Using Crime Scene Analysis to Identify Psychopathic Traits in Sexually Aggressive Males

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By

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Abstract

This study evaluates the covariation between crime scene behaviors in sexual assaults and the major components of psychopathy. Factor analyses were calculated on crime scene data of both the index sexual crimes and the maximum value across all sexual crimes, leading to consideration for commitment as sexually dangerous. Consistent, cohesive clusters of crime scene behaviors emerged for both analyses -- Aggression, Victim Response/Offender Control, Pseudo-Intimacy, and Victim Sexualization. This study explored the covariation between these factor-analytically derived themes and cross-temporally stable offender psychopathic traits. The data indicated that the four facets of the PCL-R covaried with three of the four factor-analytic themes identified from the crime scene data: Aggression, Victim Response/Offender Control, and Pseudo-Intimacy. Victim Sexualization was not found to correlate with the facets of the PCL-R. The importance of crime scene data and the PCL-R as resources for categorizing offenders is discussed.
Crime Scene Analysis (CSA) is a strategy that uses the behaviors manifest in an offense to predict characteristics about an offender. This type of analysis entails preserving and interpreting both physical evidence and the specific features of a crime (Turvey, 2011). In sexual offenses CSA is also likely to include data such as the relationship between the victim and the offender in the crime, the demographics of the offender, or information on how much violence transpired during the offense. Additionally, in sexual offenses whether or not the offense involved contact is also an essential component of CSA (Douglas, Ressler, Burgess, & Hartman, 1986). CSA is especially important to implement in the investigation of sexual crimes because it encompasses both physical evidence and the victim’s response to the offense.

Although CSA attempts to narrow the field of suspects and to help in capturing assailants, its lack of validation has limited its use in this capacity (Knight, Warren, Reboussin, & Soley, 1998). Crime scene data can be compiled from multiple crimes attributed to an offender and thus has the potential of providing a more complete picture of a suspect by identifying patterns and similarities that persist across crimes. Consequently, CSA may be most useful for serial crimes. Like clinicians’ misperception of their ability to predict clinical outcomes (e.g., Garb & Boyle, 2003; Grove & Meehl, 1996), the initial estimates of the efficacy of CSA generated from the FBI’s untested CSA experience overestimated the validity and accuracy of CSA (Lilienfeld, Lynn, Ruscio, & Beyerstein, 2010). Although experts are trusted to profile offenders’ traits accurately, research has shown that trained criminal profilers using only crime scene data have only a slightly higher probability of predicting the identity of a criminal
than non-experts. Criminal profilers thus hide their inadequacies in general statements that apply to a wide range of individuals (Lilienfeld et al., 2010).

Although CSA was initially oversold and depictions of its usefulness and accuracy have been grossly distorted in the popular media, especially television, more recent studies have identified a more modest, but nonetheless important role for this strategy. Criminal behavior is often used to assess an offender’s risk for recidivism, but important crime scene variables are often neglected in such predictive endeavors (Lehmann et al., 2012). Crime Scene Analysis and Behavioral Thematic Analysis (BTA) have been used to identify relations among crime scene variables, as well as to classify the relation between the characteristics of individual offenders and actions performed at the crime scene. These specific crime scene themes have been found to map onto theoretical models of sexual offending and to add independent variance to actuarial models in predicting recidivism. Additionally, these measures have been found to covary with an offender’s prior history of sexual offenses (Goodwill, Alison, & Beech, 2009).

Crime scene analysis has been used as an analytical tool to look at propensities between offender characteristics and criminal behavior (Lehmann, Goodwill, Gallasch-Nemitz, Biedermann, & Dahle, 2013). Some empirical analyses of crime-scene behavior have been able to link specific behaviors with some personality characteristics of offenders and have attempted to create hypotheses about the type of offender committing these crimes (Knight et al., 1998). Offender profiling is a more general strategy that attempts to coalesce all of the information currently known about an offender’s crimes in an attempt to predict likely subsequent crimes. Mokros and Alison (2002) have noted several difficulties of using crime scene variables to predict specific offender characteristics and their studies yielded discouraging results. Nonetheless recent studies using multidimensional scaling (MDS) have provided promising
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parsing of crime scene behavior clusters that are related to offender traits (Lehmann et al., 2013). Dividing identifiable themes in crime scene behavior has been shown to covary with both an offender’s prior sexual offense history and his sexual recidivism. Combining scales derived from MDS of crime-scene behavior with proven actuarials has been shown to increase the predictive validity of recidivism (Lehmann et al., 2013).

Crime scene behavior may increase the prediction of recidivism because it captures some characteristics of the offender such as his proclivity to aggressiveness by assessing his aggression in the offense, his interaction with victims, his sexual preferences, and the sexualization he manifests in the crime. The goal of this research was to add to the knowledge on crime scene analysis to help law enforcement narrow the potential characteristics of the offender. Lifestyle impulsivity, irrationality, and the presence of sexual fantasies are potential correlates of behaviors in sexual crimes (Homant & Kennedy, 1998).

