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Predicting Child Molester Typologies: Can Control Methods, Violence, and Location Predict MTC:CM3 Axis I Typology?

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Abstract

Child molesters have been a key focus of public fear so much that many policies have been created that focus on reducing public panic rather than being supported by empirical evidence. Knowing the psychological motivations and patterns of this particular population is important in order to advance research that can affect future investigations, policies and laws concerning the safety of the public. The purpose of this study was to determine whether the use of crime scene characteristics can accurately predict child molester typology using the MTC:CM3 Axis I Fixation and Social Competence levels. The crime scene characteristics: control methods (use of threat or weapons), violence, and location (whether offense was in a child-dense location or not) were used in order to predict high or low levels on both the MTC Fixation and MTC Social Competence scale. It was hypothesized that those with higher levels of fixation and lower levels of social competence would be more likely to use control methods, violence, and choose a child dense location for the offense than those with lower levels of fixation and higher levels of social competence. Archival data from 439 child molesters was gathered and coded from offender files in a state prison system. Two binary logistic regressions were performed and results indicated that these did not predict MTC Fixation and MTC Social Competence levels, thus would not aide in the prediction of child molester typology. Future research should examine additional variables as well as the entirety of the MTC:CM3 scale in order to obtain more information that can aid in the use of crime scene characteristics as predictors for child molester typologies.

Keywords: child molester, crime scene characteristics, typology, MTC:CM3

Predicting Child Molester Typologies:

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Policy regarding sexual crimes has long been a controversial topic as it requires balancing public safety concerns with the civil liberties of those who have committed sexual offenses (Koon-Magnin, 2015; Levenson et al., 2010). In the field of psychology, understanding offenders' motivation for committing sex crimes is a primary research goal in order to prevent reoffending and inform prevention and treatment efforts. What makes this endeavor particularly challenging is that many sex crimes go undetected or unreported and thus the available data may not represent an accurate landscape of sexual offending behavior. As of 2015, the Rape, Abuse and Incest National Network (RAINN) has determined that out of every 656 sex offenses reported, only 57 of these reports led to arrest. Even though Law Enforcement is searching for new approaches to detect and apprehend those who commit sex offenses, the low conviction rates suggest more needs to be done. Crime scene characteristics such as the victim-offender relationship and victim characteristics alone have been utilized in the prediction of risk for recidivism (Lehmann et al., 2013) and when this information is missing or not available this impacts the validity of predictive models.

Most actuarial risk assessment tools that measure the likelihood of sexual offense recidivism, such as the Static-99 (Hanson & Thornton, 2000), do not include crime scene characteristics that are relevant to sexual recidivism (e.g. explicit planning) (Dahle et al., 2014). Consequently, Dahle and colleagues (2014) created the Crime Scene Behavior Risk measure (CBR measure) comprised of seven items (victim selection, victim approach, offender communication, seriousness of sexual acts, degree of violence, modus operandi, and victim injury) that were not included in other actuarial risk assessment tools. They found these

variables to be an accurate predictor of sexual recidivism in a German sample of child molesters

and rapists which added incrementally to the predictive accuracy of the STATIC-99R [Cox

Regression analysis found that both measures together had a c index (goodness to fit measure of

binary outcomes) of .76, while the STATIC-99R alone had a c index of .70] (Dahle et al., 2014).

In another study, the Modus Operandi (M.O.) characteristics (Victim characteristics and offense

behaviors) of sex offenders were found to be statistically stable and consistent between the

offender's first and second offense (Lasher et al., 2014); yet a different study found that child

molesters commonly "cross-over" genders and the stability of victim type can change (Sim &

Proeve, 2010). Further, in a sample of 789 sex offenders, Kleban, Chesin, Mercado and Jeglic

(2012) found that while victim gender remained relatively stable across offenses, there was

variability between crimes in terms of the age of the victim and the relationship between the

victim and the offender (almost half of the offenders in sample had victims of various

relationship types). This suggests that focusing on the victim-offender relationship alone may

not yield accurate information regarding the offender and their behaviors. Thus, the purpose of

this study is to examine other crime scene behaviors that may tell us more about the offender and

their psychological motivations.

