

The Use of Forensic Evidence in Sexual Assault Investigations: Perceptions of Sex Crimes Investigators

Violence Against Women

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Tasha A. Menaker¹, Bradley A. Campbell²,
and William Wells³

Abstract

Despite the potential value of DNA evidence for criminal investigations and prosecution, we have a limited understanding of the way forensic evidence is used and its impact on case outcomes. This study uses qualitative data to describe the way investigators from the Houston Police Department use DNA evidence during investigations of sexual assaults. Results show DNA evidence has limited influence during investigations, and the value of DNA evidence is shaped by other evidentiary factors. The findings provide insight into the utility of DNA evidence, instances when DNA evidence is least and most useful, the importance of DNA evidence in comparison with other evidence, and the likely aggregate impact of DNA evidence across sexual assault cases.

Keywords

forensic evidence, sexual assault, police investigators

In the past 25 years, advancements in forensic science have amplified the role of scientific evidence in criminal investigations (Strom & Hickman, 2010). The collection of large volumes of evidence challenges crime labs to efficiently process scientific material and often produces laboratory backlogs (Durose, 2008; Lovrich et al., 2004;

¹Arizona Coalition to End Sexual and Domestic Violence, Phoenix, AZ, USA

²University of Louisville, KY, USA

³Sam Houston State University, Huntsville, TX, USA

Corresponding Author:

Tasha A. Menaker, Arizona Coalition to End Sexual and Domestic Violence, 2800 N. Central Ave. Suite 1570, Phoenix, AZ 85004, USA.

Email: tasha.menaker@gmail.com

Mennell & Shaw, 2006; Peterson & Hickman, 2005). In cases of sexual assault, surveys of police agencies and crime labs nationwide have revealed large numbers of unsubmitted and untested sexual assault kits (SAKs; Office on Violence Against Women [OVW], 2010; Pratt, Gaffney, Lovrich, & Johnson, 2006; Strom & Hickman, 2010). SAKs include biological evidence (e.g., blood, saliva, DNA, semen), as well as victims' statements to medical experts, observations by medical staff, and photographs or documentation of injuries (Gaensslen & Lee, 1996; Peterson, Sommers, Baskin, & Johnson, 2010). SAKs must be submitted to a crime lab to be screened for the presence of biological evidence foreign to the victim. Kits that are not submitted to a crime lab go untested. SAKs that screen positive for biological evidence are subjected to more advanced testing (Gaensslen & Lee, 1996).

A review of 16 jurisdictions (e.g., Cincinnati, Los Angeles, New York City, and others) revealed large numbers of untested kits in storage, ranging from a low of 1,200 in Cincinnati to a high of 17,000 in New York (Joyful Heart Foundation, 2016; Stricker, 2010). Accumulations of untested SAKs have been criticized by media outlets and victim advocates, who argue that backlogs deny justice to victims and perpetrators (Human Rights Watch, 2009; Perkel, 2007; Stricker, 2010). As a result, in jurisdictions that have discovered untested and unsubmitted SAKs, policy responses have been crafted to reduce backlogs and increase the analysis of forensic evidence.

Despite recent attention and policy development regarding forensic evidence in sexual assault cases, relatively little is understood about the ways sex crimes investigators use forensic evidence and its influence on case processing. In 2010, Gabriel, Boland, and Holt (2010) wrote, "An in-depth analysis of public safety improvements made with CODIS is currently unavailable to forensic practitioners and public policy analysts" (p. 396). Studies of the investigative use of scientific evidence have focused primarily on property crimes (Roman, Reid, Chalfin, & Knight, 2009) and homicides (Baskin & Sommers, 2010; Schroeder & White, 2009), with mixed findings. Much of the literature on sexual assault investigations has not examined the use of forensic evidence (but see Peterson, Johnson, Herz, Graziano, & Oehler, 2012). Instead, research has focused on legal and extralegal factors (e.g., victim characteristics, presence of injury) that predict officer decision making (Bouffard, 2000; R. Campbell, Patterson, Bybee, & Dworkin, 2009; Frazier & Haney, 1996; Gaensslen & Lee, 2001; Kerstetter, 1990; Schwartz, 2010; Spohn & Tellis, 2012). Many of these studies, however, have utilized potentially outdated data from the 1970s and 1980s (Kerstetter, 1990; LaFree, 1981; Rose & Randall, 1982).