CSA looks at numerous elements within the sexual assault, but it is insufficient to predict sexual recidivism using just crime scene data, as it is an inadequate risk assessment tool in and of itself. Crime scene variables, however, add incremental validity to investigations of sexual crimes (Dahle, Biedermann, Lehmann, & Gallasch-Nemitz, 2014). The prediction of sexual recidivism involves both scale constructs and cross-validation to attain enough information to calculate the likelihood of an individual reoffending. Sexual recidivism is defined as a reconviction for any sexual offense (including non-contact sex offenses).

Many considerations are involved in deciding what factors are important when predicting levels of recidivism in sex offenders (Lehmann et al., 2013). In dealing with sexual recidivism, four major aspects to consider include aggression, victim response/offender control, pseudo-intimacy, and victim sexualization. Although previous research has not been successful in using
crime scene data to predict sexual recidivism (Dahle et al., 2014), recent multidimensional scaling results, which find four cohesive crime-scene clusters, have evidenced predictive promise. Lehman et al. (2013) found that themes of criminality were predictive of both sexual recidivism and previous history of offenses. Examining the relationship between the victim and the offender is necessary. The following variables are crucial; are the two are related, acquainted or strangers; what are the victim selection criteria (e.g., age and gender of the victim); the offense type (e.g., contact or non-contact); and any indicators of the offender’s Modus Operandi (MO) that are often visible in crime scene data as the degree of force or intrusiveness of the offense.

Although claims of clinical profilers have garnered little empirical support to date, it has been hypothesized that crime scene analysis can be advantageous for police officers and investigators as a means identifying offenders’ consistent criminal tendencies and thereby suggesting behaviors in future offenses (Douglas & Munn, 1992). In this way, it has been proposed that CSA could be helpful for police to profile offenders and screen for potential recidivists. This is especially indicated in violent assaults where an offender’s interest in aggression manifests itself in the offense through crime scene behaviors, such as expressive aggression towards the victim. Predictive accuracy of sexual recidivism has been shown with the use of crime scene analysis (Warren et al., 1999). Despite the suboptimal success of CSA, recent data have indicated a limited, but important role that the present research attempts to study.

A recent study garnered evidence that trained criminal profilers are effective at predicting offenders using crime scene information (Fox & Harrington, 2014). Offender Profiling (OP), like CSA, if used correctly, can identify major demographic, personality, and behavioral traits of
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an offender based on the past crimes he committed (Douglas, Ressler, Burgess, & Hartman, 1986). Before this, OP, although commonly used in many police departments, was seen as a measure of confidence the profiler had, not a level of accuracy in his predictions. This means that when profilers were handling a case, they were often sure their profile of the offender was accurate, even though they were not always correct. With training, profilers do become more precise and effective at predicting offenders using crime scene information. This study substantiated, however, the importance of OP in correctly evaluating the offender from the crime scenes of burglaries. Although in general the research on offender profiling has yielded suboptimal support, the results of this study do show the potential of offender profiling by trained officials.

Although crime scene analyses have not played a major role in efforts to predict either offender characteristics or sexual recidivism, some evidence suggests that scales generated from crime scenes can contribute to such predictions (Lehmann et al., 2013). It is important to determine what kinds of offender characteristics do covary with crime scene behaviors. Psychopathy is a construct that contributes to predicting recidivism among sexual offenders, and because of its relation to both aggression (Porter & Woodworth, 2006) and to sexual behavior (Knight & Guay, 2015), it could be a good candidate to covary with crime scene behaviors (Mokros et al., 2013). Indeed, some preliminary analyses suggest such a possibility (Mokros & Menner, 2008), but psychopathy and crime-scene scales have rarely been considered together. Moreover, few studies have examined the subcomponents of psychopathy and crime-scene behavior. The purpose of the present study was to consider psychopathy and crime-scene scales, in the same study. Ultimately, further research should look into the predictive validity of psychopathy using crime scene analysis to assess rates of recidivism in sexually aggressive men.
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Although Mokros and Alison (2002) were pessimistic about detecting a person’s traits purely from crime scene variables, more recent studies suggest that what is left behind in the wake of an offender’s crime may be informative. There seems to be a small, but important role for CSA that warrants a continued exploration of its utility.

Psychopathy as a construct is composed of many characteristics that could be manifest in crime scene behavior. Potential characteristics encompass not only the Modus Operandi, or the impulsiveness of an offense, but also the relationship that the offender attempts in his engagement of his victim. These components may be able to be detected in crime scene behavior. The present study explored the importance of using crime scene data in the analysis of sexual violence. This study focused specifically on the behaviors in crime scenes of sexual offenses, thus the importance of studying crime scene behavior as a tool for understanding offenders’ motivation and traits will be explored.

Although Hervey Cleckley (1941) was the first person to operationalize psychopathy, the concept of a psychopathic individual has been around for much longer. James Cowles Prichard’s description of psychopathy as patients suffering from moral insanity is relevant to the current study. Acting in socially undesirable ways (Augstein, 1996) with no thought to consequences, in tandem with a “morbid perversion” of thoughts and behaviors (Prichard, 1999) has been hypothesized to embody antisocial behavior. The social origins of psychopaths that often lead to aggressive crimes leave physical evidence behind that may be detected later from their offenses (Wetzell, 2000).

Cleckley’s characterization of these individuals has remained in the forefront of psychology today. He described psychopaths as having an apparently normal disposition, but in actuality covering up reckless and disturbing emotional states. David Farrington (1977)
expanded Cleckley’s definition by adding stable cross-temporal antisocial behaviors as essential to the full explanation of psychopathy that is commonly accepted today.

