 4. Hypothesis 2 Chi-Square Tests	59
Table 5. Hypothesis 3 Chi-Square Tests	60

Chapter 1: Introduction to the Study

Electronic monitoring (EM) is a program that uses an electronic instrument to supervise offenders within or outside the home as an alternative to jail or prison. EM allows parole or probation officers to track where paroled offenders are at any given time throughout the day (Bales et al., 2010; Payne, DeMichele, & Okafo, 2009). EM use has increased exponentially with the growth in prison populations. In the last 40 years, there has been a 500% increase in the number of people incarcerated in prison and jail in the United States, with the total estimated at 2.2 million individuals (The Sentencing Project, 2015). Public policy and legislative changes in criminal justice systems, such as those associated with "war on drugs" and "get tough on crime" initiatives, have resulted in longer prison sentences for nonviolent drug offenders (The Sentencing Project, 2015). Females, particularly African American females, were deeply affected by these public policy and legislative changes (Bloom & Covington, 1998; Covington & Bloom, 2006; Human Rights Watch [HRW], 2008).

Each year, approximately 600,000 offenders are paroled from state or federal prisons in the United States (Bierens & Caravalho, 2010; Kilgore, 2015). Many offenders who are paroled from state and federal prisons in order to return to the community will be rearrested and returned to prison within 3 years (Langan & Levin, 2002; Leonard, 2004). In 2002, the Bureau of Justice Statistics reported that 570,966 offenders were released from state and federal prisons in 2000. From this population, 62.5% were rearrested within 3 years, and 41.5% returned to prison (Leonard, 2004).

The Illinois Department of Criminal Justice (IDCJ) has been using EM since the 1980s to free up prison bed space. In 2010, O'Day and Short reported that the prison

population in Illinois had reached 47,504 individuals. Males comprise the majority of the Illinois prison population; male inmates represent between 93.9% and 94% of the prison population, with female inmates representing just 6% (O'Day & Short, 2010). In terms of age, the largest group within the prison population in Illinois consists of those aged 30-44 years; the smallest group is those under the age of 18. In 2010, 28,042 were paroled from Illinois prisons. The paroled male population numbered 15,292, and the paroled female population numbered 1,275 (O'Day & Short, 2010). African American males represented the largest paroled population. The vast majority of the offenders released from Illinois prisons had been incarcerated for offenses related to controlled substances; this group of paroled offenders numbered 8,339 in 2010 (O'Day & Short, 2010).

Paroled offenders are under the supervision of probation officers in the community. Probation officers are responsible for supervising, tracking, and monitoring parolees' activities with the goal of rehabilitating parolees, thereby preventing them from reoffending, being rearrested, and returning to prison. EM is one of the methods that probation officers use to supervise, track, and monitor parolees or ex-offenders in the community. The goal of this study was to examine probation officers' evaluation of EM for reducing recidivism of nonviolent drug offenders in the state of Illinois. Chapter 1 focuses on the background of the study, the problem statement, the purpose of the study, the research questions and hypotheses, the theoretical framework, and the nature of the study. The study further focuses on definitions of terms, assumptions, limitations, the study's scope and delimitations, the significance of the study, and the study's implications for advancing knowledge and creating positive social change by examining probation officers' evaluation of EM of nonviolent drug offenders in the state of Illinois.

Background of the Study

Due to the rise in the prison population, EM has been implemented to deter offenders from criminal activities. EM is also used in home confinement programs, which involve house arrests and home detention sentences, in order to free up prison space. House arrest was not adopted into court sentencing practice until the 1980s (Whitefield, 1997). When EM is used, the probation officer is notified of the parolee's location. EM determines whether the parolee has violated the terms of his or her release from state or federal prison (Bales et al., 2010) by leaving the parolee inclusion zone, which indicates the zone in which the parolee can travel without violating the terms of release. The inclusion zone includes the ex-offender's home, place of work, or any other place the ex-offender is allowed to travel so as to not violate the terms of release (Bales et al., 2010).

EM is further used as a supervising tool that allows probation officers to monitor and track sex offenders' activities. Sex offenders are high-risk offenders who are not allowed near an exclusion zone. EM can detect whether sex offenders have violated the terms of their release by being near an exclusion zone (Bales et al., 2010). An *exclusion zone* is a zone that sex offenders are not permitted to be near; such zones include areas surrounding places that children occupy, such as schools and school playgrounds, parks, and daycare centers. If sex offenders violate their probation, they may be sent back to jail after an investigation or have a probation hearing to decide whether a violation occurred, which may or may not result in them returning to jail (Bales et al., 2010).

In 1989, EM was introduced in the Department of Corrections in Illinois (CCSO, 2017). In the last three decades, the use of EM has increased in the criminal justice system and the jail system (Beck, Klein-Saffran, & Wooten, 1990; Elrod & Brown, 1996;

Raider, 1994). Moreover, EM has been used to reduce rates of rearrests and recidivism among ex-offenders (Thomson, 2011). Evidence shows that EM can lead to positive outcomes, such as reducing ex-offenders' recidivism and deterring ex-offenders from committing new crimes that lead to rearrests.

Problem Statement

EM involves the use of a digital device for an alternative, community-based approach to incarceration to reduce recidivism in the Southern Region Department of Corrections in Illinois (CCSO, 2017). Since 1989, approximately 300,000 offenders have been placed on EM. Many of the offenders placed on EM are nonviolent drug offenders (CCSO, 2017). Drug offenders, who are at a high risk of reoffending, may pose a great risk in their community and are more likely to be rearrested and convicted within 3 years after they are released (Staff, 2008).

In 1994, 300,000 offenders were paroled from 15 states, and within 3 years, 67.5% had been rearrested for a new crime unrelated to their prior crime (Langan & Levin, 2002). Further, "46.9% were reconvicted for a new crime, 25.4% were resentenced to prison for a new crime and 51.8% were back in prison, serving time for a new prison sentence" (Langan & Levin, 2002, p. 1). Among the parolees who were rearrested within 3 years, the majority were male. African Americans were more likely to be rearrested than Whites. Non-Hispanics were more likely to be rearrested than Hispanics (Langan & Levin, 2002). High-risk drug offenders who are rearrested and reconvicted within 3 years require close judicial supervision with probation officers to reduce the likelihood of relapse into drug abuse and criminal activity that could result in a return to prison (Staff, 2008).

The relationship between probation officers and nonviolent drug offenders, who are at high risk of reoffending, plays a vital role in their transition and rehabilitation into the community (Smith, 2005; Ward, 2008). Probation officers supervise and monitor parolees in the community and often have unfiltered contact with parolees. Officers' evaluation and acceptance of EM play key roles in the use of EM as an alternative, community-based technique to reduce overcrowding in the prison system (DeMichele & Payne, 2009; Elrod & Brown, 1996; Raider, 1994). In addition, probation officers' evaluation of EM may affect whether nonviolent drug offenders violate their probation under probation supervision.

The relationship between probation officers and parolees can influence the effective use of EM to reduce parolees' rearrests and convictions for new crimes (Farabee, 2005; Renzema, 2003). Despite the importance of EM in deterring drug offenders from engaging in criminal behavior and repeating criminal acts, few types of research have focused on parole officers' evaluation of EM as a determining factor in reducing recidivism to promote public safety (Courtright, Berg, & Mutchnick, 2000; Pearson, Mcdougall, Kanaan, Bowles, & Torgerson, 2011; Renzema & Mayo-Wilson, 2005). Thus, understanding probation officers' relationship with parolees and their evaluation of EM may help to determine whether EM is an effective technique to prevent high-risk nonviolent drug offenders from reoffending and recidivating within 3 years after they are paroled.

Purpose of the Study

EM is used as a deterrent to reduce recidivism in the Southern Region Department of Corrections in Illinois (CCSO, 2017). The purpose of the quantitative descriptive

study was to test the deterrence theory by examining probation officers' attitudes and their impact on EM for drug offenders in Illinois.

Research Questions and Hypotheses

One probation officers' facility was used to examine probation officers' attitudes on the EM program for drug offenders in the state of Illinois. The research was guided by three research questions:

- RQ1. How do the attitudes of the probation officers predict the likelihood of drug offenders committing subsequent crimes while in the EM program?
- RQ2: What motivational factors of the EM program for drug offenders lead to positive attitudes in the probation officers?
- RQ3: What motivational factors of the EM program for drug offenders lead to negative attitudes in the probation officers?

The three hypotheses (null and alternative) were as follows:

- $H1_0$: The attitudes of the probation officers will predict that drug offenders are not likely to commit a subsequent crime while in the EM program.
- $H1_a$: The attitudes of the probation officers will predict that drug offenders are likely to commit a subsequent crime in the EM program.
- H2o: Deterrence is the leading motivational factor contributing to positive attitudes from probation officers toward drug offenders in the EM program.
- H2a: Deterrence is not the leading motivational factor contributing to positive attitudes from probation officers toward drug offenders in the EM program.

H3o: Lack of community support is not the leading factor contributing tonegative attitudes from probation officers toward drug offenders in the EM program.

H3a: Lack of community support is the leading factor contributing to negative attitudes from probation officers toward drug offenders in the EM program.

Theoretical Framework

Deterrence Theory

Becker (1968) created the first formal model of deterrence theory, which provided the basis for analyzing how capital punishment should influence murder rates. Becker provided a mathematical computation that illustrated the severity of punishment, stating that criminals are no different from law-abiding citizens in that, like citizens, criminals weigh cost and benefits when they engage in actions, considering their own self-interest. Deterrence theory was later expanded on by Ehrlich (1973). Ehrlich's analysis of deterrence theory indicated that the death penalty has a strong deterrent effect (Mendez, 2004, pp. 59-74).

Deterrence theory indicates that people who do not commit crimes follow the law because they are afraid of getting caught, rather than because they are motivated by some deep moral sense. According to deterrence theory, people are most likely to be dissuaded from committing a crime if the punishment is swift, certain, and severe. For example, if a person is tempted to steal a candy bar, the person will be more likely to steal it if there is a low likelihood of being caught, or if the punishment for getting caught is just a warning.

Deterrence theory has received some criticism because it makes three assumptions. It assumes that people (a) know what the penalties for a crime are, (b) have good control over their actions, and (c) think things through and make choices about their behavior based on logic, not passion. However, in many actual crimes, these three assumptions are not true. Even so, deterrence theory does seem to have some merit (Boyd, n.d.)

Drug offenders need a strong deterrent effect to control drug crime because not all drug crimes merit severe punishment. This is true because not all drug offenders are a threat to society. In fact, some offenders are only a threat to themselves by using drugs and harming their own bodies. These types of offenders are low risk and should be offered some alternative assistance. Other offenders are responsible for increasing crime and need more monitoring and assistance. This is why electronic monitoring is an important tool to use as a strong deterrent effect. After offenders are paroled, they are released back into the same familiar territories that originally got them arrested. It is often all too easy for them to become a product of their environment and perform routines with which they are comfortable, including engaging in behaviors that lead to crime. The risk of being rearrested will be high, and the cycle will continue generation after generation if there is no change. Reducing recidivism rates will contribute to obtaining a safer America for all citizens.

Nature of the Study

This study had a quantitative, nonexperimental survey design. Survey research was the appropriate research design for this study because a survey allowed me to gain information about the research topic (Wolfer, 2007). Survey research was used to

examine probation officers' attitudes on EM for drug offenders (Wolfer, 2007).

Questionnaires were administered, and responses were analyzed using descriptive analysis and chi-square test with SPSS software.

The key study variables were the independent and dependent variables. The independent variable was the attitudes of probation officers. The dependent variable was the EM program for drug offenders. The target population was probation officers from Southern Region of Illinois. Chapter 3 provides a more detailed discussion of the research methodology used in this study.

Definition of Terms

Attachment: The condition of being attached to something or someone.

Beliefs: A basic value system.

Commitment: The state or quality of being dedicated to a cause, activity, etc.

Drug offenses: Violations of laws prohibiting or regulating the possession, distribution, or manufacture of illegal drugs.

Inequality: The quality of being unequal or uneven, as in the case of social disparity.

Involvement: The fact or condition of being involved with or participating in something.

Parolees: Criminal offenders who are conditionally released from prison to serve the remaining portion of their sentences in the community. Prisoners may be released on probation by a probation board decision (discretionary release/discretionary probation), according to provisions of a statute (mandatory release/mandatory probation), through

other types of post custody conditional supervision, or as the result of a sentence to a term of supervised release.