The utility of these findings may be limited in light of recent rape law reform; changes to investigative processes, such as the creation of specialized sex crimes units; and technological advancements in the examination of physical, medical, and biological evidence since the 1980s (Frazier & Haney, 1996). To date, few studies have examined police attitudes toward sexual assault case processing, the challenges of sexual assault investigations, and the use of biological evidence by investigators (Gaensslen & Lee, 2001; Peterson et al., 2010; Schwartz, 2010). The primary purpose of the present study was to provide new information about the role of forensic evidence during the investigation of sex crimes. The study also overcomes an important limitation of

existing research by exploring differences between adult and juvenile victim cases. Research has focused on adult sexual assault cases (Alderden & Ullman, 2012), or neglected potential distinctions between cases with adult and juvenile victims (Gaensslen & Lee, 2001; Tasca, Rodriguez, Spohn, & Koss, 2012). Data collected through in-depth interviews with sex crimes investigators were analyzed, and prominent themes about the role of forensic evidence are identified and described.

The Role of Forensic Evidence in Criminal Investigations

Research into the ways forensic evidence is used during criminal investigations has demonstrated that such evidence is often unavailable and, when collected at crime scenes, frequently goes unanalyzed (Eck, 1983; Horvath & Meesig, 1996; Peterson, Mihajlovic, & Gilliland, 1984). Notably, investigators have reported that forensic evidence, when analyzed, does not contribute significantly to the investigative process, but is more often used for prosecutorial proceedings (Horvath & Meesig, 1996). Conversely, laboratory officials have suggested that forensic evidence is only moderately important to prosecutors' decisions, and is in fact most useful for confirming suspect involvement in crimes (Peterson, Mihajlovic, & Bedrosian, 1985). This was confirmed by Peterson, Ryan, Houlden, and Mihajlovic (1987), who found that scientific evidence contributed little to prosecutorial decision making and was less important than forensic scientists' testimony in terms of affecting sentence length. Moreover, findings suggest that the utility of forensic evidence may vary by criminal offense (Roman et al., 2008; Schroeder & White, 2009).

One early analysis of 2,700 criminal case files in four jurisdictions revealed that, when compared with cases lacking forensic material, clearance rates for burglary and robbery were 3 times higher when scientific evidence was analyzed (Peterson et al., 1984). Furthermore, the presence of forensic evidence increased the likelihood of incarceration and longer sentence length. More recent research has indicated the presence of scientific evidence, and DNA in particular, increases the probability of arrest and prosecution for property crimes (Roman et al., 2008; Zedlewski & Murphy, 2006). A multisite experiment revealed that cases in which DNA was analyzed within 30 days of collection were more likely to end in a suspect being identified and arrested, and twice as likely to be accepted for prosecution (Roman et al., 2008).

In contrast to the positive findings that have emerged from research on property crime investigations, studies indicate that forensic evidence plays a lesser role in the investigation and case progression of homicides (Baskin & Sommers, 2010; Briody, 2004; Schroeder & White, 2009). In Manhattan, DNA evidence was not present in the majority of homicides between 1996-2003, and analyzed evidence was generally unavailable during the course of investigations (Schroeder & White, 2009). In only 6.7% of cases was DNA evidence available to investigators before an arrest was made. Police investigated 93% of homicides without the aid of DNA. Moreover, the presence of DNA was not associated with a greater chance of case clearance and, in most cases, was associated with longer time to clearance. Unlike the sample of homicides Schroeder and White (2009) studied, the vast majority of homicides examined by

Baskin and Sommers (2010) had scientific evidence that was collected (97%), submitted (88.5%), and analyzed (81%). Despite the availability of forensic evidence, the results showed that such evidence did not significantly influence case outcomes.

A recent study examined the effect of forensic evidence on case processing outcomes among a sample of 4,205 criminal cases in five U.S. jurisdictions (Peterson, Hickman, Strom, & Johnson, 2013). Forensic evidence affected decision making at multiple stages of case processing when controlling for offense type (i.e., burglary, robbery, assault, rape, or homicide). Arrest was more likely in cases where forensic evidence was collected, while the analysis of forensic evidence was associated with case referrals to prosecutors, charges filed, trial conviction, and greater sentence lengths for offenders. Although illustrating the potential utility of forensic evidence in case processing, these findings do not provide information on how forensic material specifically influenced key decisions among criminal justice practitioners. Thus, while scientific evidence is believed to be an important tool in criminal investigations, research findings are mixed and its investigative value remains unclear.