Sex Offender Typologies and their Psychological Motivations

Sex offenders are generally subdivided into these four main categories based upon the

type of victim, the age of the victim and perpetrator and the gender of the perpetrator: Rapists,

Child Molesters, Female Offenders, and Juvenile Offenders. This study will focus exclusively

on male sex offenders who have committed crimes against children (Child Molesters). Groth,

Hobson, and Gary (1982) categorized child molesters as either fixated (or preferential) or

regressed (situational) by identifying how ingrained the sexually deviant behavior was in the

abuser as well as their psychological needs. Researchers theorize that fixated offenders have a persistent and compulsive attraction to children stemming from the absence of the development of attraction to age-appropriate partners starting at adolescence (Groth et al.; Robertiello and Terry 2007). These offenders are often diagnosed with pedophilia and show signs of ephebohilia (the primary or exclusive adult sexual interest in mid-to-late adolescents, generally ages 15 to 19) (Groth et al., 1982). The regressed child molester tends to victimize children who are easily accessible and does not have a victim gender preference (Groth et al., 1982). Unlike fixated child molesters, these behaviors emerge in adulthood and are usually indicative of stressors in the individual's environment that undermines their self-esteem and confidence, suggesting that these offenders are not motivated by sexual acts alone (Schwartz, 1995). However, the fixated/regressed typology has limitations as many child molesters may meet criteria in both categories and it was unclear and difficult to categorize an offender as one or the other (Bickley & Beech, 2001). Furthermore, there has been little empirical evidence to support its validity (Bickley & Beech, 2001).

The Massachusetts Treatment Center (MTC) also created a classification system for child molesters (MTC:CM3) (Knight, Carter, & Prentky, 1989). They developed a two-axis system based on offender's level of fixation and social competence on the first axis (e.g. high fixation/low competence), followed by the degree of contact and meaning of contact on the second axis (Looman, Gauthier, Boer, 2001). The second axis has the following classifications: Interpersonal, Narcissistic, Exploitative, Muted Sadistic, Nonsadistic aggressive, and Sadistic (Knight et al., 1989). The offenders are then categorized into different typologies based on both the axis I and axis II classifications. Since this classification system is one that has been

empirically derived and tested, it is the most accepted and used classification system (Looman et al., 2001).

The study of typology is important because the classification systems that are created contribute to the understanding of the different motivations of child offenders as well as the reason why different types of offenders commit different types of crimes (Canter, Hughes, and Kirby, 1998). For example, when examining the victim-offender relationship, those who were considered Narcissistic on the MTC:CM3 tended to pick victims who were likely to be strangers to solely seek out sexual gratification while, those who were Interpersonal on the MTC:CM3 scale were more likely to kiss and perform oral sex on their victims than other offenders under different classifications (Canter, Hughes, and Kirby, 1998). The use of this information can then form a bridge from studying typologies from a clinical perspective, to profiling methods in Law Enforcement in which these typologies are utilized for the investigative processes of Law Enforcement that lead to eventual apprehension.

Sex Offender Crime Scene Characteristics

In the field of Investigative Psychology, the analysis of crime scene behavior is important because the behaviors during the crime are indicative of other pertinent aspects of the offenders' psychological characteristics (Bennell, Alison, Stein, Alison, & Canter, 2001;Lehmann et al., 2013). For example, rapists who victimized strangers were found to be motivated by four psychological themes: hostility, stealing, controlling, and involving. These themes were distinguished by the amount of violation (personal, physical, sexual) that was perpetrated onto their victims (Canter et al., 2003) based on the idea that the offender viewed the victims as either an object, a person, or a vehicle. If the victim was viewed as a person, the offender likely tried to form a pseudo-intimate relationship and was driven by a psychological theme that focuses on

social contact and involvement with the victim (behaviors including verbal interaction such as complimenting victim or revealing information about themselves). If the offender viewed the victim as an object they were likely trying to psychologically "take or steal" (in which the offender wishes to feel as though they are robbing victim of dignity, innocence, etc.) from the victim and may rip at victims clothing, and control them with a weapon. Finally, if the victim was viewed as a vehicle, the offender was using the victim as a representation for something else and would lash out with hostility, excessive violence, and sexual acts (Canter et al., 2003). Furthermore, rapists who were considered to be nonsexual in motivation (dominance/control/opportunistic) had higher levels of violence in the commission of the rape than their sexual subtype counterpart. Other crime scene characteristics such as offense planning and victim relationship were also distinguishable predictors of a nonsexual subtype in which the nonsexual subtype was more impulsive in their planning and victim selection than sexual subtype offenders (Barbaree et al., 1994; Knight et al., 1998).