Probation: Occurs when courts place adult offenders on supervision in the community through a probation agency, generally in lieu of incarceration. However, some jurisdictions do sentence probationers to a combined short-term incarceration sentence immediately followed by probation, which is referred to as a *split sentence*. Probationers can have various supervision statuses, including *active supervision*, which means that they are required to regularly report to a probation authority in person, by mail, or by telephone.

Recidivism: One of the most fundamental concepts in criminal justice. It refers to a person's relapse into criminal behavior, often after receiving sanctions or undergoing intervention for a previous crime.

Radiofrequency identification (RFID) microchip: A small semiconductor carrying many integrated circuits that uses a 16-digit identification code and is about the size of a grain of rice.

Assumptions

The quantitative study operated under the following five assumptions to determine probation officers' evaluations toward using EM for high-risk nonviolent drug offenders in the state of Illinois.

- It was assumed that the probation officers would respond truthfully to the administered survey.
- 2. It was assumed that not every probation officer would return the survey.

- 3. It was assumed that the probation officers in the study would represent the target population.
- 4. It was assumed that the observations were independent.
- 5. It was assumed that the dependent variable was normally distributed in the population.

Limitations

The limitation of this study was that data were collected from probation officers in Illinois, who may not have been representative of the probation officers' population. The second limitation was that I collected data and analyzed data from the probation officers' perspective. The third limitation was that a self-administered evaluation survey was used. The participants who answered the survey may have misunderstood questions, which may have impacted the findings of the study. The fourth limitation was that the survey only focused on the probation officers' attitude toward using EM for drug offenders.

Scope and Delimitations

The scope of the study was limited to probation officers in the state of Illinois because these officers manage and supervise offenders with EM devices. The study included one questionnaire, which was collected, analyzed, interpreted, and discussed. Only probation officers in the Southern Region of Illinois were selected, due to the large population these officers served and the large number of probation officers employed in the county.

Significance of the Study

Probation officers provide a supervisory role in monitoring high-risk offenders in the community. One of the supervisory roles that probation officers serve is electronically monitoring high-risk probationers in the community (Payne & DeMichele, 2010; Payne, DeMichele, & Button, 2008). Today, to reduce overcrowding and incarcerations of nonviolent offenders, EM is used as an alternative to incarceration in the criminal justice system (Bulow, 2014; Kalmthout & Durnescu, 2008). The National Institute of Justice (NIJ, 2011) stated that the cost to incarcerate offenders is 6 times higher than the cost of using EM to monitor offenders. States such as Florida have used EM for decades for high-risk offenders in the community. In 2009, Florida had 143,191 offenders supervised in the community, with 2,392 placed on EM (NIJ, 2011).

Over the last decade, the use of EM has doubled in the United States (The Pew Charitable Trusts, 2016). Offenders followed with EM "devices rose nearly 140 percent over 10 years . . . More than 125,000 people were supervised with the devices in 2015, up from 53,000 in 2005" (The Pew Charitable Trusts, 2016, p. 1). Although EM use increased significantly from 2005 to 2015, only 2% of the probationed population in 2015 was monitored electronically (The Pew Charitable Trusts, 2016). Renzema and Mayo-Wilson (2004) and Smith (2005) studied the effect of EM of nonviolent offenders in the community. Renzema and Mayo-Wilson (2004) and Smith (2005) found that EM is a cost-effective tool to effectively monitor and supervise nonviolent offenders in the community to reduce reoffending, rearrests, and recidivism. Researchers from Florida State University's Center for Criminology and Public Policy Research conducted a mixed-method comparative study on 5,000 medium- and high-risk offenders placed on

electronic monitors and more than 266,000 offenders not placed on electronic monitors from 2001 to 2007. Offenders, probation officers, and supervisors and administrators were interviewed to provide insight into whether EM reduced recidivism and overcrowding in the prison system. Of interest were the interviews conducted with 105 offenders who were electronically monitored and 36 probation officers who monitored and supervised medium- to high-risk offenders placed on electronic monitors (NIJ, 2011).

The results from the quantitative study showed that EM reduced the risk of reoffending, rearrests, and recidivism by 31% (NIJ, 2011). EM using global positioning systems (GPS) was more effective in reducing the offender's risk of reoffending, rearrests, and recidivism than EM with radio frequency (RF) systems. Although EM was less effective with violent offenders compared to nonviolent offenders, the comparative study showed that the difference in effectiveness was still statistically significant (NIJ, 2011).

The results from the qualitative interview also demonstrated some negative feedback regarding EM. Many probation officers and offenders believed that EM negatively affected their relationship with their family. Eighty-nine probation officers felt that offenders' relationships with their spouses or significant others changed after the offenders were placed on an EM device (NIJ, 2011). Offenders further stated that EM affected their ability to obtain gainful employment. When employers saw the EM device, the employers' evaluation changed, which influenced the offender's interview. Moreover, when offenders entered buildings and lost the EM signal, their EM devices would beep. The offenders then had to walk outside for 15 minutes to reestablish the connection, which displeased their employers.

Although NIJ (2011) found that EM reduced the risk of reoffending, rearrests, and recidivism, findings from the Pew Charitable Trusts (2016) showed that there had been no clear data on the widespread use of EM for all types of offenders. Thus, more studies need to be conducted on the effective use of EM to reduce offenders' rates of reoffending, rearrests, and recidivism in the community.

Implications of the Study to Advance Knowledge

On May 17, 2010, the Supreme Court declared that offenders EM should be monitored beyond their probation (Mears, 2010). EM is an alternative method to reduce recidivism and offenders' incarceration rates (Demichele et al., 2008; Johnson, Haugen, Maness, & Ross, 1989). Probation officers have unfiltered contact and play a supervisory role with offenders to keep communities and individuals safe.

Hence, this study of probation officers' attitudes on the use of EM to reduce nonviolent drug offenders' recidivism may advance knowledge on whether the widespread use of EM is an effective tool in Illinois. Moreover, this study provides further insights into how deterrence theory affects probation officers' attitudes on EM. Officers' positive attitudes and full cooperation with the widespread use of EM are necessary to create positive social change and to reduce nonviolent offenders' recidivism. Without the full support and cooperation of probation officers with EM, recidivism rates will continue to be high in the United States.

Summary

The Illinois Department of Criminal Justice uses EM to supervise offenders within or outside the home as an alternative to jail or prison. EM allows probation officers to track where probate offenders are at any given time throughout the day. The

war on drugs and "get tough on crime" movements have resulted in harsh penalties and the incarceration of nonviolent drug offenders. In the United States, drug arrests have tripled. Approximately a half-million people are incarcerated for a drug offense, and many of those arrested have no prior history of violence or high-level drug selling activity. There is minimal information on EM's impact in terms of reducing rearrests and recidivism rates for nonviolent drug offenders. Therefore, this study focused on using questionnaires to access probation officers' attitudes on using EM for drug offenders to reduce rearrests and recidivism.

Chapter 2 contains a literature review, which focuses on EM, the theoretical foundation of this study, applications of deterrence theory, the profile of probation officers, the profile and characteristics of nonviolent drug offenders, characteristics of offenders who recidivate, and a historical overview of EM. Additionally, Chapter 2 focuses on ethical and legal issues of EM, positive and negative perceptions of EM, EM and recidivism, and recidivism rates of monitored and unmonitored offenders. It also provides brief overviews of EM in Illinois, EM in Illinois compared to the other states, EM in Illinois compared to other countries, and empirical studies on EM.

Chapter 2: Literature Review

The purpose of this study was to examine probation officers' attitudes on EM for drug offenders in Illinois, as well as to examine how using deterrence theory affected probation officers' attitudes on EM. Historically, probation officers have been tasked with the responsibility to supervise offenders on probation from prison. However, studies have shown that offenders on probation often return to prison within 3 years of their probation (Langan & Levin, 2002). This high recidivism is a major concern for the criminal justice system and policy makers.

To combat this trend, EM was introduced in the 1980s, as an alternative method of monitoring and tracking offenders in the community and society (Burrell & Gable, 2008). EM changed the way that probation officers supervised, monitored, and tracked offenders on probation. EM provided a way to track an offender's location 24 hours a day with the goal of reducing the offender's risk of reoffending and returning to prison (Burrell & Gable, 2008; Drake, 2008; Yeh, 2010). This chapter explores the literature surrounding issues of using EM with offenders on probation from prison. Specifically, it focuses on drug offenders who are at risk of returning to prison during or within 3 years after their probationary period. I examine various texts that focus on issues surrounding EM, such as the positive and negative effects of EM.

Literature Search Strategy

The search strategy targeted literature that examined EM and especially probation officers' attitudes on the use of EM with offenders on probation. The search strategy involved primary sources and secondary sources. The primary sources included websites

of government entities such as the NIJ, as well as Academic Search Complete, Criminal Justice Database, Sage Journals, and Sage Research Methods online. Some of the Boolean search terms used for the Walden library database included *offenders* and *EM*, *ex-offenders* and *EM*, and *nonviolent offenders*, *EM* and *crime control*, and *EM* and *recidivism*. Secondary sources included books on research methods and statistical methods as well as texts with information about EM, such as books and articles on the history and use of EM in the United States and other countries.

Theoretical Foundation

Deterrence Theory

Onwudiwe, Odo, & Onyeozili (2010) found the following:

The deterrence theory of punishment can be traced to the early works of Renaissance and Modern philosophers such as Thomas Hobbes (1588–1678), Cesare Beccaria (1738–1794), and Jeremy Bentham (1748–1832). Together, these theorists protested against the legal policies that had dominated European thought for more than a thousand years, and against the spiritualistic explanations of crime on which they were founded. These social contract thinkers provided the foundation for modern deterrence theory in criminology. In Leviathan, published in 1651, Thomas Hobbes described men as neither good nor bad. Unlike religious philosopher Thomas Aquinas, who insisted that people are naturally inclined to do good rather than evil, Hobbes assumed that men are creatures of their own volition who want certain things and who fight when their desires are in conflict. In the Hobbesian view, people generally pursue their self-interests, such as material gain, personal safety, and social reputation, and make enemies without

caring if they harm others in the process. Since people are determined to achieve their self-interests, the result is often conflict and resistance without a fitting government to maintain safety. (pp.233-237)

Onwudiew et. al, (2010) contends that, "Since people are rationally self-interested, they will not commit crimes if the charge of committing crimes prevails over the benefits of engaging in undesirable acts. If the sole purpose of punishment is to prevent crime in society, punishments are unjust when their severity exceeds what is necessary to achieve deterrence. Excessive severity will not reduce crime, in other words; it will only increase crime. In this view, swift and certain punishment are the best means of preventing and controlling crime; punishment for any other reason is capricious, superfluous, and repressive" (pp. 233-237). In regards drug offenders, this argument would only become effective if probation officers find a mechanism to control or prevent crime if EM is not sufficient to create deterrence.

There are many important individuals that assisted with the development of crime prevention. Onwudiwe, et. al (2010) confirms that "James Bentham is a contemporary of Beccaria, was one of the most prominent 18th-century intellectuals on crime. In 1780, he published *An Introduction to the Principles of Morals and Legislation*, whereby he proclaimed his famous principle of utility. He argued that "nature has placed mankind under the governance of two sovereign masters, pain and pleasure. Bentham believed that morality is that which promotes the greatest happiness of the greatest number, a phrase that was also common to Beccaria. The duty of the state in Bentham's view was to promote the happiness of the society, by punishing and rewarding" (pp. 233-237).

Conceptualizing Deterrence Through Theoretical Lens

Wright (2010) states, "In broad terms punishment may be expected to affect deterrence in one of two ways. First, increasing the certainty of punishment may deter potential offenders by the risk of apprehension. For example, if there is an increase in the number of state troopers patrolling highways on a holiday weekend, some drivers may reduce their speed in order to avoid receiving a ticket. Second, the severity of punishment may influence behavior if potential offenders weigh the consequences of their actions and conclude that the risks of punishment are too severe. This is part of the logic behind "three strikes" and "truth in sentencing" policies, to utilize the threat of very severe sentences in order to deter some persons from engaging in criminal behavior."

Profile of Probation Officers

Probation officers have dual tasks within their responsibilities, in that they are charged with both protecting the community and serving the needs of the offenders whom they supervise. Probation officers follow the rules and regulations of the Department of Corrections set by their direct supervisors, who are normally administrators. Probation officers hold a wide range of philosophies, outlooks, and attitudes about their job. Dr. Hannelore Watts, a former Florida probation officer, conducted research in his department to understand how probation officers felt about criminals and crime (Watts, 1988, pp. 39-45). He took advantage of the access to probation officers that he had in the department to conduct this line of research.