The Use of Forensic Evidence in Sexual Assault Investigations

Interviews with sex crimes investigators have revealed factors officers consider most important to sexual assault investigations and shed light on the potential uses of forensic evidence (Gaensslen & Lee, 2001). According to investigators, the presence of biological evidence can confirm sexual contact or aid in suspect identification, but may be of little use in family and acquaintance cases where the suspect is known or likely to claim that contact was consensual (Gaensslen & Lee, 2001). Investigators have reported SAK evidence to be less important than factors such as victim and suspect credibility and cooperation, crime scene photographs, and witness statements (Gaensslen & Lee, 2001). This is consistent with studies highlighting the importance of victim credibility in successful sexual assault case completion (Rose & Randall, 1982; Spohn, 2008). It follows that the investigative value of forensic evidence may be contingent on the strength of other case characteristics, such as victim and witness statements. Moreover, the absence of analyzed forensic evidence during investigations requires that officers rely on other types of evidence to pursue cases (B. A. Campbell, Menaker, & King, 2015), potentially reducing the perceived importance of SAK results among investigators.

Indirect evidence about the utility of forensic evidence for sex crime investigations comes from studies that document how frequently evidence is collected, analyzed, and generates meaningful results. Overall, a relatively small portion of sexual assault cases involves the analysis of forensic material and, therefore, it may be expected that such evidence would have limited impact overall on case outcomes. In their study of 602 rape incident reports, for example, Peterson et al. (2010) found that SAKs were collected from 51% of victims. Thus, about half of the cases could not benefit from this evidence. In cases in which evidence was collected, 68% of collected material was not submitted for analysis. It is noteworthy that, of the evidence submitted to a lab for

analysis, almost half (42.3%) was not examined by laboratory staff (Peterson et al., 2010). Moreover, biological materials (e.g., blood, semen) were positively identified in only 7% of cases, demonstrating that the presence of viable DNA evidence in kits was low.

This is consistent with a study of 400 SAKs in Michigan that estimated the number of kits that would reach advanced stages of forensic analysis (Pierce & Zhang, 2011). Results suggested that approximately 54% of kits would be screened for biological evidence, and only 34% of kits would contain biological material foreign to the victim. There were a number of reasons why 46% of kits were unlikely to be submitted to a laboratory. These included the following: (a) the statute of limitations was exceeded; (b) the case was previously resolved via plea or conviction; (c) the item was not, in fact, a SAK; (d) the kit could not be located; (e) the sample was taken more than 72 hr after the assault; or (f) the victim was deceased. Similarly, research on sexual assault cases in San Diego and Denver revealed that between 30-53% of open cases had no DNA evidence (McEwen, 2011). Notably, among cases with DNA samples, between 26-54% went unanalyzed. In the end, only 15% of SAKs in Denver and 24% in San Diego yielded viable DNA profiles. Again, the implication is that the proportion of cases in which DNA can affect case outcomes is not large.

More direct evidence about the role of forensic evidence in sexual assault cases comes from research examining the effects of variables on case outcomes, such as the decision to unfound a case and to make an arrest. Studies have indicated that cases with medical evidence to support victims' claims are less likely to be classified as "unfounded" by police. Kerstetter (1990) discovered, for example, that police were more likely to find sexual assault cases and consider acquaintance rapes to be criminal when victims physically resisted attacks or had evidence of injury. Similarly, evidence of penetration and injury increased the likelihood of suspect interrogation in Frazier and Haney's (1996) review of 569 sexual assaults. Yet, it is possible that medical findings of injury serve primarily to enhance victim credibility and do not speak to the direct contribution of biological evidence in the founding of cases.