Psychopathy may provide a link between criminality and crime scene behavior. It can be used as a predictor for both violent and non-violent recidivism (Harris, Rice, & Cormier, 1991). Psychopathy has been found especially predictive of violent crimes in less intelligent criminals (Heilbrun, 1979). Additionally, psychopathy, as opposed to antisocial personality disorder (ASPD), shows up in patients with a need for stimulation that comes out in impulsive offending (Hare & Schalling, 1978). Because psychopathy plays a central role in sexual aggression, sexual crimes may be useful indicators of psychopathic traits (Seto & Lalumière, 2000). The importance of crime scene behavior comes through in its relation to offender behavior. The present study focuses on psychopathy and the degree to which crime scene behavior covaries with sexual offender traits. The use of sexual aggressors as the sample for this study is justified because of the close relation between psychopathy and sexual aggression. Because the traits of psychopathy are distributed as dimensions and not taxons (Guay, Ruscio, Knight, & Hare, 2007), the full range of the traits can play a role in sexual crimes.

Presently, the instrument most commonly used to assess psychopathic behaviors is the Psychopath Checklist – Revised (PCL-R; Hare, 2003). This scale comprises behavior in four distinct categories, or facets: Interpersonal, Lifestyle, Affective, and Antisocial. These four facets provide a means of clarifying behavior performed by offenders in a forensic setting (Drislane, Patrick, & Arsal, 2013). Psychopathy is likely to affect various aspects of the crime scene because character traits found in psychopaths are likely to leave a residue in the aftermath of an offense. For example, the level of aggression in assaults has been shown to correlate with specific PCL-R scores in that more aggressive offenses generally covary with higher PCL-R
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scores (Porter, Woodworth, Earle, Drugge, & Boer, 2003). Moreover, sadistic exploitation of the victim has been an indicator of psychopathy within crimes. Shallowness and lack of remorse are central features throughout the offenses of violent offenders (Sreenivasan, Walker, Weinberger, Kirkish, & Garrick, 2008). This reflects an emotional under-arousal often found in psychopaths, which increases the likelihood of a primarily violent offense, but also the probability of reoffending in a similarly vicious manner.

Psychopathy is a helpful construct in offender profiling because it is comprised of a stable group of traits across time. These offender characteristics help limit the possibilities of who the offender could have been. This has been a prominent problem in the literature up until now, but with the help of psychopathy as a predictive measure in CSA, the pool of suspects is reduced. Although Mokros did not find psychopathy to be helpful, he did not use factors or Multidimensional Scaling in his analysis, thus he may have missed the similarities between psychopathy and crime scene clusters. These crime scene factors are important because they each relate to psychopathy. The various components of psychopathy appear to covary with various behaviors—aggressiveness, a need for control, victim relationships, and a sexualization aspect.

Data on psychopathy can also be helpful in intervention and in efforts to reduce the recidivism rate of offenders. For example, psychopathy can be used to infer what kind of supervision may be most beneficial for a sexual offender upon release. Further research should examine the relation of levels of psychopathy to varying the level of the risk of recidivism. Reducing the level of recidivism can also be helped with CSA. CSA can be used to potentially enhance the prediction of recidivism.
Psychopaths do not apparently empathize with the emotional states of their victims, and consequently they are potentially more prone to sexual coercion because of their proclivity to disengage emotionally from the situation to fulfill their own individual needs (Knight & Guay, 2006). Notably, the proclivity for promiscuity is an item on the PCL-R and is a predictor for an increased likelihood of a crime including sexual coercion. This leads to conclusions of the potential relationship of psychopathy to other clusters of behaviors found in crime scene analyses. The PCL-R serves as a good predictor of criminal and violent recidivism, and, as such, can establish connections between crime scene variables and psychopathy (Salekin, Rogers, & Sewell, 1996; Hart, 1998). Many of the aggressive crime scene variables such as victim unconsciousness and sadistic assault on the victim’s genitals are evidence of the PCL-R item poor behavioral control, and the offender’s paraphilic coercion. The offender’s ability to complete the rape, ending in his ejaculation, compounded with rape fantasies leading to expressed aggression throughout the offense is symbolic of the use of coercion (Knight, Sims-Knight, & Guay, 2013). Noted for their criminal versatility, the crime scene variables assessed in this study further display a relationship between psychopaths and their coercive behavior.

Psychopathy is associated with a paucity in violence inhibition allowing for sexually aggressive crimes to be committed more easily than for the nonpsychopathic criminal (Knight & Guay, 2006). Because of the lowered ability to read any stress cues from a victim, and a lack of empathy, psychopathic individuals are more likely to be capable of rape.

Criminality assesses the level of criminal activity a perpetrator commits. As with sexual offenses, it is possible to use similar measures to predict recidivism of perpetrators of criminal offenses. Criminality strongly corresponds to similar features from one crime an individual commits to his next. Crime scene behaviors have shown a degree of similarity between crimes
allowing us to find patterns in offending that aids in the ability to profile offenders (Mokros & Alison, 2002).

The clusters of data strongly relate to different components of the construct of psychopathy, as crime scene data relates to information such as the use of sexualized aggression, the reaction of the victim to the assault, the offender’s emotional attachment to his victim, and the offender’s objectification of his victim.