Probation supervision is a sentencing option that requires offenders to comply fully with specific court-ordered conditions while remaining in the community. With proper guidance, surveillance through EM, and the use of service providers, most

probation officers assist offenders with satisfying their probationary sentences. If an offender fails to comply, the offender can be subjected to administrative sanctions that are imposed by the probation officer or, worse, brought back to court for violating the probation terms. An offender can violate the terms of the probation by not meeting one of the following requirements: regular reporting to a probation officer, allowing a probation officer to make home visits, refraining from further criminal activity, not possessing a weapon, not leaving the state without permission from the court, and refraining from the use, possession, and sale of illegal drugs (Circuit Court of Illinois [CCOCC], 2017).

Probation-officer services in Illinois are operated by the social services department. Probation officers provide dispositional correctional casework to over 24,000 offenders who are placed on supervision (CCOCC, 2017). The social services department oversees 13 court locations, of which eight are in Chicago while the remaining five are in suburban Southern Region in the cities of Markham, Maywood, Bridgeview, Rolling Meadows, and Skokie (CCOCC, 2017). In 1911, there was one probation officer in the social services department. Today, the social services department has approximately 200 employees to monitor offenders. Moreover, the social services department boasts that it uses evidence-based practices to manage its offender population (CCOCC, 2017). The department begins with a comprehensive assessment that matches the offender's criminogenic needs with interventions. Other evidence-based principles and practices include positive reinforcements, community engagement, and measuring success through social science research (CCOCC, 2017).

Profile and Characteristics of Nonviolent Drug Offenders

According to the Bureau of Justice Statistics (2015) "Nonviolent crimes are defined as property, drug, and public order offenses that do not involve a threat of harm or an actual attack upon a victim. Typically, the most frequently identified nonviolent crimes involve drug trafficking, drug possession, burglary, and larceny." Durose (2004) states that, "Demographic characteristics of nonviolent offenders are as follows: "An estimated nine of ten nonviolent offenders discharged from prison are male, and about two-thirds are under the age of 34. Overall, about two-thirds of nonviolent offenders released from prison are ethnic minorities. Just over 4 in 10 released nonviolent offenders have less than a high school education, and an additional 1 in 4 have received a GED. Furthermore, nearly two-thirds of nonviolent offenders discharged from prisons indicated that they had been using illegal drugs in the month preceding the offense, and about 4 in 10 reported using drugs at the time of the offense." The Bureau of Justice completed a study on approximately 95,000 drug offenders and concluded that 88% of African American drug offender were crack cocaine offenders, 54% of Hispanics or Latino drug offender were powder cocaine offenders, and 48% of Caucasian drug offenders were methamphetamine offenders (BJS, 2015).

Characteristics of Offenders Who Recidivate

Characteristics of a person who might recidivate are plenty. Typically, women have a lower recidivism rate than men; however, recidivism rates decline consistently as age increases (U.S. Sentencing Commission [USSC], 2004). African American offenders have a higher rate of recidivism than Hispanic offenders, and White offenders are the least likely to recidivate (USSC, 2004). Individuals who have stable employment are less

likely to recidivate than those who are unemployed (USSC, 2004). Moreover, individuals who have obtained an education lower than a high school diploma or have no college education are also more likely to recidivate (USSC, 2004). Last, offenders who have never been married or who used illicit drugs within 1 year prior to their offense have a higher recidivism rate (USSC, 2004). When determining if an individual will repeat and commit crimes, it is important to understand these characteristics.

Characteristics provide direction for defining factors such as who is more likely to engage in criminal activity, in what type of environment this will occur, and what to expect for future criminal activity. These factors are important when trying to find a viable solution to drug trafficking. For example, in a high-poverty, minority environment, individuals are more likely to engage in drug trafficking because these areas are filled with individuals who have higher unemployment rates and lower education levels. The motivation to obtain financial means or to deal with their personal or current situation may lead people to resort to drugs.

Drug offenders also are aware of the judicial system and tend to become more savvy about preventing arrests related to drug trafficking. According to Scherlen (2001), "Drug trafficking has grown more sophisticated through the use of the main instruments of globalization, such as instant communications, electronic fund transfers, the Internet and the latest technologies, and an increased ability to obtain confidential information" (p. 5). Communication electronically could pose a threat to police officers when they are trying to prevent the use, sale, or distribution of illegal drugs and drug trafficking. Hence, having knowledge of characteristics and the different capabilities of a drug offender allows the judicial system to stay on top and be more aware of how to reduce

drug trafficking. Race, age, and gender are also identifiable factors that affect an offender's recidivism rate. According to the Florida Department of Corrections [FDOC] (2001), "On average, an inmate's probability of reoffending drops by 2.1% for each year older the inmate is at release. Younger offenders reoffended at much higher rates than older offenders" (pp. 6-8).

Offenders have higher recidivism rates the longer they are out of prison (FDOC, 2001). For instance, offenders between the ages of 18-24 reoffend less during the first 12 months of being released, but from 12 months to 60 months, their recidivism rates increase. Offenders over 60 years old have a lower recidivism rate, and often less than 10% of these offenders will reoffend. Gender and race also affect recidivism. For example, African American males and African American females have higher recidivism rates than White males and White females. On average, African American males are 43.6% more likely to recidivate than males of other races. African American males are also 24.2% more likely to recidivate than African American females (FDOC, 2001, pp. 6-8).

Historical Overview of Electronic Monitoring

The idea of keeping offenders within the community using EM was conceived by a Harvard psychologist, Dr. Robert Schweitzgebel. He created the very first EM device (Gomme, 1995). His monitor consisted of a battery pack and a transmitter capable of emitting a signal to a receiver within a quarter-mile range (Nellis, 1991). The first use of this technology occurred in 1964, and it was experimentally tested on research volunteers, offenders, and mentally ill patients in Cambridge and Boston, Massachusetts.

The equipment weighed about two pounds and was monitored by a repeater station that was activated by a transceiver (Gable, 1986).

In 1983, an Albuquerque, New Mexico district court judge named Jack Love introduced the new concept of house arrest, which used offenders' telephones to report their presence or absence at home in order to make EM more effective in the criminal justice system (Burks, 1989). In 1986, the U.S. Probation Commission developed a curfew probation program for early release inmates that began by using telephone calls and in-person visits to monitor offenders; however, due to limited resources, further research was necessary to assist with enforcement (Gowan, 2000). By 1991, after a full pilot study in 1988 evaluating the EM equipment, the federal system of EM was implemented nationally and was predicted to be the dominant means of probation and probation supervision within the next 20 years (Bennett, 1989).

Ethical and Legal Issues of Electronic Monitoring

According to the John Howard Society of Alberta (JHSA, 2006), EM is widely used in the United States and other countries, which raises ethical and legal concerns. Since the introduction of EM, two legal issues have emerged. The first legal concern is whether EM infringes on or violates the offender's constitutional rights to privacy and equality under the law (JHSA, 2006). Although it is accepted that offenders do not have the same constitutional protections as non-offenders (JHSA, 2006), this raises questions about what the legal rights are that an offender retains under the Constitution.

Nevertheless, the major legal issue surrounding EM focuses on the ethical aspects of surveillance of any kind and the impact that EM has by intruding on the offender's family (JHSA, 2006).

The current trend is to reduce the constitutional rights of high-risk offenders, such as sex offenders, by placing these offenders into exile from mainstream society (Dante, 2012). This means that high-risk offenders will have fewer rights in the future. EM with GPS is one way in which the government reduces offenders' constitutional rights because it monitors and tracks offenders' movement 24 hours a day, which removes their right to privacy (Dante, 2012). For example, GPS prevents sex offenders from going near a playground. Nonetheless, it must be noted that sex offenders pose a threat to society, and these offenders are at high-risk of reoffending and landing back in prison. Therefore, GPS monitoring is necessary to help protect the public from offenders.

Ward (2009) posited that the main purpose of the use of EM with offenders is to reduce criminal justice agency (CJA) costs and prison overcrowding. Despite the widespread use of EM, some individuals who work in the criminal justice system believe that EM is unethical and violates the rights of offenders (Ward, 2009). In addition, offenders and their families have complained that EM makes their family home a prison because it limits the offender's movement within and outside the home. Family members have further felt that EM limits their movement (Ward, 2009). Ward (2009) indicated that EM helps probation officers manage, control, and track parolees' movements. Nevertheless, many offenders and their families feel that EM violates their rights to privacy and equality under the law (Ward, 2009).

According to the U.S. Department of Justice Development Services Group (2012), adopting EM programs leads to lower recidivism rates for high-risk offenders and has two economic advantages: It reduces the tax burden on society and reduces the costs of more and larger prisons. Although EM programs offer these advantages, negative

consequences are also associated with using EM. EM has been shown to increase probation officers' work stress, which is further exacerbated by the number of alerts or false alerts received from GPS monitoring (Gott & Foster, 2006; Malan & Sussman, 2008). Additionally, if a parolee is in violation and the probation officer does not report it, the probation officer may be terminated for not reporting the violation.

Nonetheless, it is still unclear how EM increases high-risk offenders' compliance and reduces their recidivism (Gies et al., 2012). Placing EM on high-risk offenders to protect the public is not new (Vollmann, 2009); however, there is still the ethical question raised by Ward (2009) about whether EM violates the privacy rights of the offenders and their families (Vollmann, 2009). There has also been a shift to legal and ethical concerns about the economic aspects of using EM (Bottos, 2007; JHSA, 2006). Since EM is being used more frequently with high-risk offenders, these offenders lose their privacy because the EM is visible and noticeable (Bottos, 2007).

According to Igbal and Lim (2008), GPS monitoring is now a widely accepted device to reduce crime since it is often used in court cases to either acquit or convict an offender. In *The United States vs. Garcia* (2007), an offender who was released from prison for a methamphetamine (meth) offense was on GPS monitoring to track whether the offender committed a crime. A GPS was placed on the offender's car for a few days to track his movement (As Cited in Igbal & Lim, 2008) and ascertain whether the offender was continuing to produce meth, which would violate his probation. The GPS in the car showed that the offender violated his probation, and he was sentenced back to prison. *The United States vs. Garcia* (2007) ruled that the GPS device placed on the car

was lawful and that such devices could be used to reconvict and resentence offenders (As Cited in Igbal & Lim, 2008).

Risk assessment further changed with EM. Since GPS monitoring tracks offenders 24 hours a day, probation officers can track the offenders in real time, which can be used to examine the history and pattern of the offenders' behavior. This can help to develop a new risk assessment to reduce the risk of offenders reoffending and returning to prison (Rollwagen & Brunschot, 2012). New risk assessments can help the criminal justice system effectively use EM to supervise, monitor, and track the offenders' movement (Spidell & Cornish, 2010). Parole and probation officers are helping to bring about legislative changes in the use of EM to lower risk in the criminal justice system (Gable, 2009).

Positive and Negative Effects of Electronic Monitoring

While EM is a recognized device that is used in the criminal justice system, there are positive and negative factors associated with its use (Gable & Gable, 2007).

Blackwell, Payne, and Provost (2011) indicated that "the rise of the EM device for management of offenders within the criminal justice system today necessitates an increased collaboration of criminal justice personnel with private sector companies that provide monitoring services" (p. 1). According to Jones (2014), one of the primary arguments for why states are adopting EM is to rehabilitate and reduce the recidivism of offenders. DeMichele and Payne (2010b) further indicated that EM could help with the slow release of low-level offenders into the community and society and reduce their risk of recidivism.

From 1982 to 2005, prison cost increased significantly from \$35.8 billion to \$204.1 billion, a six-fold increase. This stretches the budget of the government at the local, state, and federal level because prisons are reaching their maximum capacities to house offenders (DiMichele & Payne, 2010a). Moreover, probation and parole officers are responsible for supervising many offenders released from prison, which creates a challenge for these officers with a limited budget (DiMichele & Payne, 2010a).

Nevertheless, Harlow (2011) showed that a probation officer in Kentucky with 19 years of experience found that EM allows her to manage high-risks offender in the community better. Yeh (2010) further stated that EM has significant social benefits because it reduces repeat offenders from committing new crimes.

Barry (2009) and Yeh (2010) noted that EM could be a powerful device to deter offenders from crime. Since EM tracks the offenders' activities, it can also be a useful device to exonerate innocent offenders by providing evidence that the offender was not at the crime scene (Barry, 2009). EM may deter offenders from committing a crime because they know that they will be caught (DiMichele & Payne, 2010a; Sipes, 2012). Sipes (2012) further noted that GPS monitoring provides added protection to the public. If offenders are not in compliance with their release from prison, the GPS monitoring immediately signals the probation or parole officers that a criminal violation has occurred.