Research shows that victim credibility, victim-offender relationship, the identification of a suspect, and the seriousness of the sexual assault largely influence the likelihood of an arrest. The police decision to arrest is probable in cases where indicators of victim credibility (e.g., prompt reporting) are present (Bouffard, 2000; LaFree, 1981; Tasca et al., 2012), and the victim is cooperative with the investigative and judicial process (i.e., agreeable to a sexual assault exam, willing to prosecute; Bouffard, 2000; LaFree, 1981; Peterson et al., 2010). While cases with medical evidence of a serious assault are more likely to result in the arrest of a suspect (Bouffard, 2000; LaFree, 1981; Smith, 1986), there is little evidence to suggest that the presence of foreign DNA significantly increases arrest probability.

Collectively, the literature on forensic evidence in sexual assault cases has revealed that the presence of this evidence enhances the odds of charges being filed and cases moving to dispositions of higher outcomes, such as trial prosecution and severe sanctions (R. Campbell et al., 2009; Frazier & Haney, 1996; Kerstetter, 1990; McGregor, DuMont, & Myhr, 2002; Peterson et al., 2012; Rose & Randall, 1982; Spohn & Spears

1996). Tasca et al. (2012) found that the existence of “forensic evidence” in a sample of 200 sexual assault cases increased the chances a suspect was identified and subsequently arrested. Among a sample of 137 adult sexual assault cases, for example, those with positive DNA evidence were more likely to progress through the criminal justice system (i.e., be referred for prosecution or continue to trial; R. Campbell et al., 2009). These findings confirmed Rose and Randall’s (1982) conclusions, in that corroborating medical evidence was a significant contributor to decisions to prosecute sexual assaults (Rose & Randall, 1982). In a sample of 371 sexual assault cases in Los Angeles, SAK testing slightly increased the percentage of cases resulting in arrest (2% increase), filing of charges (5% increase), and conviction (11% increase; Peterson et al., 2012). According to R. Campbell and colleagues (2009), however, prior research has failed to account for interactions between investigators’ attitudes and the use of forensic evidence, making uncertain how investigator perceptions may affect the value assigned to scientific material.

In light of studies demonstrating that cases with SAK evidence are more likely to have charges filed than those without such evidence, and findings suggesting that juries anticipate scientific evidence for conviction (Beichner & Spohn, 2005), the importance of forensic evidence during the progression of sexual assault cases through the criminal justice system is clear. With the advent of databases allowing for storage of suspects’ personal and biological information, such as CODIS,¹ biological evidence extracted from SAKs *may* contribute to future cases and help resolve cases that have been inactivated due to a lack of evidence. Yet, we know very little about the influence of CODIS, including the percentage of cases that yield CODIS hits and the extent to which hits influence case outcomes (but see Gabriel et al., 2010; Peterson et al., 2012).

In a sample of 1,891 backlogged sexual assault cases that were submitted to SAK testing in Los Angeles, approximately 36% had viable biological material appropriate for upload to CODIS (Peterson et al., 2012). Among uploaded profiles, 49.6% resulted in offender hits, 30% ($n = 69$) of which were associated with unknown assailants. Subsequent analysis with a random sample of 371 backlogged kits revealed that SAK testing had no impact on arrest rates and did not significantly advance case processing. In contrast, a study of 110 CODIS hits in cold sexual assault cases found that a “legal remedy” (e.g., guilty plea or conviction by jury trial) occurred in about 30% of the cases and could possibly reach 50% as legal proceedings continue (Gabriel et al., 2010). Accordingly, additional research is necessary to develop greater understanding of the role forensic evidence plays in decision making at multiple stages of sexual assault case processing. This is particularly true with regard to police investigations. Research of this nature may enhance investigator effectiveness, inform policy decisions, and ultimately decrease attrition rates in sexual assault cases.

Method

The results described here are based on the analysis of interview data that were collected to understand the way sex crimes investigators report using forensic evidence and, in particular, evidence contained in SAKs. The qualitative analysis is not suited

for estimating the effects of DNA evidence on case outcomes. Rather, the results provide in-depth information about the extent to which investigators view SAK evidence as useful, and the circumstances in which it appears to be most and least beneficial. While SAKs may contain a variety of evidence, the analysis focuses extensively on the perceived utility of biological material in the kit and DNA testing results. There are advantages and disadvantages associated with the interview data examined here. Interview data represent the perspectives and opinions of investigators; they may not reveal the more objective value of forensic evidence potentially identified through quantitative analyses. Investigators' work experiences have likely shaped their perspectives on forensic evidence, and these views may not fully reflect the actual value this evidence holds. That being said, these data are valuable because they reveal insights that may not be captured through quantitative analyses. Interview data allow for a deeper understanding about how forensic evidence does or does not get used and about the circumstances in which it is most and least important.