**Aggression**

This theme encompasses all violent acts committed throughout the offense, starting with the apprehension of the victim, through the offender’s exiting the crime scene. The goal of these offenders is to ensure the acquiescence of their victims by any means necessary. The use of coercion and power to overcome victims into succumbing to the offender’s desires establishes the offender’s control in these situations (Sreenivasan, Walker, Weinberger, Kirkish, & Garrick, 2008). There is a strong link between psychopathy and aggression (Porter & Woodworth, 2006). It is hypothesized that the Affective facet of the PCL-R will covary with such callous disregard of the victim. This study thus predicts that aggressive crime scene variables are likely to correlate highly with both factors of the PCL-R because highly violent assaults are often combined with a lack of empathy or guilt and impulsivity.

**Victim Response/Offender Control**

This theme captures the offense from both the perspective of the victim and the way in which the offender encounters her. This factor encompasses some ambiguity as it is unknown how the victim will respond to the impending assault. The offender’s response to his victim’s resistance indicates a lot about his personality. Will he lash out aggressively or impulsively? Psychopaths are unlikely to process distress cues from their victims possibly resulting in a more
violent offense than was originally intended (Blair, Jones, Clark, & Smith, 1997). Because of this, Victim Response/Offender Control is hypothesized to have a positive relationship with aggression.

**Pseudo-Intimacy**

The theme of Pseudo-Intimacy within sexual crimes is categorized by nonviolent acts within a sexual offense. Such offenders justify their acts by viewing the situation as one that is enjoyable for both parties involved (Hall & Hirschman, 1991). Behaviors where the offender tries to engage in a consensual relationship with his victim are displayed in sex acts that attempt to create a bond and arousal between them, such as kissing, caressing, or mutual masturbation. The offender’s inability to see such offenses as inappropriate behaviors supports the idea that this is a risk factor for sexual recidivism. This factor is also likely to preclude the offender from realizing the harm his offense is causing, as he views it as a consensual relationship. A relation between the Lifestyle facet of the PCL-R and Pseudo-Intimacy is hypothesized because of the irresponsibility of the offender in his intent to commit a sexual offense.

**Victim Sexualization**

Victim Sexualization describes the objectification of the victim by the offender. This factor can contribute to the “denial of moral concern” of the offender for his victim (Loughnan, Pina, Vasquez, & Puvia, 2013). This theme includes items such as voyeurism or fetishism as the object of each offense is for the offender to fulfill his sexual needs. This theme is hypothesized to correlate with the Antisocial facet of the PCL-R, as poor behavioral controls are key characteristics in sexual offenses that include non-contact aspects. As this theme corresponds with non-contact sex acts, it represents a “non-violent” aspect of the offense. Nonetheless, such hyper-sexuality could increase the risk for psychopathy.
Participants

The participants in this study were 900 sexual offenders from the Massachusetts Treatment Center (MTC) for Sexually Dangerous Persons in Bridgewater, Massachusetts who were being evaluated for civil commitment. Four subjects were excluded due to insufficient data. The sample included in this study contained rapists and child molesters (CM) who were civilly committed to the MTC as sexually dangerous between 1959 and 1991. Rapists were defined in this study as adult men who sexually assaulted women who were 16 years old or older. Those offenders all of whose victims, either male or female, were younger than 16 years old, were classified as CMs. Within this database, we have between two and 27 years of follow-up for a subset of 599 rapists and CMs.

The Center was founded in 1959 with the purpose of evaluating and treating individuals convicted for repetitive or aggressive sexual crimes. The term “sexually dangerous persons” was introduced and defined in 1958 into Massachusetts General Laws, Section 123a, Chapter 646 as any individual “whose misconduct in sexual matters indicates a general lack of power to control his sexual impulses, as evidenced by repetitive or compulsive behavior and either violence or aggression by an adult against a victim” (Bard et al., 1987). The civil day-to-life commitment is provided by legislation from the court for individuals who are considered sexually dangerous. Release of these patients is contingent upon them no longer being found to be sexually dangerous individuals (Prentky, Lee, Knight, & Cerce, 1997). A serious sexual offense was defined as any assault motivated by sexual impulse in which contact between the offender and the victim was made.
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**Procedure**

The data were collected through the offenders’ clinical records and police reports. The information gathered on each offender contained evaluations from their 60-day observation period, data received post-commitment to the Treatment Center, and appraisals of their progress during treatment. In addition, most files included school and employment reports, information on past institutionalization, court testimonies, probation and parole summaries, and diagnostic and psychometric evaluations. Many of the files also included extensive interviews with the offender to gather additional information. The records in a file came from many sources throughout the offender’s life, tracing all progress and each setback an offender made. The crime scene variables were taken from statements by the victim, police records of the offense, and reports by Treatment Center staff. The crime scene data were coded using the Massachusetts Treatment Center Archival Coding Dictionary (Knight, Cerce, Carter, & Martino, 1986) and all sexual crimes were rated. The psychopathy data were coded using Hare’s Psychopathy Checklist–Revised (PCL-R). Both sets of ratings were coded individually by two trained researchers and checked for reliability. When responses differed, the raters met to discuss the discrepancies and come to consensus ratings. Inter-rater reliability (IRR) was reached on both scales and was calculated for each rater on pre-consensus ratings. All analyses were calculated either across all sexual offenses prior to commitment evaluation (maximum offense) or on the offense immediately preceding the apprehension for the individual’s commitment evaluation (index offense).