DiMichele and Payne (2009a) noted that EM "are inanimate objects or machines that should be understood as tools with the potential to improve community supervision when appropriately implemented, evaluated, and adjusted despite the fact that electronic supervision tools are relatively new to the community corrections field. However, they

are not magical and require humans to operate them" (p. 28). One of the major benefits of EM is to help offenders avoid prison or help offenders adhere to the conditions of their release from prison or jail (Barry, 2009). The major benefit of EM is it "reduces societal costs because offenders are employed, pay taxes, and are abele to provide for their families" (Barry, 2009, p. 9). In a cost-benefit analysis, EM was found to reduce offenders from committing new crimes (Yeh, 2010).

Padgett, Bales, and Blomberg (2006) examined the effectiveness and consequences of EM. Padgett et al. (2006) found that violent offenders on GPS-monitors were 91.2% less likely to commit a crime compared to their non-monitored offenders. Marklund and Holmberg (2009) conducted a meta-analysis to examine the benefits of EM. Although there are many benefits to using EM, Marklund and Holmberg (2009) found that there was minimal supporting evidence that EM in place of prison reduces offenders from committing a new crime. Calderbank (2012) indicated that EM should be placed on sex or violent offenders but should not be used with offenders who committed minor offenses.

Although there are many positive benefits to using EM, it is not a panacea. Nellis (2006) found that there is no supportive evidence to show that EM is a rehabilitation method to keep offenders from committing crimes once off EM. Other challenges of EM are that the criminal justice agency must include EM into its budget and must also take into account what probation officers will experience when monitoring offenders who are placed on EM (Gott & Foster, 2006). EM was studied in Orange County, California (Gott & Foster, 2006). Gott and Foster (2006) found that EM, on average, provided 19 alerts per day per offender. If a probation officer was monitoring 50 offenders on

probation that would mean the probation officer would receive 950 alerts per day, which is a lot for one probation officer to track. In Arizona, EM of 140 offenders led to 35,000 false alerts in the first year. All of this indicates that EM is not without problems. Many of the false alerts occurred from signal interruptions, inaccurate reading of the offender's position, and the batteries not being fully charged (Malan & Sussman, 2008).

Moreover, Miller (2012) indicated that EM needs to be reformed. Police and probation officers need to be involved in the surveillance and tracking of offenders. Continued technological advancement of EM has made it more difficult for the criminal justice agency to keep pace with the new technology (Miller, 2012). EM device failure can also be a problem. When an electronic monitor has technical problems, the probation officers must fix it (Yeh, 2010).

Recidivism of Monitored and Unmonitored Offenders

According to the United States Department of Justice (USDOJ, 2011), EM has helped reduce the recidivism of offenders. More than 600,000 offenders are released from state and federal prisons annually, with some being placed on EM as a condition of their release (Bieren & Carvalho, 2010; USDOJ, 2011). Since many offenders released from county jails and other correctional facilities return to prison within three years of their release, many offenders are placed on EM to reduce their recidivism (Langan & Levin, 1994; USDOJ, 2011). Many of the offenders released into society often pose threats to the community. Therefore, to reduce their recidivism, many states have expanded their monitoring programs to ensure the public safety of their citizens.

In Florida, a large funded study was conducted to determine if EM reduced offenders' recidivism (National Institute of Justice [NIJ], 2011). For six years between

2001 and 2007, more than 5,000 medium- to high-risk offenders were on EM compared to 266,000 who were not placed on EM. The exact "sample included 5,034 medium- and high-risk offenders on electronic monitoring and 266,991 offenders who were not placed on electronic monitoring" (NIJ, 2011, p. 1). Also, 105 offenders were interviewed and selected through convenient sampling (NIJ, 2011). The findings from the study showed the following:

- Electronic monitoring reduces offenders' risk of failure by 31 percent.
- Electronic monitoring based on Global Positioning Systems (GPS) typically
 has more of an effect on reducing failure to comply than radio frequency (RF)
 systems.
- Electronic monitoring had less of an impact on violent offenders than on sex,
 property, drug and other types of offenders. However, the effect remains
 statistically significant. (NIJ, 2011, p. 2)

Additional information about the offenders being monitored showed that EM affected the offenders' personal relationships with the offenders' spouses and families (NIJ, 2011).

A Brief Overview of Electronic Monitoring in Illinois

EM is used for three specific criminal justice purposes. The first purpose is to detain an offender to specific locations. The second purpose is to restrict offenders to limited areas. The third purpose is for surveillance through tracking movement (Bales, 2010, p. 67). There are essentially two forms of electronic monitoring, and they are radio-frequency (RF) and global positioning system (GPS) monitoring. RF monitoring usually measures the distance and parameters of the transmitter and is usually used in home curfew orders or sentencing. In the event the offender leaves his/her home after a

prohibited time, the RF alerts the probation officer that the offender's curfew has been violated. GPS monitors the offender's movement in real time and usually is used for more complicated supervision orders. Potential offenders usually have been committed of a high-risk crime such as a sexual offense (Roman, Liberman, Taxy, & Downey, 2012).

The sheriff's EM program in Illinois is a program that is supposed to assist with overcrowding prisons. The program was created in 1989, and since then over 300,000 parolees have been placed on electronic monitoring in Illinois. The goal of this program is to offer a community-based alternative to incarceration for nonviolent offenders. This approach was an attempt to allow short-time and pre-trial inmates an opportunity to remain in the community with family and friends instead of jail. The electronic monitoring program usually populates an average of over 2,000 offenders daily (Cook County Sheriff [CCS], 2017).

The way EM works is that a detainee is fitted with an ankle bracelet that acts as a transmitter and GPS locator. A probation or parole officer who works in a monitoring center monitors the ankle monitor. The ankle monitor will inform the center of the offender's movements, and even if the monitor is being tampered with (Cook County Sheriff [CCS], 2017). Participants of the EM program can be in the community to attend job interviews, work, and school; however, they are monitored 24 hours per day, seven days a week for all movement. In most cases work and school movements are acceptable with prior approval (Cook County Sheriff [CCS], 2017). These types of monitors are in place to monitor the activity of an offender to ensure while they are back in the community that they are not engaging in further criminal activity, which would cause

them to recidivate and return to prison once again (CCS, 2017). In addition, the EM poses an element of control to reduce levels of criminal activity, clarified later theoretically as the SBT (Hirschi, 1969). The main concern is whether probation officers believe EM is effective, considering that recidivism is still a nationwide concern.

Comparing Electronic Monitoring in the Other States

Currently, 27 states have specific policies for monitoring offenders, with 19 of these states requiring GPS for sex offenders. There are also states such as Alabama, Arkansas, Louisiana, and New Mexico that allow prisoner's credit toward jail time served if placed on electronic supervision. Other states such as Florida, Indiana, and Ohio utilize GPS monitoring for their sex offenders, ruling that sex offenders must be monitored their entire life. Kansas, Louisiana, and Maine have mandatory prison followed by a lifetime of GPS monitoring to track sex offenders. (Bureau of Justice Administration [BJA], 2005).

There are three types of monitoring uses for EM in the United States: GPS provisions, GPS time limits, and active monitoring. States that have provisional GPS are California, Florida, Georgia, Indiana, Michigan, Missouri, Montana, Ohio, Oklahoma, Rhode Island, South Dakota, West Virginia, Virginia, and Wisconsin. States also have GPS with time limits that expire after some time such as California, Florida, Georgia, Indiana, Missouri, Ohio, Rhode Island, Virginia, and Wisconsin. The states that have active EM with real-time monitoring include Virginia, Tennessee, South Carolina, Oklahoma, New Jersey, California, and Illinois (Bureau of Justice Administration [BJA], 2005.

GPS monitors are perhaps the most advanced EM devices utilizing 24 orbiting satellites that transmit precise time and location to a receiver. Location, within a few feet, is determined by calculating the time difference between the satellite and Earth.

Active GPS monitors continuously transmit date and time via a wireless network. GPS monitors store data that is later downloaded via telephone wires (Bales, 2010).

There are many different types of monitoring systems in the United States, and not all EM is done by ankle monitoring and reporting to a probation officer to check in. In the state of New York, an EM kiosk has been developed, which provides 70% of the state's probationers reports. The kiosk allows offenders to report frequently to a kiosk resembling an ATM that uses a thumb-scanned print to identify the user, then takes a photo and records a video of the entire session. While at the kiosk, the offender is asked a series of questions about his/her progress. Although the reporting kiosk is still at an early stage to determine its effectiveness, it is still an innovative way that the US is using electronic monitoring (BJA, 2005, p. 19-20).

Comparing Electronic Monitoring in Other Countries

Many other countries are using electronic monitoring to monitor and supervise offenders. In Latin countries such as Argentina, Brazil, Chile, Columbia, Mexico, and Uruguay electronic bracelets are used to monitor offenders. The same electronic bracelets are also used in countries such as Portugal, Sweden, and Panama. The Republic of Colombia (Latin America) has a Decree n. 177 of 2008 that establishes the legal criteria for users as follows (United Nations Office on Drugs and Crime [UNDOC], 2015, p. 2-11):

- I. Article 1. Electronic Monitoring System. The Execution and Security Measure judge may require the utilization of electronic monitoring systems during the execution of the sentences, as an alternative measure to imprisonment, provided that the sentenced meet the following requirements:
 - a. Punishment doesn't exceed 8 years of imprisonment and the offender has not been declared guilty of crimes of genocides, international crimes against the humanitarian law, forced disappearance, kidnapping, torture, smuggling of migrant, trafficking in persons, crimes against freedom, integrity and sexual extortion, money laundering, aggravated conspiracy, terrorism, terrorist financing, and crimes related to drug trafficking.
 - b. Sentence has not been declared guilty for an intentional or almost intentional crime within the last 5 years.
 - c. Sentence that doesn't represent any danger to the community.
 - d. Sentence has fulfilled the total payment of the fine.
 - e. The offender has repaired damages caused by the offense within the timeperiod established by the judge.
- II. Article 2. Application as an alternative measure to pre-trial detention. The correction judge may order the use of electronic surveillance systems, which would be replaced in the pre-trial detention facility by the place of residence, subject to compliance with the requirement referred to in Article 314 of Law 906 of 2004.
- III. Article 3. Select following persons to assure efficiency of the use of EM bracelet an alternative measure to imprisonment:

- a. Voluntary participation in the program and aware of details that the obligation entails.
- Person who cannot be treated according to indications of the prison medical center.
- Pregnant women and mothers with children that are within their first 6
 months of age unless they represent danger against their own children.
- d. Person deprived of liberty who is ordered house arrest and is not dangerous.
- e. Syndicated bailable offense of release
- f. Syndicated with work permit
- g. Syndicated with study permit (UNDOC, 2015, p. 2-11).

In Saskatchewan, electronic monitoring supervision has been available to offenders across the province since 1996 (Bonta et al., 1999), yet the average annual incarcerated population count in 1998-1999 was higher than it was in 1995-1996, the fiscal year before the full implementation of Saskatchewan's electronic monitoring program (Solicitor General of Canada, 1998). The relatively small capacity of Canadian electronic monitoring programs and the restrictive selection criteria that the programs use may explain why electronic monitoring did not reduce the numbers of offenders in prison (Howard, 2000).

The Relationship between Probation Officers and Nonviolent Drug Offenders

The relationship between probation officers and offenders is primarily one of supervision. The probation officer's job is to monitor and supervise the offender for a set time. During the time in which the offender is supervised, their relationship can grow

either strong or weak bonds between the two of them. There is a small but growing body of literature specific to criminal justice settings indicating that the working alliance between criminal justice employees and offenders may affect outcomes (Green et. al, 2013). Probation officers face the problem of integrating authoritarian and rehabilitation-oriented elements in their role. To achieve rehabilitation, they must elicit the participation of the parolee and the other members of the community in creating new interpersonal relationships, which integrate the parolee into community life (Johnson, 1959).

In 2015, a study was conducted in Virginia in which parolees enrolled in a six-site randomized clinical trial were assigned either to a probation officer/therapist/client collaborative intervention designed to improve relationship quality or to supervision as usual.. The parolees were then asked to rate relationship quality with their supervising officer (Blasko, Friedmann, Rhodes, & Taxman, 2015). Results showed parolees assigned to the intervention endorsed significantly higher relationship ratings and demonstrated a lower violation rate than those assigned to the control group. Ratings of the parolee–probation officer relationship mediated the relationship between the study condition and the outcomes; better-perceived relationship quality was associated with fewer drug use days and violations during the follow-up period, regardless of the study condition. Findings are discussed as they pertain to supervision relationships (Blasko, Friedmann, Rhodes, & Taxman, 2015).