Crime Scene Behavior and Child Molesters

The relationship between offender type and crime scene behaviors is also found when examining the typologies of child molesters. Crime scene behaviors of parental (familial) sexual offenders were also shown to have unique characteristics compared to extrafamilial sex offenders including increased criminal versatility as well as the use of control methods such as coercion, threats, and violence, the use of violence during the commission of the crime and the crime location (Delahunty-Goodman, 2014).

Control Methods (weapons/threats). Research has suggested that the most common form of control method for child molesters is grooming (Robertiello & Terry, 2007). Grooming is the process by which when a person prepares a child, significant others, and the environment

around them for the abuse of the child (Winters & Jeglic, 2016). This includes choosing a

vulnerable target, building a relationship with their victim in order to gain the victims trust

before the offense by using tactics such as games, enticements, and emotional manipulation, and

desensitization to touch (Robertiello & Terry, 2007; Winters & Jeglic, 2016). However, some

child molesters use other control methods, such as using a weapon to intimidate the victim, or

using verbal threats in order to control the victim.

The use of weapons has been widely regarded as a relatively rare occurrence among child

molesters as opposed to sex offenders with adult victims as their victims are smaller than adults

and easier to subdue (Langevin & Curnoe, 2014). Research has shown that those with adult

victims using weapons during the offense for varying motivations including the need to subdue

their victims and to derive sexual pleasure through inciting fear (sexual sadism). Consequently,

this increases the likelihood of victim injury and violence from the offender (Langevin &

Curnoe, 2014). Similar to sex offenders with adult victims, research on the motivational themes

of child molesters indicate that the use weapons and threats during the commission of the assault

has been associated with child molesters who are sexually aggressive or those with high levels of

criminality (Dahle et al., 2014).

The use of verbal threats is a method commonly used by sex offenders to subdue and

control their victims (Marshall & Christie, 1981; Stermac et al., 1989). Other times, it is a way

to express aggression, anger, and the need to control and dominate their victim (Canter et al.,

2003). For child molesters, threats vary from physical abuse to threats specific to the age of the

victim (threats of reporting child's behavior to their guardians) (Marshall and Christie, 1981).

Similar to the use of weapons, studies have indicated that different motivational themes

determine how threats are used during the offense. For example, those with high criminality will

most likely use threats of violence and control only as an instrument to complete the offense, whereas those who are more sexually aggressive may use threats as a tool for gratification (Dahle et al., 2014).

      Violence. Until recently, the use of violence by child molesters in the commission of crime was thought to be uncommon, with many believing that child molesters are less physically aggressive than adult offenders when committing abuse (Stermac et al., 1989). However, Stermac and colleagues (1989) found that the majority of their sample of child molesters (89%) were physically violent (defined as gratuitous and excessive physical force beyond the force needed to control or subdue used during or immediately preceding sexual contact (Stermac et al., 1989)) with their victims as well as penetrated them (54.5%). In 29% of the cases threats were used. Furthermore, they found that the use of violence and aggression was higher among those who were incest child molesters (biological or stepparent) than those who were non-familial offenders. This suggests that the victim-offender relationship could play an important role in the crime scene behaviors, and that the use of violence within crime scenes can be an accurate indicator of the type of offender as well as their risk of recidivism.

      Location. The location of the sex crime is another factor in sex offenses, so much so that sex offender policies (residence restrictions and GPS monitoring) have focused on restricting child molesters from areas where children congregate (Durling, 2006). Many assume that offenders meet their victims in places that are heavily populated with children. However, Colombino and colleagues (2011) found that most child sex offenses occur in residential locations (67%) and only a select few (4.4%) met victims in child-dense locations (locations that have many children present). Smallbone and Wortley (2000) also found that 40% of extra-familial child molesters met their victims in a friend's home rather than public places. The

offenders who did meet their victims in public locations were more likely to recidivate than those who did not (Colombino et al., 2011). Furthermore, offenders who had adult victims were more likely to offend in public than offenders with child victims (Colombino et al., 2011). It is these findings that suggest that using the location choice of the offender as a crime scene behavior could provide useful information regarding motivation and subsequent recidivism risk.