**Results**

The crime scene variables used in this study were created both using the index crime and the maximum variable value across crimes for each individual variable. Similar factors emerged
for both analyses. Both sets of analyses are presented here. The index offense factors are presented because their factors explained a greater percent of the variance and yielded factors with higher internal consistency. The maximum value variables are presented as an alternate view of the data because they evidenced a slightly higher correlational value with the PCL-R on two factors, Victim Response/Offender Control and Pseudo-Intimacy. The index factor of Aggression, however, evidenced a marginally higher correlational value with the PCL-R suggesting that while the is stability across crimes can be attributed to cross-temporal stability in traits, the index crime is consistent enough with all prior crimes that using the index value variables are sufficient.

A principle factor analysis with OBLIMIN rotation of the index variables yielded four factors that explained 43.67% of the variance (See Table 1). The factors were Aggression, Victim Response/Offender Control, Pseudo-Intimacy, and Victim Sexualization. All four factors evidenced acceptable levels of internal consistency. Each variable that loaded .40 or greater onto its respective factor was included as a variable on that factor, and summative scales were created including all variables that loaded on the factor. Dual loading variables were included only in the factor scale on which they loaded higher. The first factor, (Sexualized) Aggression included the variables—medical problems requiring a physician (MD); expressive aggression before/during the offense (AEB); use of a weapon (UW); cuts, bruises, or abrasions (CBA); victim unconscious (VU); expressive aggression after the offense (AEA); stabbing (STB); instrumental aggression (AIB); and sadistic assault on the victim’s genitals (SAG). The second factor, labeled Victim Response/Offender Control comprised the variables—the relationship of the offender’s first victim to himself (RO11), the reverse coding of the offender’s approach to the victim (APP), rape not completed/victim response (FVR), rape not completed because of
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physical limitations (FLV), violent resistance of the first victim (VV11), and the reverse coding of the style of the offense (STY). The third factor, Pseudo-Intimacy, comprised the variables—kissing (KISS), caressing (CAR), victim kicked the offender (OK), vaginal penetration with a penis (VP), vaginal penetration with fingers or hand (VFH), the offender’s sexual arousal/erection (SX), the offender’s sexual arousal/ejaculation (EJ), and the victim performed fellatio on the offender (OF). The fourth and final factor, Victim Sexualization, includes the variables—involvement of voyeurism (VOY), masturbation (MAS), involvement of exhibitionism (EXH), involvement of fetishism (FET), and the victim masturbated the offender (OM). Variables that were missing over 200 data entries were excluded from the factor analysis and were not included in further steps. Two variables, APP and STY, were reverse coded to maintain homogeneity with the way each variable within the factors are coded. APP and STY were reverse coded to reflect the more aggressive answers coded first and the least aggressive coded last. The internal consistency of each factor was calculated to ensure adequate reliability and that there was good internal consistency between the variables comprising each factor. Further variables were excluded so that each factor had a minimum Cronbach Alpha above 0.70. Variables were transformed into z-scores to maximize overall reliability.

The maximum value for the crime scene variables was also assessed where the variables were calculated as the maximum value across all reported sexual crimes for each offender. A principle factor analysis with OBLIMIN rotation was calculated on the maximum offense crime scene variables (see Table 2). It yielded the same four factors as the calculation with the index crime, but explained only 33.11% of the variance. The factors were Aggression, Victim Response/Offender Control, Victim Sexualization, and Pseudo-Intimacy/Offender Sexualization. The factor scales derived from these factors (all variable loading ≥.40 on the factor) also
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evidenced acceptable levels of internal consistency. The Aggression factor was made up of the variables broken bones (BB), presence of a weapon (PW), victim kicked offender (OK), AEB, MD, CBA, AIB, AEA, VU, and STB. The second factor, Victim Response/Offender Control, included the variables APP, and the reverse coding of STY and RO11. Factor three was Victim Sexualization, and this factor included the variables SAG, VOY, and FET. Finally, the fourth factor, Pseudo-Intimacy/Offender Sexualization, included the items SX, VP, and EJ. Similarly with the index crime factors, each of the maximum factors was then checked for reliability to ensure that there was good internal consistency between variables. Variables were excluded in an attempt to get to a Cronbach Alpha above 0.70 for each factor. With the maximum variables, both Aggression and Victim Response/Offender Control reached a Cronbach Alpha above 0.70, but Pseudo-Intimacy/Offender Sexualization reached a Cronbach Alpha of 0.696. Additionally, the Victim Sexualization factor only reached a Cronbach Alpha of 0.445. Although this factor did not reach a minimally acceptable internal consistency consistent with the other factors, it is still relevant in explaining the importance of CSA in sexual crimes.

Finally, correlational analyses were calculated on both sets of factors (see Tables 3 & 4) to determine relations between each factor and the two PCL-R factors and each of the four facets of the PCL-R. The index crimes evidenced stronger internal consistency within factors, and when the variables were coded to reflect the maximum score across crimes, or the strongest score, the correlations were only slightly lower than for the index crime factor scores. Regardless of whether the maximum or the index crime was used, the results yielded the same pattern of correlations with the PCL-R.