Interviews were completed with 44 of 49 investigators from the Houston Police Department's (HPD) Sex Crimes Units in the summer of 2011.² The sample was comprised of 13 investigators from the Adult Sex Crimes Unit and 31 investigators from the Juvenile Sex Crimes Unit. HPD is the fifth largest police department in the United States, employing approximately 5,400 sworn officers and more than 1,600 civilian personnel (City of Houston, n.d.). Uniform Crime Report data show 771 forcible rapes were reported in Houston in 2011 (Federal Bureau of Investigation, 2011).³ The authors and one additional researcher conducted face-to-face semi-structured interviews in private rooms within the Sex Crimes Units. The interview protocol was developed with input from Sex Crimes investigators and supervisors and contained items related to investigator decision making and the influence of SAK evidence on investigations. Interviews lasted approximately 90 minutes.

To understand the role of forensic evidence in investigations, the current study employed a content analysis of interview data, in which two of the authors conducted three waves of coding to identify themes related to the research questions (Berg & Lune, 2012, Rubin & Rubin, 1995; Warren & Karner, 2005). The first two authors independently examined all interview items and selected those relevant to the research purpose. Both researchers independently identified 37 items for analysis. There were five additional items selected about which there was disagreement. Three of these were retained for analysis, resulting in a total of 40 items.⁴ Next, thematic categories summarizing the use of SAK evidence were extracted from the final item set, and coding protocols and categories were developed.

For each item selected for analysis, the two researchers independently categorized all responses using the coding protocol. To illustrate, one item asked, "How might evidence gathered in SAKs aid in the investigation and prosecution of cases least likely to result in arrest or prosecution?" Responses to this item produced nine thematic categories: evidence of sexual contact; evidence of contact between suspect and victim; child's statement to a doctor/nurse; SAK evidence is not helpful; SAK evidence is not helpful without victim cooperation/credibility; SAK evidence can produce CODIS hits; SAK evidence corroborates victim statements; SAK evidence

reveals additional information; and SAK evidence helps identify suspects.⁵ The participants' responses were multifaceted and could therefore include references to multiple thematic categories.

After responses to each item were coded, researchers compared results and resolved discrepancies in coding. This produced an interrater reliability of 92.67%. Results were grouped into four broad themes describing investigators' perceptions about the utility of SAK evidence. The following themes were developed: (a) the uses of SAK evidence during investigations, (b) characteristics of cases in which SAK evidence is least and most useful, (c) the impact of SAK evidence on the success of a case (i.e., arrest and successful prosecution), and (d) the importance of SAK evidence relative to other evidence. Finally, the three authors selected anecdotes from investigator interviews to illustrate the relevance of each theme.⁶

Findings

During informal discussions with sexual assault investigators and supervisors, it became clear that the nature of adult and juvenile sex crimes and investigations are different in important ways. For this reason, findings are discussed separately for adult and juvenile investigations. The following discussions highlight results that converge and differ across these types of investigations.

The Use of SAK Evidence During Investigations

Adult Sex Crimes Unit. Most investigators (62%, $n = 8$) in the Adult Sex Crimes Unit reported that SAK evidence is useful for investigations when it is present, although 38% ($n = 5$) indicated that results are rarely available during the investigative process, and are most useful in conjunction with CODIS. Investigators agreed, however, that compared with other physical evidence, including weapons, fibers, bed sheets, pictures, and clothing, SAK evidence is the most essential to case processing.

SAK evidence was described as being particularly important for identifying and confirming suspects (62%, $n = 8$), establishing victim credibility (54%, $n = 7$), and proving sexual contact occurred between the victim and suspect (31%, $n = 4$). As one investigator pointed out, SAK evidence "establishes and eliminates possible suspects . . . that's what the SAK is designed to do, point us in the right directions." Others concurred that SAK evidence is useful in cases with known and unknown suspects, as it establishes contact between suspect and victim and can be entered into CODIS to identify suspects for past or future investigations.