Study Overview

The aim of the current study is to determine if crime scene behaviors (in this case, control methods and use of violence) alone can differentiate between child molester typologies (based on the MTC:C3 Axis I typologies). In addition, we will also examine whether location (areas with many children present versus areas without) of the index offense can add to the prediction of child molester typology. The results of the current study could provide the proper framework for future research to better understand the relationship between crime scene behavior and sex offender typologies that could benefit measures of risk assessment and recidivism by increasing the predictive accuracy as well as helping Law Enforcement in the investigative process and apprehension of sex offenders against children should the offender be at large. The hypotheses of this study are that crime scene characteristics (control methods, use of violence, and location) will accurately distinguish between the MTC:CM3 Axis I Fixation levels and MTC:CM3 Axis I Social Competence levels. Specifically, offenders with high fixation and low social competence will more likely use control methods and violence as well as pick locations that are child-dense for their offenses than offenders with lower levels of fixation and higher social competence.

Methods

Research Design

The study utilized archival data that was previously collected from 3,168 male sex offenders

from the state of New Jersey who were residing in either a prison-based sex offender treatment

facility or any New Jersey State prisons and who were released from custody between the years

1996 and 2007 (see Mercado, Jeglic & Marcus, 2011). Sex offenders in New Jersey were

defined as individuals convicted of the following crimes: aggravated sexual assault, sexual

assault, aggravated criminal sexual contact, criminal sexual contact if the victim is minor,

endangering the welfare of a child by engaging in sexual conduct which would impair or

debauch the morals of the child, endangering the welfare of a child through acts involving

pornography featuring a child, promoting prostitution of a child, luring or enticing, kidnapping,

criminal restraint, and false imprisonment if the victim is a minor and the offender is not a parent

of the victim. This data was collected as part of a larger study examining placement criteria for

sex offenders within the penal system (Mercado et al., 2011). Archival Records of the offenders

were stored in Avenel, New Jersey, while the general population was stored at the Central

Reception and Assignment Facility (CRAF) in Trenton, New Jersey. Data were coded from the

archival files by trained MA level research assistants. The current analysis of this archival data

was deemed Exempt by the CUNY Institutional Review Board.

Participants

Of the 3,168 male sex offenders, 2344 (73% of the total sex offenders) were child

molesters. Almost half of the sample had never been married (46.2%), more than a quarter of the

sample was married (27.2%), 5.7% were separated, widowed, or divorced, and 8% were living

with a partner at the time of incarceration. The ethnic composition of sex offenders in New

Jersey were as follows: 33.2% were African American, 21.8% were Hispanic and 43.7%

Caucasian. Asian/Pacific Islander, American Indian, and unknown were all less than one percent.

Only those who had complete information pertaining to MTC:CM3 and Index Offense

(Violence, Location, Control Methods) were retained for this study, leaving 439 sex offenders to

be used for analysis [missing data in sample was randomly distributed (see Mercado et al., 2011

for missing data analysis)]. Of these sex offenders, 42.1% were Caucasian, 37.3% were African

American, 19.5% were Hispanic, .5% were Asian/Pacific Islander, and .7% were considered

other. Of this sample, 50.3% were never married, 22% were married, 11.9% were divorced, 8.7%

lived with a partner, 5.7% were separated, and 1.1% were widowed.

Materials/Procedures

The materials used to obtain the data collected consisted of the data collection tool that

included questions regarding the offender's demographics, criminal history, index offense, and

the MTC:CM3. The Index Offense section and the MTC:CM3 section of the data collection tool

were utilized in this study. Within the Index Offense questions regarding the crime itself was

used to obtain information regarding whether threats were made and weapons were used, if

physical violence was present, and a description regarding the location of the crime. The

MTC:CM3 section was utilized in order to obtain the levels of fixation and social competence.