The Future of Electronic Monitoring in Reducing Recidivism With Ex-Offenders

During the 12th annual United Nations Congress on Crime Prevention and Criminal Justice Conference in Brazil, one of the recommendations was to use EM on

offenders as an alternative to prison as a future of crime control (Hill, 2010). When EM was first introduced in the 1980s, it was not well received because it was poorly designed and consisted of multiple pieces of equipment (Burrell & Gable, 2008; Crowe, Sydney, & Bancroft, 2002; Drake, 2008; Yeh, 2010). However, in the last 20 to 30 years, technological advancement and improvements in EM have led to widespread use of EM in the criminal justice system (Burrell & Gable, 2008; Drake, 2008). The widespread use of EM will continue to grow to reduce prison overcrowding (Beck et al., 1990; Elrod & Brown, 1996; Palermo, 2015; Raider, 1994; Renzema & Mayo-Wilson, 2005).

According to Drake (2009) and Sipes (2012), the widespread use of GPS monitoring will continue to grow and expand in the United States. Approximately 44,000 GPS monitoring devices were used (Drake, 2009). Drake (2009) noted that 32 states had adopted GPS monitoring for sex offenders. GPS monitoring tracks the offenders' location 24 hours a day (Sipes, 2012; Yeh, 2010). Annually, more than 60% of offenders were tracked with a GPS monitoring device (Sipes, 2012). The Court Services and Offender Supervision Agency (CSOSA), which is a federal agency in the D. C. area, has been using GPS monitoring to track offenders since 2003. At that time, approximately 600 offenders were in the program. These numbers will continue to rise, as more offenders will be placed on GPS monitoring to rehabilitate offenders and reduce prison overcrowding (Sipes, 2012).

Sipes (2012) stated that while GPS monitoring is a great tool to deter offenders from committing a criminal act, it does not replace the interaction that offenders have with their probation officers. Gable (2009) indicated that technological advancement in GPS monitoring would help reduce the size of monitored offenders. A reduction will

occur because GPS poses high sanctions on offenders, which will help offenders, comply with the law and reduce the offenders from committing future crimes (Gable, 2009; Yeh, 2010). Barry (2009) further predicted that EM would improve crime control and indicated that widespread use of EM will continue to gain support. Nevertheless, the success of EM depends on the support of the public, political leaders, and criminal justice system (Barry, 2009).

Compared to 30 years ago, more states are turning to EM because the prison population continues to rise and cause overcrowding; as a result, more states are relying on EM as an alternative to prison (DeMichele & Payne, 2009). DeMichele and Payne (2009) further noted that with the technological advancement in EM, more offenders would rather be placed on EM than be in prison. EM also allows probation or parole officers to better monitor and supervise offenders in the community. However, opponents to EM still question whether EM is an effective alternative method to control and prevent crime. Burrell and Gable (2008) noted that when offenders are placed on EM, EM reduces the offenders' recidivism, but further studies are necessary to analyze whether recidivism is further reduced after the offenders are taken off EM.

Summary

The above review of literature provided an in-depth look recidivism research for offenders, an overview of electronic monitoring used in Illinois Adult Probation, current and future uses of electronic monitoring with offenders, probation officers' attitudes with offenders, crime, and the relationship between probation officers and offenders.

Additionally, it provided information on the profile of offenders and their probation

officers, along with an in-depth conceptualization of the deterrence theory and how it applies to this research.

Chapter 3: Research Method

I conducted a descriptive quantitative study in The Southern Region, Illinois to examine probation officers' attitudes toward the EM program for drug offenders.

Probation officers are reputable and professional members of their field; therefore, obtaining probation officers' evaluations of an EM program for drug offenders was justifiable. The criminal justice system and policymakers may appreciate this essential information on whether EM is an effective monitoring system for drug offenders and may provide additional community resources.

Research Design and Rationale

Independent and Dependent Variables

There were two main variables in this quantitative research design. The independent variable was the attitudes of probation officers. The dependent variable was the EM program for drug offenders.

Population and Sample

The population for this research study was probation officers. The sample consisted of 40 probation officers from the Illinois Adult Probation Office. There are approximately 200 probation officers working at the Illinois Adult Probation Office located at 69 West Washington, Suite 1940, Chicago, IL 60602. According to G*Power, a population of 200, with a margin of error of 5% and a confidence level of 95%, has a sample size of 20. However, twenty additional probation officers completed the survey, totaling 40. The reason that The Southern Region, Illinois probation officers were selected was that Illinois has one of the highest recidivism states in the United States.

Illinois has a 51.70% recidivism rate; hence, it was pertinent to examine Illinois probation officers' attitudes toward the effectiveness of their EM systems (PEW, 2011).

Sampling and Sampling Procedures

A convenience sample was used to collect data. According to Castillo (2009), convenience sampling is a non-probability sampling where participants are selected due to their easy access. Convenience sampling was chosen for this research study because probation officers are extremely busy with heavy caseloads, therefore, whoever was available for the survey was selected based on their convenience. Probation officers were chosen because these officers work directly with the offender population, particularly drug offenders, and have expertise and knowledge about EM and drug offenders.

Procedures for Recruitment, Participation, and Data Collection

The Illinois Adult Probation Office was contacted by email to ask if staff wanted to participate in a quantitative research study on probation officers' attitudes about the EM program for drug offenders. Thirteen jurisdictions cover Illinois. Once the Illinois Adult Probation Office agreed to participate in the research study, permission of implied consent was provided to allow me to conduct a study with the office. After I had received implied consent, probation officers in the Illinois Adult Probation Office were recruited to participate in the study by the Chief Judge who was the head of the Adult Probation Department. All 40 probation officers who agreed to participate in the research study were asked by their supervisor to login on a computer, tablet, or personal cell phone using a link on Survey Monkey. Once all of the questionnaires had been completed and collected, the questionnaires were analyzed with IBM SPSS-24. The probation officers had 4 weeks to complete the survey online.

Instrumentation and Operationalization of Constructs

Probation officers in Illinois Adult Probation completed the Modified Effective Evaluation of Electronic Monitoring Survey (MEEEMS). The instrument is composed of five sections. Section 1 contains items pertaining to the respondent's current caseload. Section 2 consists of items related to background information on the officer. Section 3 relates to operational aspects of EM. In Section 4, the officer evaluates EM and its effect on recidivism/rearrests. Last, Section 5 relates to implications for social change.

Data Analysis Plan

The data analysis involved descriptive analysis and chi-square test. Sections 1, 3, 4, and 5 of the questionnaire pertained to the caseload data and operational aspects of EM for the 40 probation officers. Please see Appendix A. These sections were evaluated using chi-square test. Responses to Section 2 of the questionnaire, which consisted of more demographic information, were analyzed using descriptive analysis.

Research Questions and Hypotheses

The study examined the relationship between probation officer attitudes and the EM program as an effective monitoring system for drug offenders. The study's three research questions were as follows:

- RQ1: How do the attitudes of the probation officers predict the likelihood of drug offenders committing subsequent crimes while in the EM program?
- RQ2: What motivational factors of the EM program for drug offenders lead to positive attitudes in the probation officers?
- RQ3: What motivational factors of the EM program for drug offenders lead to negative attitudes in the probation officers?

The three hypotheses (null and alternative) were as follows:

- $H1_0$: The attitudes of the probation officers will predict that drug offenders are not likely to commit a subsequent crime while in the EM program.
- H1a: The attitudes of the probation officers will predict that drug offenders arelikely to commit a subsequent crime in the EM program.
- H2o: Deterrence is the leading motivational factor contributing to positive attitudes from probation officers toward drug offenders in the EM program.
- H2a: Deterrence is not the leading motivational factor contributing to positive attitudes from probation officers toward drug offenders in the EM program.
- H3o: Lack of community support is not the leading factor contributing to negative attitudes from probation officers toward drug offenders in the EM program.
- H3a: Lack of community support is the leading factor contributing to negative attitudes from probation officers toward drug offenders in the EM program.

Threats to Validity

Validity is separated into internal validity and external validity. Internal validity is the reliability of the instrument used in a study. Factors that can threaten internal validity include history, maturation, testing, and instrumentation (Howell, 2014). In this research study, there were no threats to internal validity. Factors that can jeopardize external validity include the reactive or interaction effect of testing, selection biases, multiple

treatment interferences, or reactive effects of experimental arrangements (Howell, 2014). In this research, there were no external threats to validity.

Ethical Procedures

In the last several decades, the protection of human participants has caught international attention due to ethical violations related to the treatment of human subjects in biomedical and behavioral research. Therefore, the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research was formed to protect human participants, and guidelines were established to protect human rights. In order to conduct a research study that involves human subjects or participants, a researcher must apply for permission to do so and follow the procedure of the Institutional Review Board (IRB) at Walden University. To protect the participants' (probation officers') rights in this research study, the researcher complied with IRB guidelines and procedures involving human participants at Walden University. The Walden University IRB approval # is 02-13-18-0240981.

Guidelines and procedures that I followed in this study included the following: ensuring less than minimal harm to the probation officers, using consent forms, and protecting the privacy and anonymity of the study participants. No harm came to the probation officers who participated in this research study. An access-implied consent was used to gain permission to use the probation office supervisor to recruit twenty-five study participants (probation officers). A participant-implied consent was used to request the participants' permission to participate in the research study. The participant-implied consent included a brief explanation of the research study and questionnaire; a description of the participants' voluntary rights, such as the right to drop out of the

research study at any time without judgment or bias; and contact information for me and my chairperson.

To maintain the probation officers' privacy, the researcher did not have access to probation officers' names, addresses, phone numbers, or email information. This reduced the risk for any breach of confidentiality. To ensure the anonymity of the probation officers, I used two-number codes from 01 to 40 in place of the probation officers' names for statistical analysis. The questionnaire was distributed through a third-party site called Survey Monkey, and the participants were assured that their answers to the questionnaire would be kept private and confidential. All information, such as the questionnaire results, has been kept on a locked flash drive in a locked file cabinet to which only I have access.

Ethical Concerns

There were three ethical concerns related to this study. First, publishing an article on one county could have presented a concern for the county or the public. If the Illinois Adult Probation Office had indicated a concern about its name being used, the researcher would have taken the office's name off the study and replaced it with *Illinois Probation Office*. Second, the researcher could have been unable to find enough probation officers who agreed to participate in the study. Third, the probation officers who agreed with the participant-implied consent could have decided to withdraw from the study. A probation officer's withdrawal would have affected the study results if I had been unable to obtain a large enough sample size to generalize the findings to the study population. If this had occurred, I would have contacted the department head administrator to ask about redistributing the survey once more to increase numbers.

Summary of Design and Methodology

A quantitative, descriptive design was used. Probation officers from the Illinois Adult Probation Office in the state of Illinois were contacted to gain permission to administer the survey with convenience sampling of 40 probation officers. Forty probation officers from the Illinois Adult Probation Office completed the questionnaire to examine their attitudes about EM for drug offenders.

Chapter 4: Results

Demographics

I conducted a descriptive quantitative research study in The Southern Region, Illinois to examine probation officers' attitudes toward an EM program for drug offenders. This study had a sample size of 40 probation officers, who were asked 15 questions on an online survey through Survey Monkey. This study was important, in that it allowed me to seek information on the attitudes of probation officers on EM.

Nationally, the recidivism rate is 45.9%, and in the state of Illinois, the recidivism rate exceeds the national rate by 6%. With Illinois having a 51.70% recidivism rate, there was a need to explore the attitudes of probation officers who deal with offenders regularly in the EM program. Probation officers' sole purpose is to control, deter, and monitor offenders in order to reduce offenders' rearrest rates.

Data were collected for this research using Survey Monkey. Probation officers completed 15 questions online using an anonymous survey link. Data collection was slow for the first couple of weeks and picked up during the last week after multiple attempts from the researcher with the probation department supervisor. The majority of the surveys were completed during the final days before the survey ended. After several attempts, the survey received more responses (40) than the required sample amount (20). The dynamics of the survey were as follows: The first four questions were related to demographics, and the last 11 questions were related to the research questions and theoretical framework. Probation officers had 4 weeks to complete the survey. Sixteen males and 24 females completed the survey. These results indicating the sex of the

participating probation officers were surprising. The knowledge that there were more females in the sample made me wonder if there are more female officers than male officers. Recruitment took place first through the chief judge, and then through the probation officers' supervisor. In terms of ethnicity, there were 11 Caucasian probation officers, 24 African American probation officers, 1 non-Hispanic probation officer, two multiracial probation officers, and 2 probation officer who identified themselves as *other*. There were no probation officers who identified themselves as Indian, Alaskan, or Pacific Islander.