Notably, several investigators (54%, $n = 7$) reported using SAK evidence to determine whether the victim has been consistent in reporting and, more broadly, to corroborate the victim's statement. One investigator noted, the "SAK doesn't solve a case on its own, but it helps prove or disprove the story of the complainant or suspect." Three investigators (23%) said that the victim's statement to the nurse or doctor can be useful for comparison with statements made to investigators and responding officers, as inconsistencies in statements may decrease victim credibility. Moreover, the SAK

may provide evidence that supports the victim's story, such as the presence of semen in a particular location or trauma and bruising consistent with the victim's claims. Investigators explained,

I look at [the SAK] for consistencies in the statements between medical personnel and the police. I'm looking for signs of force and injuries, and hopefully there will be semen that matches the story and the suspect.

I use it to back up the complainant's story. Just because there is DNA in a kit doesn't mean she didn't have consensual sex, but the rape kit lets me know if there was trauma involved and leads me to know if there is a suspect that needs to be questioned.

SAK evidence was described as critical to establishing intimate contact between the victim and suspect. This can be valuable in cases where suspects deny being at the scene of the crime, or state that they do not know the victim or have not had sexual contact with him or her. Thus, according to investigators, SAK evidence can be a useful tool in assessing suspect credibility and gaining confessions or other information.

Juvenile Sex Crimes Unit. Consistent with investigators in the Adult Sex Crimes Unit, investigators in Juvenile Sex Crimes said that SAK and other physical evidence are generally unavailable during the course of an investigation and, in fact, juvenile sex crimes often lack biological evidence entirely. Indeed, 61% ($n = 19$) of investigators estimated that less than half of their cases in the past 12 months had SAKs that were collected and tested by the lab.⁷ Moreover, 45% ($n = 14$) of investigators reported never having SAK evidence during their investigations. As a result, investigators relied on other factors. For example, when asked to identify which pieces of physical evidence are most important for case processing, one investigator said "disclosure" and another said "the truth." A statement by another investigator also illustrates this point: "I would take a credible, reliable victim over physical evidence."

When physical evidence is available, however, investigators agreed that it has an important role in sexual assault investigations, particularly as a means to corroborate the victim's statement and establish contact occurred between the victim and suspect. Among investigators who had used SAK evidence in investigations, 77% ($n = 24$) reported using it to evaluate victim credibility and corroborate the victim's statement. Six investigators (19%) said that they primarily use SAK evidence to determine whether there is consistency in victim statements to law enforcement and medical personnel. Investigators explained that in situations where the victim and suspect offer different accounts of the event, the investigator will examine SAK evidence to determine which statement is most consistent with physical evidence.

Several investigators (35%, $n = 11$) reported that quicker receipt of SAK results would expedite investigations. Four investigators (13%) said that SAK evidence would provide additional information and potentially "change the course of the investigation." These investigators suggested that SAK evidence might direct investigators to the correct suspect, eliminate other suspects, and facilitate victim and suspect

questioning. Four additional investigators (13%) said that SAK evidence would be useful during suspect interviews, as it gives the investigator more detailed information about the event and “enhances the chances for a confession.” Overall, investigators indicated that cases often have contradictory elements that could be swiftly resolved by SAK evidence, and emphasized the importance of expediting case processing to protect victims from potential revictimization, prevent suspects from fleeing, and avoid additional assaults.

Of note, 23% ($n = 7$) of investigators believed the timeliness of receiving SAK results would *not* affect investigations, or would only be useful once the case went to trial. According to one investigator, SAK evidence “helps with the sentencing phase and court process . . . [I] can do an investigation without the kit.” Another investigator concurred, stating, “Unless it is a case with some special circumstances, [SAK evidence] doesn’t affect my investigation process at all. I usually have enough to prosecute before I get the SAK results back.” This is consistent with prior research, indicating that physical evidence more often affects the likelihood of conviction than investigations or arrests (see Horvath & Meesig, 1996, for a review).

Characteristics of Cases in Which SAK Evidence Is Most Useful

Adult Sex Crimes Unit. The majority of Adult Sex Crimes investigators (54%, $n = 7$) reported that SAK evidence is most useful in stranger cases where the identity of the perpetrator is unknown to the victim. There were, however, three investigators (23%) who said that SAK evidence is useful in all cases, and three others (23%) found it most useful in serial cases, cases where the suspect denies having sexual contact with the victim, and cases where penetration occurred, respectively. When asked about cases in which SAK evidence is most useful, investigators stated,

In stranger-on-stranger cases it is more useful because you know that they didn’t have consensual sex.