MTC:CM3 Classification/Dependent Variable. The MTC:CM3 classification

offenders on multidimensional axes with the first axis assessing levels of fixation and social

competence and are classified as either Type 0 (high fixation, low social competence), Type 1

(high fixation, high competence), Type 2 (low fixation, low competence, and Type 3 (low

fixation, high competence) (Knight et al., 1989; Schaaf, Jeglic, Calkins, Reymaker, Lequizamo,

2016). The second axis assesses the degree of contact (sexual and nonsexual) with child. Those

with higher contact are categorized on the context of the contact, in which those who believe that

they can have a relationship with children are considered "interpersonal" and those who have a

self-centered approach (sexual gratification) are considered "narcissistic." Those with lower

contact levels are also distinguished based on physical injury to the child and the levels of

sadistic interest (Knight et al., 1989). This creates additional subtypes: Type 1 (high contact,

interpersonal), Type 2 (high contact, narcissistic), Type 3 (low contact, low injury, low sadism),

and Type 4 (low contact, low physical injury, high sadism, Type 5 (low contact, high physical

injury, low sadism), and Type 6 (low contact, high physical injury, high sadism) (Knight et al.,

1989, Schaaf et al., 2016). For the purpose of this study, the MTC Fixation scale and the MTC

Social competence scale were utilized from the MTC:CM3 as these two scales are used to

determine the Axis I typologies of child molesters (for example, Type 0 is high on the fixation

scale, low on the social competence scale). Furthermore, the use of only these two scales reflects

similar studies conducted by previous researchers (Groth et al.,1982), but using scales that have

been empirically derived and tested.

      Control Methods. The independent variable "control methods" is defined as whether

the offender used a verbal threat against the victim or used a weapon during the index offense,

which was taken from the Index Offense section of the data collection tool. The variable was

then coded as either present (1.00) or not present (0.00).

      Violence. The independent variable "violence" is defined as whether the offender was

physically violent (beat, used excessive force, etc.) with the victim during the index offense. The

variable was the coded as present (1.00) or not present (0.00).

      Location. The independent variable "location" is defined as any location from the

offenders' index offense that was considered child-dense. Child-dense locations were defined as

an area where large numbers of children may congregate (parks, schools, malls, etc.). The

locations that were deemed child-dense were coded as 1.00, those that were not child-dense (homes, hotels, vehicles, etc.) were coded with a 0.00.

Results

Frequency, assumption tests, and two binomial logistic regressions were conducted in order to determine whether the independent variables (control methods, violence, and location) could accurately predict levels of the MTC Fixation Scale (High or Low) and the MTC Social Competence Scale (High or Low). A frequency analysis was conducted on the dependent and independent variables to determine the percentage of occurrence. 53.3% of the sample (n=234) scored high levels on the MTC Fixation and 46.7% (n=205) of the sample scored low levels . For the MTC Social competence scale, high levels made up 15.5% (n=68) of the sample and low levels made up 84.5% (n=371) of the sample. Frequency of the independent variables indicated that 21.6% (n=95) used control methods during their offense while 78.4% (n=344) did not, followed 10% (n=44) of the sample using violence (10%, n=44) during their offense while 90% (n=395) did not, and 5.5% (n=24) of the sample choosing a child dense location (5.5%, n=24) for their offense while 94.5% (n=415) did not.

Two ROC curves (shown in Figure 1 and Figure 2) were analyzed and the area under the ROC curve for MTC Fixation and Independent Variables was .534 (95% C.I., .480, .589), which is considered a poor level of discrimination according to Hosmer and colleagues (2013). The area under the ROC curve for MTC Social Competence and independent variables was .583 (95% C.I., .512, .654), which is also considered a poor level of consideration.

Crime Scene Characteristics and MTC:CM3 Axis I

A binary logistic regression was performed to ascertain whether crime scene characteristics (control methods, violence, and location) could accurately predict between high or

levels of the MTC Fixation scale (see Table 1). The binary logistic regression model was not statistically significant X^2 (3) = 2.037, p>.05. The model explained .6% (Nagelkerke R^2) of the variance in fixation levels and correctly classified 54.7% of cases. Sensitivity was 91.9%, specificity was 12.2%, positive predictive value was 54.43%, negative predictive value was 56.8%. None of the independent variables were statistically significant in predicting the levels of MTC Fixation.