Participants' ages varied widely. There were no probation officers between the ages of 18 and 24, four probation officers between the ages of 25 and 34, eight probation officers between the ages of 35 and 44, eighteen probation officers between the ages of 45 and 54, and ten probation officers between the ages of 55 and 64. There were no probation officers over the age of 65.

The 40 probation officers were also asked to indicate their years of experience monitoring offenders with EM. Results showed that there were two probation officers who had between 0 and 1 year of experience with EM. Seventeen probation officers had between 2 and 5 years of experience with EM. Four probation officers had between 6 and 10 years of experience with EM. Five probation officers had between 11 and 15 years of experience with EM. Three probation officers had between 16 and 20 years of experience with EM. Four probation officers had between 20 and 25 years of experience with EM. Five probation officers had over 25 years of experience with EM. See Table 1.

Table 1

Probation Officers' Demographics

	n	Percentage
Gender		
Female	24	60%
Male	16	40%
Total	40	100%
Race		
Caucasian	11	27.5%
African American	24	60%
Non-Hispanic	1	2.5%
Indian	0	0%
Asian	0	0%
Alaskan	0	0%
Multiracial	2	5%
Other	2	5%
Total	40	100%
Age		
18-24	0	0%
25-34	4	10%
35-44	8	20%
45-54	18	45%
55-64	10	25%
65-74	0	0%
Total	40	100%
Experience as a probation	on officer	
0-1 years	2	5%
2-5 years	17	42.5%
6-10 years	4	10%
11-15 years	5	12.5%
16-20 years	3	7.5%
20-25 years	4	10%
Over 25 years	5	12.5%
Total	40	100%
Current caseload of drug	g offenders on I	EM
0-25	26	65%
26-50	7	17.5%
51-100	5	12.5%
Over 100	2	5%
Total	40	100%

Note. n = number of probation officers.

An interesting result in Table 1 is that there were no probation officers between the ages of 18 and 24 years. There were also no probation officers between the ages of 65 and 74. It is assumed that the reason that there were no probation officers between the ages of 65 and 74 is that these are common retirement ages. Moreover, the minimum prospective age limit for a probation officer or even a local law enforcement officer is 18 years. It would have been interesting to survey the entire population to see exactly how many probation officers were between the ages of 18 and 24. Nevertheless, the same population shows that they are poorly represented.

The majority of probation officers represented in Table 1 were Caucasian and African American. Other races such as non-Hispanic, Indian, Asian, Pacific Islander, and multiracial were poorly represented in this group of 40 probation officers. This could have been due to the nature of Illinois's population. The ethnic distribution of probation officers in other counties such as DuPage, Will, or Lake County might have been different. Table 1 illustrates that the sample of Illinois probation officers was mostly female. Males composed only 40% of the sample population.

Table 1 also contains data on the years of experience held by the probation officers surveyed. The largest group (42.50%) of participants had worked as probation officers monitoring offenders for between 2 and 5 years. Five percent of participants had worked for between 0 and 1 year in the EM program. There were four probation officers who had 6 to 10 years of experience monitoring offenders on EM. Five probation officers had 11-15 years of experience, three probation officers had 16-20 years of experience,

four probation officers had 20-25 years of experience, and five probation officers had over 25 years of experience monitoring offenders on EM.

Probation officers were asked how many offenders they currently monitored with EM. Of the 40 probation officers surveyed, results showed that 20 were monitoring a caseload of between 0 and 25 electronically monitored offenders. Thirteen probation officers were monitoring a caseload of between 26 and 50 electronically monitored offenders. Three probation officers were monitoring a caseload of between 51 and 100 electronically monitored offenders. Last, there were four probation officers monitoring a caseload of over 100 electronically monitored offenders.

When probation officers were asked how many drug offenders were being monitored of their current caseload, 26 probation officers indicated that they monitored a caseload of between 0 and 25 drug offenders, seven probation officers indicated that they monitored a caseload of between 25 and 50 drug offenders, five probation officers monitor a caseload between 50-100 drug offenders, and two probation officers indicated that they monitored a caseload of over 100 drug offenders.

In addition, probation officers provided information on their attitudes concerning ways that EM can be improved. The 40 probation officers indicated many ways to improve electronic monitoring for drug offenders. They recommended the following:

- Better communication
- Faster response time
- Technology improvement
- Relationship building
- Make EM harder to remove

- Include better GPS surveys
- More funding for the program
- Better system
- Less false signals
- More utilization
- Better court responses to compliance issues
- Smaller, more efficient equipment
- More staff
- Let the Sheriff's Department manage the program

Only five probation officers out of 40 who participated in the survey stated that the EM program for drug offenders was fine in its current state. That equated to about 12.5% of the probation officers. The remaining 35 (87.5%) probation officers offered recommendations for improvement.

Probation officers' attitudes concerning the best aspects of EM also varied.

Probation officers provided nine different responses on the best thing about EM. The most prominent response, tracking/restrictions to offenders, came from 17 probation officers. Two probation officers agreed that EM keeps probationers out of jail and in the community with their families. One probation officer stated that there was nothing best about electronic monitoring. Three probation officers stated that cost was the best thing about EM. One probation officer stated that accountability was the best thing about EM. One probation officer stated that communication was the best thing about EM. Two probation officers

stated that the best thing about EM was that it could deter offenders from committing more crimes. One probation officer stated that the best thing about EM was that the system worked. Finally, six probation officers stated that the EM program gave overpopulated jails room for more serious offenders instead of drug offenders.

The results also varied for the types of offenders for which probation officers thought EM was most effective and not effective. The choices were homicide, assault, robbery, kidnapping, sexual assault, burglary, and drug offenders. The largest group of probation officers (32%) agreed that EM would be most effective with sexual assault offenders. However, 28% of the probation officers thought that EM would instead be most effective with drug offenders. Homicide and robbery were each identified by 12% of the probation officers as the offenders with whom EM would be most effective. Eight percent of the probation officers thought that EM would be most effective with offenders who had engaged in assault. Finally, 4% of the probation officers thought that EM would be most effective with offenders who had committed acts of kidnapping and burglary. See Table 2.

Table 2
Attitudes on Effective Monitoring

	_	
	n	Percentage
What type of offende	ers on EM are	e effective?
Homicide	4	10.0%
Assault	2	5%
Robbery	3	7.5%
Kidnapping	1	2.5%
Sexual assault	16	40%
Burglary	1	2.5%
Drug offenders	13	32.5%
Total	40	100%
What type of offend	ers on EM are	e not effective?
Homicide	15	37.5%
Assault	2	5%
Robbery	1	2.5%
Kidnapping	3	7.5%
Sexual assault	1	2.5%
Burglary	3	7.5%
Drug offenders	15	37.5%
Total	40	100%

Note. n = number of probation officers.

Probation officers were asked what type of offender EM is not effective with, and results showed that 37.5% of the probation officers thought that EM was not effective with drug offenders. Additionally, 37.5% of the probation officers thought that EM was not effective with offenders who committed homicide. In reference to offenders who engaged in burglary, 7.5% of probation offices thought that EM was not effective. Finally, 5% of probation officers thought that EM was ineffective with assault offenders, 7.5% of probation officers thought that EM was ineffective with kidnapping offenders, and 2.5% of probation officers thought that EM was ineffective with sexual assault offenders.

Chi-Square Test of Independence Results

The chi-square test is used to test whether two categorical variables are associated. Chi-square indicates whether the variables are independent or related, as it is a nonparametric test. The chi-square test allows the null hypothesis of the chi-square test of independence to be expressed in two different but equivalent ways. The chi-square is

denoted x2 and is computed by $x_e^2 = \sum \frac{(O_i - E_i)^2}{E_i}$

The chi-square was used to test the hypotheses and answer the three research questions. The three research questions were as follows:

- RQ1: How do the attitudes of the probation officers predict the likelihood of drug offenders committing subsequent crimes while in the EM program?
- RQ2: What motivational factors of the EM program for drug offenders lead to positive attitudes in the probation officers?

RQ3: What motivational factors of the EM program for drug offenders lead to negative attitudes in the probation officers?

The three hypotheses (null and alternative) were as follows:

- $H1_0$: The attitudes of the probation officers will predict that drug offenders are not likely to commit a subsequent crime while in the EM program.
- H1_a: The attitudes of the probation officers will predict that drug offenders are likely to commit a subsequent crime in the EM program.
- H2o: Deterrence is the leading motivational factor contributing to positive attitudes from probation officers toward the drug offenders in the EM program.
- H2a: Deterrence is not the leading motivational factor contributing to positive attitudes from probation officers toward the drug offenders in the EM program.
- H3o: Lack of community support is not the leading factor contributing to negative attitudes from probation officers toward the drug offenders in the EM program.
- H3a: Lack of community support is the leading factor contributing to negative attitudes from probation officers toward the drug offenders in the EM program.

Hypothesis Testing

Hypothesis 1

Hypothesis testing for the chi-square of independence is determined by the significance and degrees of freedom. There are two major applications of the chi-square:

(a) goodness of fit and (b) test of independence. Pearson's chi-square test is an approximate test and is produced by analysis only. Furthermore, when testing the first hypothesis to determine how the attitudes of the probation officers predict the likelihood of drug offenders committing subsequent crimes while in EM program. See Table 3.

Table 3

Hypothesis 1 Chi-Square Tests

			Asymptotic
	Value	df	significance (2-sided)
Pearson chi-square	49.418 ^a	8	.000
Likelihood ratio	18.974	8	.015
N of valid cases	40		

Note. Eleven cells (73.3%) have expected count less than 5. The minimum expected count is .02.

The degrees of freedom = 8 and the p-value is .015 > .5. In general p-values with less than .05 significance allows the researcher to reject the null hypothesis and accept the alternative hypothesis. Alternative hypothesis assumes there is a non-statistically significant relationship between the independent and dependent variables. Therefore, the researcher has rejected the null hypothesis and accepted the alternative hypothesis. The alternative hypothesis is $H1_a$: The attitudes of the Probation Officers will predict that drug offenders are likely to commit a subsequent crime in the EM program. According to the sample of probation officers (n=40) the $H1_a$ assumes there is a relationship.

Hypothesis 2

When testing the second hypothesis with Pearson's Chi Square, I found that the degrees of freedom = 10 and the *p-value* is .108 > .05. Since the *p-value* is not less than .5, I must accept the null hypothesis and reject the alternative hypothesis. The null

hypothesis states that deterrence is not the leading factor contributing to positive attitudes from the probation officers towards the EM program for drug offenders.

Table 4

Hypothesis 2 Chi-Square Tests

			Asymptotic
	Value	df	significance (2-sided)
Pearson chi-square	46.729 ^a	10	.000
Likelihood ratio	15.711	10	.108
N of valid cases	41		

Note. 14 cells (77.8%) have expected count less than 5. The minimum expected count is .02.

Hypothesis 3

When testing the third and final hypothesis, I used Chi-Square test for independence. The degrees of freedom = 10 and the p-value is .326 > .05. The p-value is higher than .05 level of significance which means the researcher must accept the null hypothesis and reject the alternative hypothesis. The null hypothesis states that the lack of community support is the leading factor contributing to negative attitudes from probation officers towards drug offenders in the electronic monitoring program. Please see Table 5.

Table 5

Hypothesis 3 Chi-Square Tests

			Asymptotic significance
	Value	df	(2-sided)
Pearson chi-square	42.968 ^a	10	.000
Likelihood ratio	11.414	10	.326
N of valid cases	41		

Note. Sixteen cells (88.9%) have expected count less than 5. The minimum expected count is 02

The statistical procedure conducted was Chi-Square test to determine if there was an association between the independent and dependent variables. If the *p*-value (probability) is more than the significance level, the null hypothesis can be accepted. If the *p*-value is less than the significance, the null hypothesis cannot be accepted. Two categorical variables are independent if the conditional distribution of the response variable does not change as we switch from one value to another. In this case, since both categorical variables were independent, knowledge of the values of one variable does not help us predict the outcome of the other variable.