As can be seen in Tables 3 and 4, for both the index and maximum crimes three of the four factors correlated with the four facets of psychopathy: Interpersonal, Affective, Impulsive,
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and Antisocial. Aggression, Victim Response/Offender Control, and Pseudo-Intimacy correlated strongly with the PCL-R. Interestingly, Victim Sexualization did not correlate with the PCL-R using either set of variables. When the Aggression factor was assessed with the PCL-R, it correlated with both factors and all four facets; but correlated strongest with the Antisocial facet of the PCL-R. Victim Response/Offender Control correlated negatively with Factor 2 of the PCL-R and both of the facets within that factor. This factor correlated negatively because this factor comes out stronger when a stranger, rather than an acquaintance, commits the offense. The Pseudo-Intimacy (Offender Sexualization) factor correlated with Factor 1 of the PCL-R and both facets within that factor. It was, however, correlated more highly with the Affective facet. The Victim Sexualization factor did not reach $p < .05$ for any of the PCL-R factors.

Using SPSS for Windows (ver. 22), a two-dimensional, non-metric Multidimensional Scaling (MDS) using the PROXSCAL component at an ordinal level of measurement not allowing for ties was run to generate a graphical relation between each individual variable (see Figure 1 and Figure 2).

The physical representation of the factor analysis in an n-dimensional diagram with MDS allows a display of variables to be measured against one another with variables that are denoted farther away from one another revealing dissimilarities, and points that are closer presenting similarities in the data. The distance between data points shows the correlational similarity or dissimilarity pertaining to those variables. Additionally, variables that appeared close to one another were more likely to appear together within a single crime.

This shows that across crimes, the intercorrelation of the factors drops, but the factor does pick up a stronger correlation with psychopathy. Conversely, within a crime, there is a higher correlation between the variables within a factor. This says that instances of a behavior were not
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related to a single crime. Thus, the index variables show that the factors were less consistent cross-temporally, whereas the maximum variables allowed the measure to go across instances, which captured the variance and correlated more with psychopathy. Individual correlations with the crime-scene variables lessen because there is no limiting time frame in which the behavior had to occur. This differentially captured diverse behavior. Although the solution is similar when using either the index crime or the maximum crime, the factor analysis demonstrated that with the maximum behavior across crimes, the percent variance decreased relative to the index variables, but the intercorrelation between the variables in the factors increased for two out of the three factors that correlated with the PCL-R.

Discussion

This current study sought to assess and replicate the Factor Analysis and Multidimensional Scaling (MDS) structures of previous studies of sexual offenders’ crime-scene variables to link these themes to psychopathy. This study identified four crime-scene factors of aggression, victim response/offender control, pseudo-intimacy, and victim sexualization, and assessed the relation between these factor scales and the facets of psychopathy, assessed using the PCL-R. The same factor structures emerged from both analyses of index crimes and maximum variable scores across all sexual crimes. The results showed, however, that across crimes, the intercorrelation among variables loading on maximum factors decreased relative to correlations among index variables. The relation to psychopathy was stronger for maximum values than for the index crime analyses in the Pseudo-Intimacy and Victim Response/Offender Control factors, suggesting that cross-crime analyses may capture some cross-temporal stability that correlates more with the cross-temporally stable psychopathy traits. However, the Aggression factor correlates stronger with the index values indicating that this scale does not
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...need to be assessed cross-temporally as it is stable and consistent over time. Nonetheless, both the cross-sectional index analyses and the cross-temporal maximum analyses yielded essentially the same factor structures meaning that all four factors remain fairly consistent regardless of whether the data is collected using the index crime or the maximum strength across crimes.

This study supports previous research (Lehmann et al., 2013) that has shown that crime-scene data do covary with cross-temporally stable personality traits. It extended this research by demonstrating the covariation of the facets of psychopathy with specific factor-derived crime-scene scales. The Aggression factor correlated highly with Factor 1 on the PCL-R indicating that offenders were likely to be emotionally shallow and manipulative in their offenses to ascertain compliance with their victims. Offenders evidencing a lack of emotionality tended to sexualize their victims at all stages of the assault. The covariation of the PCL-R Interpersonal and Affective facets with Offender Sexualization/Pseudo-Intimacy indicated that offenders who were callous, manipulative, and mendacious liars, were more likely to engage in a variety of sexual acts during the offense.

CSA provides a useful tool for looking at observable offender behaviors and relating them to the themes within psychopathy. This study allows a detailed analysis of aggression by looking at the complex actions of psychopaths. Interestingly, when the maximum strength crime was compared with the PCL-R, it correlated with all four facets implicating a complex relation. It is important to understand the nature of aggression because this will lead to critical knowledge on what components of aggression are most important to cover in treatment. Pseudo-Intimacy is a factor that involves less violent sex acts, and with this offender type being conceptualized as the purest manifestation of (hyper-) sexual motivation, this theme is consistent with Knight’s (2010) assertion of offenders high on Pseudo-Intimacy as “sexual, non-sadistic” offenders. Victim
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Response/Offender Control is a factor that has a certain amount of ambiguity as the actions of the offenders are based on the unexpected resistance of the victims. This factor is closely related to the theme of criminality as the offenses coded under this factor indicated a certain level of preparedness or planning. Finally, Victim Sexualization engaged offenders in partially non-contact and non-violent offenses. This is an important addition for crime-scene variables because this factor captures the versatile individual desires of each offender. Although no strong correlation between this factor and the PCL-R was found, this factor is still critical in explaining the poor social controls of the offender. Although Mokros (2002) argues that CSA was futile, this research showed the efficacy of CSA when using it as a tool for predicting psychopathy.