A binary logistic regression was performed to ascertain whether crime scene characteristics (control methods, violence, and location) could accurately predict between high or low levels of the MTC Social Competence scale (see Table 2). The binary logistic regression model was not statistically significant X^2 (3) = 7.466, p>.05. The model explained 2.9% (Nagelkerke R^2) of the variance in fixation levels and correctly classified 84.5% of cases. Sensitivity was 0%, specificity was 100%, positive predictive value was 0%, negative predictive value was 84.5%. Of all independents variables, control methods were the only statistically significant independent variables in predicting the levels of MTC Social Competence (p=.015).

Discussion

This study sought to examine the relationship between crime scene characteristics (control methods, violence, and location) and the fixation and social competence levels of the MTC:CM3 Axis I. Overall we found that these variables were not significant predictors of child molester typologies derived form the MTC:CM3 Axis I MTC Fixation and MTC Social Competence scales. Although there was a significant relationship between the use of control methods and MTC Social Competence scale (those with lower social competence were more likely to use threats or weapons), the effect size was small. There was also no significant relationship between choosing a child-dense location and the use of violence and MTC:CM3

Axis I fixation and social competence scales. Thus, the use of these particular predictors may not be accurate predictors of MTC: CM3 Axis I typologies as these typologies utilize the scores of both scales to determine which classification a child molester falls under.

Contrary to expectation, we did not find that the use of threats effectively distinguished between low/high competence and fixation levels in this sample. Previous studies have found that threats were commonly used by child molesters to subdue and control their victims, whether it be threats of physical force or threats to report the child to the parent or guardian ((Marshall & Christie, 1981; Stermac et al., 1989; Canter et al., 1998), however the results of this study indicate that this was a behavior that was not common in our sample. Previous studies also found that the use of weapons or threats in some instances could be in order to subdue the victim for completion of offense (sexual gratification) or for the need to dominate and control victim (sadism) (Dahle et al., 2014). Because weapon use is rare in child molester offenses (Langevin & Curnoe, 2014), lower levels of social competence may be indicative of the need to use a weapon or threats as opposed to grooming, which would require more social competence to be successful.

We also found that the use of violence was also not a significant predictor of MTC:CM3 Axis I MTC Fixation and MTC Social Competence scales. Previous research indicated that the use of violence distinguished between typologies (e.g. sadistic subtypes and interpersonal subtypes) (Stermac et al., 1989; Canter et al., 1998). Perhaps this was because previous researchers focused on familial versus extrafamilial child molesters rather than the MTC:CM3 Axis I classification system (high versus low fixation, high versus low social competence). The lack of significance in the use of violence in this sample signifies a poor predictor for fixation and social competence typology, but may be explained by another MTC: CM3 scale, such as the

Pervasive Anger (PA) scale. Future studies should analyze the PA scale and its relationship to the use of violence in child molesters, as research has shown extreme anger and aggression has an affect on the use of violence in other sex offender populations (Canter et al., 2003).

The results of this study found that the choice of a child-dense location is not a significant predictor of Fixation and Social Competence. This could be because the choice of location is not the result of levels of fixation or social competence but other underlying factors in the MTC:CM3 such as impulsivity and offense planning. However, the results of this study supports previous studies that the use of a child dense and public location is very rare and most of the offenses committed against a child occur in private places such as their homes or homes of acquaintances (Colombino et al., 2011; Smallbone & Wortley, 2000), which is contradictory to much of the policies that have been created (Durling, 2006).

While the results of this study indicate that the use of these particular variables are not predictors of fixation and social competence on the MTC:CM3 scales specifically, these crime scene characteristics have been shown to be accurate predictors of psychological themes in clinical typologies (Canter et al., 1998; Stermac et al.,1989; Delahunty-Goodman, 2014). Furthermore, these particular variables are also accurate predictors of recidivism (Dahle et al., 2014; Lehman et al., 2014). Even though these variables were not accurate predictors in this particular study, these variables have been shown to be indicative of typologies. This is useful to analyze in clinical practice, in which the goal is understanding the motivations of these offenders to facilitate better rehabilitation and treatment, as well as law enforcement, in which the clinical typologies and behavioral characteristics at the crime scene, can aid law enforcement narrow their focus in the investigation, leading to faster apprehension of an unknown offender.