If you’ve got stranger-on-stranger it’s going to help you identify your suspect or at least acknowledge the fact that there’s some hope of finding the suspect. If it’s a known suspect you can always hit them with the evidence and get some story from them about whether it was consensual or not.

Relatedly, several investigators (31%, $n = 4$) reported that it “makes the most sense” to test SAK evidence when an aggravated sexual assault has occurred and when the victim is credible and cooperative. These investigators indicated that perpetrators who commit violent rapes and seriously injure victims are more likely to reoffend; thus, it is important to apprehend these individuals before they harm again. Furthermore, according to investigators, aggravated sexual assaults and cases with cooperative, credible victims are more likely to be accepted by the district attorney (DA) and result in viable biological evidence. Illustrating the importance of victim cooperation, investigators reported,

[The SAK is helpful with] definitely unknown suspects when we have no other evidence. Sometimes they have the potential to be a serial case. Also when there is a known suspect and the complainant wants to move forward.

When the complainant wants to pursue the case [the SAK] is useful. It would be more useful with the stranger-on-stranger cases.

Cooperative victims who are willing to prosecute.

Juvenile Sex Crimes Unit. It is noteworthy that when asked to describe the cases in which it “makes the most sense” to test SAKs, one fourth of investigators in the Juvenile Sex Crimes Unit said that SAKs should always be tested. Investigators also indicated that SAK evidence is most useful in cases with very young victims (29%, $n = 9$), followed by aggravated sexual assaults (19%, $n = 6$), stranger cases (13%, $n = 4$), and cases with timely reports (3%, $n = 1$). Investigators agreed that SAK evidence is helpful when victims are unable to verbalize their experiences, so that physical evidence is the only means for understanding and confirming the victimization. For example, investigators said that SAK evidence is useful with

Children who can’t articulate because of age or disabilities.

Very young victims. When there is a nonverbal child, either because of age or mental capacity.

In addition, investigators stated that physical evidence is useful for corroborating the victim’s statement and in cases where there are credibility concerns. Some suggested that it is not uncommon for sexual abuse to be falsely reported by parents, for example, to gain custody of their children in divorce situations. SAK and other physical evidence can aid in assessing claims. Relatedly, one investigator stated,

[SAK evidence] is important to help to prove that a sexual act did occur and to prove that the victim is credible and reliable.

In contrast to Adult Sex Crimes investigators, only 13% ($n = 4$) of investigators in the Juvenile Sex Crimes Unit believed SAK evidence to be most useful in stranger cases. This difference is likely explained by the nature of complaints received by the Adult and Juvenile Units. According to investigators, juvenile victims most often know their assailants, and consequently the unit has few cases where the perpetrator is unknown. Finally, many investigators reported that physical evidence, including but not limited to SAK evidence, is most useful when a timely report has been made and the case is “fresh,” or when viable evidence is most likely to be procured. As one investigator noted, SAK evidence is valuable in

any type of fresh case or any type of case where there is semen. Rape kits are very important in the fresh kits, but in the delayed cases they aren’t important.

Characteristics of Cases in Which SAK Evidence Is Least Useful

Adult Sex Crimes Unit. Investigators agreed (62%, $n = 8$) that SAK evidence is least useful in cases where the complainant is not credible (e.g., due to mental illness), uncooperative (e.g., does not want to pursue the case), or has admitted a false report. This may include unfounded cases in which victims admit a crime did not really occur, or those in which victims may be unwilling to cooperate with investigators and thus impede the progression of the investigation. Investigators described these cases as unlikely to progress in the system. When asked about cases in which SAK evidence is least useful, investigators reported,

Where we know the victim doesn't want to cooperate, I don't think we should test the kit. There's only a small chance for a case to get a [CODIS] hit.

In cases with an uncooperative complainant and where the evidence isn't strong that an assault even occurred. Or if the evidence from the original report says that the assault didn't occur then [the SAK] doesn't need to be tested.