Psychopathy is an important feature to recognize in criminals as it contributes to our understanding of the potential motives the offender had for his behavior. It is a personality disorder that includes traits such as irresponsible and impulsive behaviors, deceitfulness, egocentricity, and an inclination to violate the rules and social norms (Mokros et al., 2010). Crime scene analysis can be used to help assess different facets of the criminal’s behavior. Through the Pseudo-Intimacy factor of the crime-scene data, deceitful and manipulative behavior comes through as a means of keeping control over the victim. The Victim Sexualization factor relates well with the emotional detachment of the Affective factor. Aggression and Victim Response/Offender Control in a sexual offense were linked to a reckless and negligent way of life (Mokros et al., 2013). It is imperative to understand the maladaptive social of psychopathic versus non-psychopathic individuals in the discussion of crime scene analysis because of the higher tendency of psychopathic individuals to exploit their victims for personal gain (Mokros et al., 2008). Psychopath’s Machiavellian ability to place their needs over the morality of their actions constitutes non-cooperative behaviors that are rebellious in nature and impossible for
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society to control.

Sexual aggression is important in the study of psychopathy and CSA because it infers the unwillingness of the partner to engage in sexual acts with the offender. The offender often knows the need to use coercion before the offense even transpires. Sexual violence has long-term negative consequences that affect the victims for the rest of their lives. Although only 5.3% of offenders are strangers (Black, Basile, Breiding, & Ryan, 2014), the requisite of force to induce compliance is still needed when the offender is an acquaintance. Behavior maladaptation is common among sexually dangerous men, and although social competence is apparent in many rapists and child molesters, using the PCL-R to assess the level of psychopathy in sexual offenders allows clinicians to provide better treatment for each individual. Sex offenders are often distinguished from other types of criminals, and this study is no different, as sexual offending often encompasses stronger antisocial behaviors than are found in other criminal acts (Harris, Mazerolle, & Knight, 2009). Sexual aggression is an important facet to consider within CSA because sexual crimes leave behind a slew of physical and behavioral evidence that is not apparent from other crimes. As sexual crimes are nearly always contact offenses, law enforcers have the opportunity to get an eyewitness account of the misdeed every time an unwanted sexual encounter occurs. This is invaluable as it enables researchers to get a full picture of the actions leading up to, during, and immediately after the offense.

**Future Directions**

This study uses only sexual crimes in its analysis of the predictability of psychopathy using crime scene analysis. Although there were several important findings as a result of these discoveries, future research should assess the implications of using CSA to predict psychopathy in other types of crimes, not just sexual offenses. Additionally, two individual research
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assistants rated each offender’s file, and adequate levels of reliability were obtained. Nonetheless, archival data are limited in the information they contain and in the limited reliability of those who write the original reports and record the original data.

Recidivism data exist on a significant subset of offenders in this sample. The next step will be to determine whether crime-scene clusters add incremental predictive validity both to the PCL-R and to other actuarials (e.g., Static 99R, Risk Matrix, Static 2002).

Conclusion

This study aimed at exploring the importance of using crime-scene data in the analysis of sexual violence. This study focused specifically on the behaviors in crime scenes of sexual offenses. The correlations between the PCL-R and offense behavior supported the importance of a shallow affect and a lack of empathy in violent offenses. Additionally, offenders who tried to engage or control their victims throughout the offense tended to display higher criminality. While crimes that were high in sexualization behaviors did not correlate with the PCL-R, Victim Sexualization plays a significant role in assessing risk prediction of sexual offenders. When using CSA to identify cross-temporal traits, it is equally beneficial to use a single crime, such as the index offense, as using across crime variables, such as the maximum value crime.
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References