Limitations/ Future Directions

The data for this study was coded from archival recorded and was not gathered with express focus on crime scene variables. Thus, some of the data that was collected was used for investigative and legal purposes rather than scientific (police reports, court proceedings, etc.) which means that there were various ways that were used to obtain information that influence the way in which the data was recorded. For example, police reports are motivated by the apprehension and conviction of the perpetrator and they may be written down in such a way that will sway the outcome. Gathering scientific information, however, requires minimizing biases and remaining as objective as possible in order to yield data that is as true to the phenomenon being researched as possible. Thus, the data that was collected may have been from a distorted view of the behavioral context being observed (Alison, Snook, & Stein, 2001). One of the main limitations of this study was the lack of a large enough sample size due to the fact the independent variables being observed (use of weapons, child dense location offending, etc.) are statistically uncommon. Also, focusing on just Axis I of the MTC: CM3 as opposed to the entire scale may have left out important factors that would better determine the accuracy of the crime scene characteristics as predictors.

Conclusion

The purpose of this study was to determine the importance and accuracy of crime scene characteristics of child molesters to supplement the empirical evidence that law enforcement agencies currently use in order to investigate sex offenses against children and to supplement the information regarding child molester typologies in the field of psychology. Although violence and location are significant predictors of recidivism, they were not significant predictors of child molester typology in this study. This information suggests that the value of certain crime scene characteristics in the investigative process, actuarial risk assessment measures, as well public policy and law should be frequently reevaluated and examined in order to better determine the

relationship of crime scene characteristics and the behavioral motivations that drive them in the

population of child molesters.

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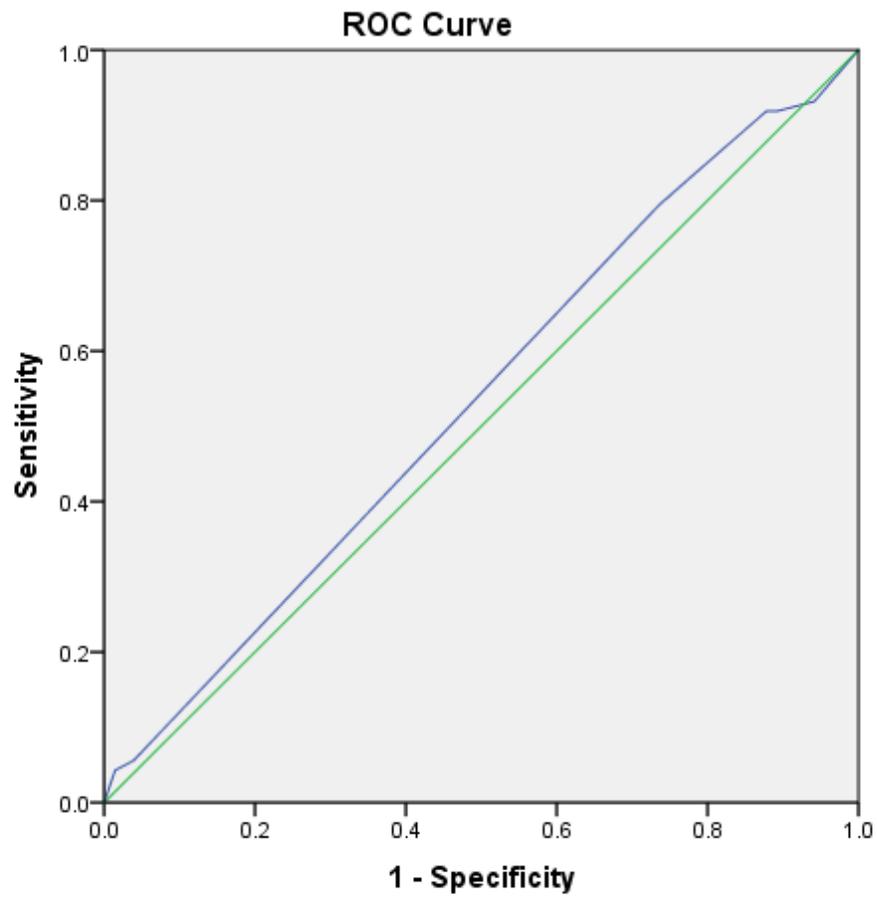
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Appendix