The researcher tested the first hypothesis, *H1o*: The attitudes of the Probation Officers will predict that drug offenders are not likely to commit a subsequent crime while in the EM program. *H1a*: The attitudes of the Probation Officers will predict that drug offenders are likely to commit a subsequent crime in the EM program. The *p*-value was found to be .015, which is not higher than .05 significance level, therefore the null hypothesis was rejected and the alternative hypothesis was accepted. The second hypothesis *H2o*: deterrence is not the leading factor contributing to positive attitudes

from probation officers toward electronic monitoring. *H2a*: Deterrence is the leading factor contributing to positive attitudes from probation officers toward electronic monitoring. The *p*-value was .108, which is higher than the 0.5 significance level; therefore, the null hypothesis was also accepted. Last, the final hypothesis, *H3o*: Lack of community support is not the leading factor contributing to negative attitudes from probation officers toward electronic monitoring. The null hypothesis, *H3a*: Lack of community support is the leading factor contributing to negative attitudes from probation officers toward electronic monitoring. The *p*-value for this hypothesis was .326, again was higher than the .05 level of significance and the null hypothesis was accepted.

Summary

In chapter 4, I discussed the survey responses of 40 probation officers in The Southern Region, Illinois. There were many interesting results drawn from the tables and figures that were all illustrated above. All of the tables and figures above represents the survey response questions of the probation officers. The data in this research was pulled from survey monkey, exported to Microsoft Excel, and imported into IBM SPSS-24 in order to create the figures and tables. The tables and figures was included in this research to show a visual reflection of the research findings to appease to readers who are visual learners. Some key findings of the sample population was that majority of the respondents were female, African American, and had only 2-5 years' experience as a probation officer. It was also interesting to see that 45% of the probation officers' attitudes focused on deterrence as being a positive factor contributing to social change. While 40% of probation officers focused on lack of community support and other outside reasons as being negative factors contributing to probation officer's attitude. These

findings coincide with the deterrence theory, which is the theoretical framework guiding this research study.

Furthermore, after testing the hypothesis and finding that all hypothesis was proved that the independent and dependent variables are independent of one another. The independent and dependent variable does not predict the outcome of the other. It was expected in the beginning of the research that they were dependent of one another. The researcher assumed that the attitudes of the probation officer towards electronic monitoring (independent variable) predicted the EM program for drug offenders (dependent variable) since they work closely with one another. It was also assumed that probation officers attitudes could predict the probability of the drug offender committing a subsequent crime to see if electronic monitoring deters offenders.

The second and third hypothesis was disproved by the data collected in this research study. However, the first hypothesis was proven by the data collected from the probation officers. Turns out the attitudes of the probation officers can predict the likelihood of a drug offender to commit a subsequent crime while in the EM program, deterrence is the leading factor that contribute to less offenses, and lack of community support is the leading negative contributing factor. There are no significant relationship towards the probation officers attitudes about electronic monitoring drug offenders.

Although probation officers are considered the experts who deal with them on a regular basis. This was certainly not expected when this research study began. Chapter 5 provides more discussion, recommendations, and concludes this research study.

Chapter 5: Discussion, Conclusion, and Recommendations

The purpose of this quantitative study was to examine the independent variable of attitudes of probation officers concerning EM of drug offenders in an EM program. The study had a quantitative, nonexperimental survey design. This research was guided by the deterrence theory developed by Becker, who contended that actions/behaviors can be controlled or prevented through fear of punishment. Deterrence theory shaped the criminal justice system in the early 1900s. EM is an example of the implementation of deterrence theory. Chapter 2 of this paper consisted of the literature review. Research has indicated that EM has been the leading technique used to control offenders who are on probation or parole. Probation officers, who communicate with offenders daily, use EM as a method of tracking and/or restricting probationers. Probation officers were selected to be surveyed in this research study because they were the most credible and valid population for this study.

The quantitative method was chosen because surveys were the only way to reach this population. Surveying probation officers can be extremely difficult, given that researchers are not to have direct contact with them. Many state and county jurisdictions place this population off limits for interviews or direct communication. Therefore, if any future researchers would like to obtain information from this protected population, they will need to complete quantitative research unless permission for research of another nature is granted. The fact that probation officers are difficult to access will more than likely be a limitation for future researchers, as it was definitely a limitation in this

research. However, in order to have validity, this study required a reliable, reputable population.

Summary of Findings

Chi-Square Summary

The value of the test statistics is 49.418^a , 46.729^a , and 42.968^a . The assumption was met because no cell had an expected cell count assumption of less than 5. The corresponding p-values of the test statistic are p = .015, p = .108, and p = .326. Moreover, because the p-value was less than the chosen significance level for the first hypothesis, there was a need to reject the null hypothesis. For the second and third hypotheses, the p-value was greater than the chosen significance; therefore, the null hypothesis was rejected. There is not enough evidence to suggest an association between probation officers' attitudes and the EM program for drug offenders.

Probation Officers Summary

The parole officers who completed the survey were mostly African American females between the ages of 45 and 54 years. Most of these probation officers had a caseload of between 0 and 25 offenders, and 65% of their caseloads consisted of drug offenders. From all of the responses to the 15 questions that they answered, it was important to extract certain information that they provided. In short, the probation officers felt that the EM system was not perfect and was in need of repair, reorganization, updating, and restructuring. The probation officers noted that communication was one of the main concerns, whether communication occurred through the courts, through the sheriff's office, or with offenders.

In addition, the majority of the probation officers felt that the most effective population for EM is offenders who have been convicted of sexual assault. The most shocking information relayed was that 45% of the probation officers thought that EM was most ineffective with drug offenders. Probation officers believed that offenders on EM were no more likely to commit a subsequent crime while under their supervision. Last, probation officers believed that drug offenders were no more likely to show reduced recidivism rates while being monitored with EM.

Discussion

Probation officers in The Southern Region, IL did not agree that EM affects recidivism rates, which might help explain why the recidivism rate in Illinois is over 51.70%. However, they did agree that deterrence was a positive factor for offenders on EM. Probation officers also agreed that lack of community support was the leading negative factor for offenders on EM. This research examined parole officers' attitudes concerning EM as it relates to recidivism rates for drug offenders. With a national recidivism rate of 45.9% and an Illinois recidivism rate of over 51.70%, it was imperative to research what probation officers' attitudes were regarding this issue.

Working with this hard-to-reach population gave me some insight into how extremely busy probation officers actually are. One probation officer reported having to monitor over 500 offenders. That was a red flag that led me to question how truly effective is the program. That individual completing the survey may have been a supervisor, however, and because the data is unknown, there is room for discussion on how one person can monitor over 500 offenders in one day. This was just one of the unexpected findings in this research.

Limitations

One of the limitations of this study was that data were collected from probation officers in The Southern Region, Illinois, who were not representative of the entire probation officer population. The second limitation was that a self-administered evaluation survey was used. The participants who answered the survey may have misunderstood questions, which could have affected the findings of the study. The third limitation was that the survey only focused on the probation officers' attitudes toward using EM for drug offenders. These limitations still existed after the research was completed. The main concern with the limitations above pertains to whether the probation officers were able to understand the questions. This may have been a challenge; because I did not have direct contact with the probation officers, I could not provide clarification

Recommendations

There were findings in this research indicating that the electronic monitoring system was not perfect and was in need of updates and possible reorganization to gain better results. Although this research was based only out of Illinois, it would be recommended for future research to look into the effectiveness of the EM program on a national level. To date, many organizations have conducted research on EM, but none have done so on a nationwide scale. It would be quite interesting to learn what all probation officers' attitudes are about a program that has produced such a large failure rate. If almost 50% of probationers or even parolees are returning to prison, then the system has failed everyone.

It is also recommended that more focus be placed on drug offenders' perceptions of EM. This research only focused on probation officers' attitudes toward the EM program for drug offenders. If a subsequent research study were conducted, the researcher could look further into the relationship between drug offenders and probation officers. It would also be advisable to look into which methods are effective in reducing recidivism for drug offenders.

Implications for Social Change

America could be a safer place with some modifications and/or adjustments to the criminal justice EM program. The research involved in this effort might be time consuming, but its results would be well worth it. All EM systems should be evaluated because there is always room for growth and improvement. If EM programs were reorganized and recidivism rates nationwide were reduced, positive social change would occur on a national level. Positive social change is important for the community and the well-being of the nation.

Conclusion

With crime happening every day throughout the United States, it would not hurt to begin trying to solve the problem. Many drug crimes happen across the nation each day. This research study proves that the system in place to monitor drug offenders is neither perfect nor 100% effective. This research study showed that probation officers believed that even with the EM program, drug offenders were likely to continue to commit subsequent crimes. No matter what motivational factor is present, or what theory drives this research, we still have a major issue: Crimes are not being controlled enough! Imagine if it were possible for the EM system to become 100% effective. This would

leave the nation in a much better place and affect not only the safety of America, but also the health of citizens.

References

- Andersen, L. H., & Andersen, S. H. (2014). Effect of electronic monitoring on social welfare dependence. *Criminology & Public Policy*, 13(3), 349-379. doi:10.1111/1745-9133.12087
- Bales, W., Mann, K., Blomberg, T., Gales, G., Barrick, K., Dhungana, K., & McManus, B. (2010). *A quantitative and qualitative assessment of electronic monitoring*.

 Retrieved from http://www.criminologycenter.fsu.edu/
- Barry, K. P. (2009). *Electronic monitoring: The future of crime control*. Retrieved from http://www.scribd.com/doc/13198103/Electronic-Monitoring-for-Criminal-Offenders#scribd
- Beck, J. L., Klein-Saffran, J., & Wooten, H. B. (1990). Home confinement and the use of electronic monitoring with federal parolees. *Federal Probation*, *54*, 22-33.
- Bierens, H. J., & Carvalho, J. R. (2010, November). *Job search, conditional treatment*and recidivism: The Employment Services for Ex-Offenders Program

 reconsidered. Retrieved from http://econ.la.psu.edu/~hbierens

 /CONDTREAT2.PDF
- Blasko, B., Friedmann, P., Rhodes, A., & Taxman, F. (2015). The parolee-parole officer relationship as a mediator of criminal justice outcomes. *Criminal Justice & Behavior*, 42(7), 722-740. doi:10.1177/0093854814562642
- Bloom, B. E., & Covington, S. S. (1998). *Gender-specific programming for female offenders: What is it and why is it important?* Retrieved from http://www.stephaniecovington.com/assets/files/13.pdf

- Bottos, S. (2007). *An overview of electronic monitoring in corrections: The issues and implications*. Retrieved from http://www.csc-scc.gc.ca/
- Bulow, W. (2014). Electronic monitoring of offenders: An ethical review. *Science & Engineering Ethics*, 20(2), 505-518. doi:10.1007/s11948-013-9462-3
- Bureau of Justice Statistics. (2015). *Drug offenders in federal prison: Estimates of characteristics based on linked data*. Retrieved from https://www.bjs.gov/content/pub/pdf/dofp12.pdf
- Burrell, W. D., & Gable, R. S. (2008). From B. F. Skinner to Spiderman to Martha Stewart: The past, present and future of electronic monitoring of offenders. *Journal of Offender Rehabilitation*, 46(3/4), 101-118.
- Calderbank, L. (2012). *It's complicated: The management of electronically monitored curfews*. Retrieved from http://www.justice.gov.uk/
- Chan, H., & Chui, W. (2015). Social bond and self-reported nonviolent and violent delinquency: A study of traditional low risk, at-risk, and adjudicated male Chinese adolescents. *Child & Youth Care Forum*, *44*(5), 711-730. doi:10.1007/s10566-015-9303-4
- Cook County Sheriff's Office. (2017). *Electronic monitoring*. Retrieved from http://www.cookcountysheriff.org/doc/doc_electronicmonitoring.html
- Courtright, K., Berg, B. L., & Mutchnick, R. (2000). Rehabilitation in the new machine?

 International Journal of Offender Therapy and Comparative Criminology, 44,

 293-311. doi:10.1177/0032885504269345
- Covington, S. S., & Bloom, B. E. (2006). Gender responsive treatment and services in correctional settings. *Women & Therapy*, *29*, 9–33. doi:10.1300/J015v29n03 02

- Crowe, A., Sydney, L., & Bancroft, P. (2002). *Offender supervision with electronic technology: A user's guide*. Washington, DC: National Institute of Justice, U.S. Department of Justice.
- DeMichele, M., & Payne, B. (2009). Offender supervision with electronic technology community corrections resource. Retrieved from http://www.appa-net.org/
- DeMichele, M., & Payne, B. (2010a). Electronic supervision and the importance of evidence-based practices. *Federal Probation*, 74(2), 4-11. Retrieved from http://www.uscourts.gov/statistics-reports/publications/federal-probation-journal
- DeMichele, M., & Payne, B. (2010b). Supervision of lower level sex offenders.