http://dx.doi.org/10.1017/S0025727300061329


http://dx.doi.org/10.1002/bsl.2370050211


http://dx.doi.org/10.1111/j.1469-8986.1997.tb02131.x


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Table 1

*Factor Analysis Loadings for the 29 Index Crime Scene Variables*

<table>
<thead>
<tr>
<th>Component</th>
<th>Aggression</th>
<th>Victim Response/Offender Control</th>
<th>Pseudo-Intimacy</th>
<th>Victim Sexualization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Problems</td>
<td>.78</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggression Before</td>
<td>.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of Weapon</td>
<td>.73</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cuts &amp; Bruises</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victim Unconscious</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggression After</td>
<td>.61</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stabbing</td>
<td>.56</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instrumental Aggression</td>
<td>.54</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sadistic Assault on Victim’s Genitals</td>
<td>.43</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offense Style</td>
<td>-.67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approach to Victim</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victim Violent Resistance</td>
<td>.58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victim Relation to Offender</td>
<td>-.55</td>
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<td></td>
<td></td>
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<tr>
<td>Rape Not Completed/Physical Limitations of Victim</td>
<td>-.49</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victim Kicked Offender</td>
<td>.48</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rape Not Completed/Victim Response</td>
<td>.47</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offender's Erection</td>
<td>.65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vaginal Penetration with Penis</td>
<td>.65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kissing</td>
<td>.65</td>
<td></td>
<td></td>
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<tr>
<td>Caressing</td>
<td>.61</td>
<td></td>
<td></td>
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<tr>
<td>Vaginal Penetration with fingers/hand</td>
<td>.59</td>
<td></td>
<td></td>
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<tr>
<td>Offender’s Ejaculation</td>
<td>.57</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Victim Performed Fellatio on Offender</td>
<td>.41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voyeurism</td>
<td>.73</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhibitionism</td>
<td>.66</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masturbation</td>
<td>.62</td>
<td></td>
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<td></td>
</tr>
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</table>
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<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim Masturbated</td>
<td></td>
<td></td>
<td>.45</td>
</tr>
<tr>
<td>Offender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fetish Involved</td>
<td></td>
<td></td>
<td>.43</td>
</tr>
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### Table 2

Factor Analysis Loadings for the 20 Maximum Crime Scene Variables

<table>
<thead>
<tr>
<th>Component</th>
<th>Component</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggression Before</td>
<td>.78</td>
<td>Medical Problems</td>
</tr>
<tr>
<td>Medical Problems</td>
<td>.71</td>
<td>Cuts &amp; Bruises</td>
</tr>
<tr>
<td>Instrumental Aggression</td>
<td>.68</td>
<td>Victim Violent Resistance</td>
</tr>
<tr>
<td>Aggression After</td>
<td>.53</td>
<td>Victim Unconscious</td>
</tr>
<tr>
<td>Stabbing</td>
<td>.47</td>
<td>Broken Bones</td>
</tr>
<tr>
<td>Broken Bones</td>
<td>.45</td>
<td>Presence of Weapon</td>
</tr>
<tr>
<td>Victim Kicked Offender</td>
<td>.44</td>
<td>Approach to Victim</td>
</tr>
<tr>
<td>Offense Style</td>
<td>-.69</td>
<td>Victim Relation to Offender</td>
</tr>
<tr>
<td>Sadistic Assault on Victim’s Genitals</td>
<td></td>
<td>Sadistic Assault on Victim’s Genitals</td>
</tr>
<tr>
<td>Voyeurism</td>
<td>.58</td>
<td>Fetish Involved</td>
</tr>
<tr>
<td>Offender’s Erection</td>
<td>.82</td>
<td>Offender’s Ejaculation</td>
</tr>
<tr>
<td>Vaginal Penetration with Penis</td>
<td>.79</td>
<td></td>
</tr>
</tbody>
</table>

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Table 3

PCL-R Factor/Facet Correlations Among Index Crime Factors

<table>
<thead>
<tr>
<th>Component</th>
<th>Aggression</th>
<th>Victim Response/Offender Control</th>
<th>Pseudo-Intimacy</th>
<th>Victim Sexualization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1: Interpersonal/Affective</td>
<td>.32**</td>
<td>−.02</td>
<td>.12**</td>
<td>−.04</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>.28**</td>
<td>−.03</td>
<td>.10*</td>
<td>.02</td>
</tr>
<tr>
<td>Affective</td>
<td>.29**</td>
<td>−.01</td>
<td>.11**</td>
<td>−.07</td>
</tr>
<tr>
<td>Factor 2: Lifestyle/ Antisocial</td>
<td>.33**</td>
<td>−.10*</td>
<td>.02</td>
<td>−.01</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>.27**</td>
<td>−.09*</td>
<td>−.01</td>
<td>−.06</td>
</tr>
<tr>
<td>Antisocial</td>
<td>.40**</td>
<td>−.07</td>
<td>.03</td>
<td>.01</td>
</tr>
</tbody>
</table>

*p < .05, **p < .001
Table 4

PCL-R Factor/Facet Correlations Among Maximum Crime Factors

<table>
<thead>
<tr>
<th>Component</th>
<th>Aggression</th>
<th>Victim Response/Offender Control</th>
<th>Victim Sexualization</th>
<th>Pseudo-Intimacy/Offender Sexualization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1: Interpersonal/Affective</td>
<td>.32**</td>
<td>-.06</td>
<td>.05</td>
<td>.14**</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>.26**</td>
<td>-.05</td>
<td>.09</td>
<td>.11*</td>
</tr>
<tr>
<td>Affective</td>
<td>.29**</td>
<td>-.070</td>
<td>.01</td>
<td>.14**</td>
</tr>
<tr>
<td>Factor 2: Lifestyle/Antisocial</td>
<td>.31**</td>
<td>-.19**</td>
<td>.03</td>
<td>.04</td>
</tr>
<tr>
<td>Lifestyle</td>
<td>.25**</td>
<td>-.18**</td>
<td>-.02</td>
<td>.02</td>
</tr>
<tr>
<td>Antisocial</td>
<td>.38**</td>
<td>-.13**</td>
<td>.07</td>
<td>.06</td>
</tr>
</tbody>
</table>

** p < .001, * p < .05
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Figure 1

*Multidimensional Scaling (MDS) of Index Variables*
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Figure 2

*Multidimensional Scaling (MDS) of Maximum Variables*