Figure 1
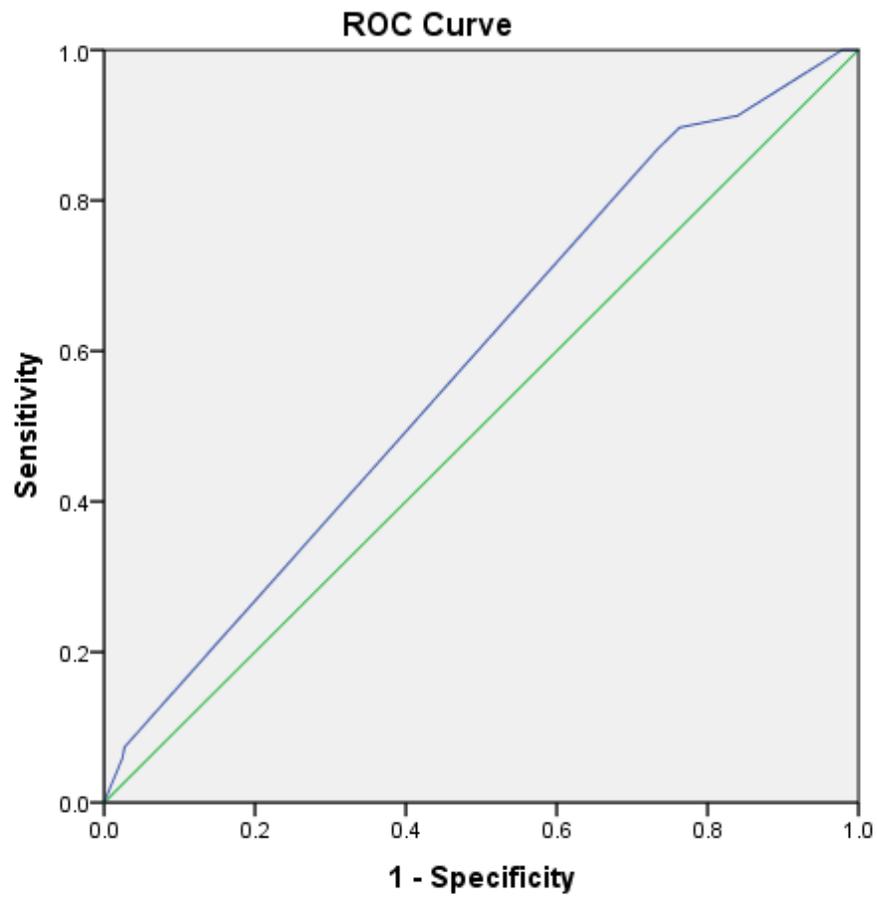
MTC Fixation ROC Curve

Diagonal segments are produced by ties.

Area Under the Curve

Figure 2

MTC Social Competence ROC Curve

Diagonal segments are produced by ties.

Table 1

Table for Binary Logistic Regression of MTC Fixation and Independent Variables

Independent Variables	B	S.E.	Wald	df	Sig.	Exp(B)	95% CI Lower	95% CI Upper
Did Offender use threats or a weapon (1)	-0.31	.250	.015	1	.902	.970	.594	1.584
Did Offender use a child dense location? (1)	.054	.424	.016	1	.899	1.055	.459	2.424
Did Offender use violence (1)	-.438	.343	1.627	1	.202	.645	.329	1.265
Constant	.18	.111	2.634	1	.105	1.197		

Notes. R2 = .6%(P>.05).

Table 2

Table for Binary Logistic Regression of MTC Social Competence and Independent Variables

Independent Variables	B	S.E.	Wald	df	Sig.	Exp(B)	95% CI Lower	95% CI Upper
Did Offender use threats or a weapon (1)	-1.085	.447	5.882	1	.015	.388	.141	.812
Did Offender use a child dense location? (1)	-.138	.641	.047	1	.829	.871	.248	3.058
Did Offender use violence (1)	.326	.146	.423	1	.516	1.385	.519	3.699
Constant	-1.544	.146	112.156	1	.000	.213		

Notes. R2=2.9% (p>.05)