 *Corrections Compendium, 35(2), 6-9. Retrieved from http://www.aca.org/ACA

 _Prod_IMIS/ACA_Member/Publications/Corrections_Compendium_Journal/AC

 A_Member/Publications/Corrections_Compendium/CorrCompendium_Home.asp
- DeMichele, M., Payne, B. K., & Button, D. M. (2008). Electronic monitoring of sex offenders: Identifying unanticipated consequences and implications. *Journal of Offender Rehabilitation*, 46(3/4), 119-135.
- Di Tella, R., & Schargrodsky, E. (2013). Criminal recidivism after prison and electronic monitoring. *Journal of Political Economy*, *121*(1), 28-73. doi:10.1086/669786
- Drake, G. (2008). *Offender tracking technologies: Where are we now?* Retrieved from http://napehome.org/NAPEExEx081c.pdf
- Drake, G. B. (2009). *Offender tracking in the United States*. Retrieved from http://www.cepprobation.org/uploaded_files/Pres%20EM09%20Dra.pdf
- Durose, M. (2004). *Profile of nonviolent offenders exiting state prisons*. Retrieved from https://www.bjs.gov

- Elrod, P., & Brown, M. P. (1996). Predicting public support for electronic house arrest. *American Behavioral Scientist*, *39*, 461-473.
- Erez, E., & Ibarra, P. R. (2014). Electronic monitoring: International and comparative perspectives. *Crime, Law and Social Change, 62*(4), 385-387. doi:http://dx.doi.org.library.capella.edu/10.1007/s10611-014-9543-5
- Farabee, D. (2005). *Rethinking rehabilitation: Why can't we reform our criminals?*Washington, DC: American Enterprise Institute.
- Farrington, D. P. (2001). Editorial systematic reviews of criminological interventions.

 Criminal Behaviour & Mental Health, 11(1), 127-130
- Fry, R. (2010). Dealing with violations in the 21st century. *Corrections Today*, 72(10), 60. Retrieved from http://www.readperiodicals.com/
- Gable, R. S. (2009). Should manufacturers of offenders monitoring equipment be liable for design defect? Retrieved from www.iltp.edu/
- Gable, R. S., & Gable, K. R. (2007). The practical limitations and positive potential of electronic monitoring. *Corrections Compendium*, *32*(5), 6-42. Retrieved from http://search.proquest.com.library.capella.edu
- Gainey, R. (2014). Electronic monitoring in Denmark and beyond. *Criminology & Public Policy*, *13*(3), 345-348. doi:10.1111/1745-9133.12093.
- Gainey, R. R., Steen, S., & Engen, R. L. (2005). Exercising options: An assessment of the use of alternative sanctions for drug offenders. *Justice Quarterly*, *22*(4), 488-520. Retrieved from http://search.proquest.com.library.capella.edu
- Gies, S. Gainey, R. Cohen, M. I., Healy, E. Duplantier, D., Bekelman, A.,. . . & Hopps,

- M. (2012). Monitoring high-risk sex offenders with GPS technology: An evaluation of the California supervision program. Retrieved from https://www.ncjrs.gov/
- Green, T. et.al (2013). Parole officer-parolee relationships and HIV risk behaviors during community supervision. *AIDS & Behavior*, 17(8), 2667-2675. DOI: http://dx.doi.org.ezp.waldenulibrary.org
- Harlow (2011). Electronic program reinvents Kentucky's ACA filing system.

 Corrections Today. Retrieved from http://www.thefreelibrary.com/
- Hill, G. (2010). Emphasis on prisons seems likely to be part of UN's future crime program. *Corrections Compendium*, *35*(2), 41-3. Retrieved from http://www.thefreelibrary.com
- Ibarra, P. R., & Erez, E. (2005). Victim-centric diversion? The electronic monitoring of domestic violence cases. *Behavioral Sciences & the Law*, 23(2), 259-276. doi:10.1002/bsl.639
- Jones, R. (2014). The electronic monitoring of offenders: Penal moderation or penal excess? *Crime, Law and Social Change, 62*(4), 475-488. doi:http://dx.doi.org.library.capella.edu/10.1007/s10611-014-9537-3
- Johnson, E. (1959). The parole supervisor in the role of the stranger. Journal of Criminal Law, Criminology, & Political Science. 50(1). Pp. 38-43. DOI:
- Kalmthout, A. M. V., & Ioan, D. (2008). (Eds.). *Probation in Europe*.

 Nijmegen, the Netherlands: Wolf Legal/CEP.
- Kilgore, J. (2015). Electronic monitoring is not the answer critical reflections on a

- flawed alternative. Retrieved from http://centerformediajustice.org/wp-content/uploads/2015/10/EM-Report-Kilgore-
- Langan, P. A., & Levin, D. J. (2002). *Recidivism of prisoners released in 1994*. Retrieved from http://bjs.gov/content/pub/pdf/rpr94.pdf
- Leonard, M. A. (2004). Predicting completion vs. defection in a community-based reintegration program. *Journal of Offender Rehabilitation*, 40(1/2), 133-146.

final-draft-10-4-15.pdf

- Malan, D. S., & Sussman, P. (2008). False alarm common with GPS monitoring.

 Retrieved from http://www.sdp123a.com
- Marklund, F., & Holmberg, S. (2009). Effects of early release from prison using electronic tagging in Sweden. *Journal of Experimental Criminology*, *5*(1), 41-61. doi:10.1007/s11292-008-9064-2
- Miller, C. (2012). Future of corrections. Exploring the use of electronic monitoring.

 Retrieved from http://www.policyexchange.org
- National Institute of Justice (NIJ) (2011). Electronic Monitoring Reduces Recidivism.

 Retrieved from U.S. Department of Justice Office of Justice Programs
- Nellis, M. (2006). Surveillance, rehabilitation, and electronic monitoring: Getting the issues clear. *Criminology & Public Policy*, *5*(1), 103-108. doi:10.1111/j.1745-9133.2006.00104.x
- O'Day, J., & Short, D. (2010). *Illinois department of correction: Annual report FY*2010. Retrieved from

 https://marisluste.files.wordpress.com/2010/11/deterrence-theory.pdf

- Onwudiwe, I., Odo, J., and Onyeozili, E., (2010). Deterrence theory. Retrieved from: https://marisluste.files.wordpress.com/2010/11/deterrence-theory.pdf
- Padgett, K. G., Bales, W. D., & Blomberg, T. G. (2006). Under surveillance: An empirical test of the effectiveness and consequences of electronic monitoring.
 Criminology & Public Policy, 5(1), 61-91. doi:10.1111/j.1745-9133.2006.00102.x
- Palermo, G. B. (2015). Electronic monitoring in the criminal justice system: Less recidivism? *International Journal of Offender Therapy and Comparative Criminology*, 59(9) 911–912
- Payne, B. K. (2014). It's a small world, but i wouldn't want to paint it: Learning from Denmark's experience with electronic monitoring. *Criminology & Public Policy*, 13(3), 381-391. doi:10.1111/1745-9133.12090
- Payne, B. K., & DeMichele, M. (2010). The role of probation and parole officers in the collaborative response to sex offenders. *Federal Probation*, 74(1), 23-27.

 Retrieved from https://www.ncjrs.gov
- Payne, B. K., DeMichele, M., & Button, D. M. (2008). Understanding the electronic monitoring of offenders. Retrieved from https://www.appa-net.org
- Payne, B. K., DeMichele, M., & Okafo, N. (2009). Attitudes about electronic monitoring: Minority and majority racial group differences. *Journal of Criminal Justice*, 37(2), 155-162. http://dx.doi.org/10.1016/j.jcrimjus.2009.02.002
- Pearson, D. A., S., Mcdougall, C., Kanaan, M., Bowles, R. A., & Torgerson, D. J. (2011).

 Reducing criminal recidivism: Evaluation of citizenship, an evidence-based probation supervision process. *Journal of Experimental Criminology*, 7(1), 73-102. doi:http://dx.doi.org.library.capella.edu

- Raider, M. C. (1994). Juvenile electronic monitoring: A community based program to augment residential treatment. *Residential Treatment for Children & Youth, 12,* 37-48.
- Renzema, M., & Mayo-Wilson, E. (2005). Can electronic monitoring reduce crime for moderate to high-risk offenders? *Journal of Experimental Criminology*, *1*(2), 215-237. doi:http://dx.doi.org.library.capella.edu
- Sipes, L. A. (2012). Law enforcement and community correction use of GPS. Retrieved from http://media.csosa.gov
- Smith, D. (2005). Probation and social work. *British Journal of Social Work, 35*, 621-637.
- Spidell, M. C., & Cornish, T. (2010). *Introduction to the special issue on supervision of*sex offenders and location monitoring in the federal probation and pretrial

 services system. Federal Probation, 74(2), 2. Retrieved from

 http://www.uscourts.gov
- Stacey, T. (2006). Electronic tagging of offenders: A global view. *International Review of Law, Computers & Technology*, 20(1/2), 117-121.

 doi:10.1080/13600860600775401
- Staff, N. (2008). *High-risk drug offenders do better with close Judicial supervision*.

 Retrieved from http://aupa.wrlc.org
- The Sentencing Project. (2012). *Incarcerated women*. Retrieved from http://www.sentencingproject.org/doc/publications/cc_Incarcerated_Women_Fact sheet Sep24sp.pdf
- The Sentencing Project. (2015). Trends in U.S. corrections. Retrieved from

- http://sentencingproject.org/wp-content/uploads/2016/01/Trends-in-US-Corrections.pdf
- Thomson, P. M. (2011). A comprehensive strategy targeting recidivist criminals with continuous real- time GPS monitoring: Is reverse engineering crime control possible. Retrieved from http://www.fed-soc.org/doi:http://dx.doi.org.library.capella.edu
- Vollman, J. J. (2009). Electronic monitoring of dangerous sexual offenders. Retrieved from http://www.corrections.com/
- Ward, D. (2008) BJSW critical commentary: What works in probation offender management: Evidence for new direction?. *British Journal of Social Work, 38*(3) 395-405.
- Ward, T. (2009). Dignity and human rights in correctional practice. *European Journal of Probation*, 1(2), 110-123. doi:10.1177/206622030900100204
- Wright, V. (2010). Deterrence in criminal justice: Evaluating certainty vs. severity of punihsment. Retrieved from: http://www.sentencingproject.org/wp-content/uploads/2016/01/Deterrence-in-Criminal-Justice.pdf
- Wolfer, L. (2007). Real Research: Conducting and evaluating research in the social science. Boston, MA: Allyn and Bacon.
- Yeh, S. S. (2010). Cost-benefit analysis of reducing crime through electronic monitoring of parolees and probationers. Retrieved from http://www.sciencedirect.com/

Appendix A: Modified Evaluation About Electronic Monitoring Questionnaire

Evaluating the Effectiveness of Electronic Monitoring

of Offenders Under Supervision

Officer Survey Instrument

SECTION 1. OFFICER'S CURRENT CASELOAD DATA

1.1. Number on EM:						
1.2. Number on Non-EM:						
SECTION 2. BACKGROUND INFORMATION						
2.1. Gender:						
2.2. How would you describe yourself in terms of race and ethnicity? (circle one)						
CaucasianAfrican American—Non-HispanicHispanicIndian—Alaskan—AsianPacific Islander—MultiracialOther						
2.3. How old are you?						
2.4. How long have you been monitoring offenders on EM?						
SECTION 3. OPERATIONAL ASPECTS OF EM						
3.1. What ways can EM be improved?						
3.2. What is the best thing about the EM program?						
3.3. In your opinion, which types of offenders is EM most effective? (circle one)						
Homicide Assault Robbery Kidnapping Sexual Assault Burglary Drug Offenders						
3.4. In your opinion, are there any offender types in which EM is not effective? (circle one)						
Homicide Assault Robbery Kidnapping Sexual Assault Burglary Drug Offenders						

SECTION 4. EVALUATION OF ELECTRONIC MONITORING

4.1. How likely do you believe drug offenders will commit a subsequent drug related crime while in the EM program? (circle one) (a./b./c)						
likel	y more like	ely not likely	less likely	no change		
4.2 Do you believe drug offenders recidivism rates will reduce while being on electronic monitoring? (circle one)						
likel	y more like	ely not likely	less likely	no change		
SECTION 5: IMPLICATIONS OF SOCIAL CHANGE 5.1 What motivational factor of the EM program contribute to social change for drug						
offenders? Deterrence Control Convenience Trust						
Other						
5.2 What motivational factor of the EM program does not contribute to social change for						
drug offenders?						
Ι	ack of Commu	nity Support	Trust	Control	Deterrence	
Other						