Juvenile Sex Crimes Unit. Many Juvenile Sex Crimes investigators (39%, $n = 12$) said that evidence in kits should always be tested, because it "can only make the case stronger" and may provide evidence previously unknown to the investigator. Investigators noted that victims do not always disclose everything that occurred during the assault, and victims who have lied about the perpetrator or nature of the assault may have been pressured to do so by a relative or the assailant. Investigators suggested that forensic evidence can provide clues about the crime in cases with reluctant or dishonest complainants. These responses highlight important differences in terms of the nature of crimes involving juvenile and adult victims. Finally, these investigators reported that it is important to examine SAK evidence and enter DNA profiles into CODIS. Investigators stated,

There's no case [where] it doesn't make any sense. If you have the kit, it can only make your case stronger.

There are no cases where it wouldn't make sense. Only because there could be something there that you don't know. Maybe they are lying about the assault and who did it to them, but evidence could come back to suggest that someone else did it. Just because they lied about the person doesn't mean they weren't actually assaulted. Every kit should be tested.

However, investigators also gave examples of situations in which they believe SAK evidence is least useful, particularly in cases where viable DNA is unlikely. These include cases where reporting was delayed or penetration was not reported. Twenty-three percent ($n = 7$) of investigators said, for example, that testing SAKs is unnecessary if penetration did not occur. These individuals argued that testing SAKs in cases with allegations of touching or exposure, and no report of penetration, is a waste of

resources as DNA will not be present. As indicated above, however, some investigators observed that SAKs are occasionally useful in these cases when a victim is unwilling or uncomfortable disclosing more intimate contact. Investigators explained,

If it's a delayed case where there won't be any evidence, then I'd be perfectly fine saying that they shouldn't be processed. It's a waste of time if the case is three years old. I would still want the statements from the kit, but I don't think it should be sent to the lab to get processed. If you don't get any physical evidence there is no need to process it.

[The SAK is less useful] if they tell the doctor there was just touching over the clothes and no penetration occurred, or cases in which the doctor didn't collect any physical evidence.

Investigators also indicated that SAKs should not be tested in unfounded cases where there is a dishonest victim or no evidence a crime occurred. Several investigators suggested that testing SAKs in unfounded cases takes time and resources away from cases with corroborating evidence and cooperative victims—those cases most likely to result in prosecution. Although investigators recognized the benefit of DNA profiles for CODIS hits and future use with previously reluctant victims (i.e., victims who did not originally cooperate with investigators but later decide to), most stated the likelihood of these events is low.

The Impact of SAK Evidence on the Success of a Case

Adult Sex Crimes Unit. With regard to the impact of SAK evidence on case progression, investigators agreed that the presence of physical evidence will facilitate the success of a case, but, on its own, is not sufficient for arrest or prosecution. Investigators suggested that most cases cleared with an arrest have multiple components contributing to the strength of the case, including a credible victim statement, a known suspect, suspect statements, victim injuries, witness statements, and timely complainant report, in addition to physical evidence. These factors interact to augment or diminish probable cause. A victim appears more credible, for example, when physical evidence, such as injury or semen, is present to corroborate statements. Statements from two investigators illustrate the multiplicity of factors that contribute to an arrest:

Cases with a credible victim, where they've provided a sworn statement, there is physical evidence that some kind of sex took place. There would be bruising, or signs of force being used. Then we look at the credibility of the suspect. What his [suspect] statement was and whether or not it makes sense. The sexual assault kit would be completed and we know for sure that some type of sex has occurred between the suspect and the victim.

Cases where the complainant is credible. There is evidence to back up the complainant's story. The suspect has a criminal history, and either the suspect didn't give a statement or is running from us. If it is a stranger-on-stranger with semen in the rape kit, and it was run through CODIS and a hit came back on a suspect, that would be a strong case. If you have DNA it is huge to prove that the suspect was with the victim and that a sexual act occurred.

Although multiple factors affect whether an arrest is made, most investigators (54%, $n = 7$) agreed that a kit exists in most cases cleared with an arrest and has an important role in successful case completion. Investigators reported that SAK evidence contributes to arrest outcomes because it establishes contact between suspect and victim, and may provide clues as to whether a sexual assault occurred, such as indicators of trauma or violence. According to investigators, physical evidence is especially useful in cases where victim credibility is tenuous or the nature of the sexual contact was unclear. To be sure, investigators reported that cases least likely to result in arrest and prosecution are often characterized by the lack of a kit and other physical evidence. In addition, several investigators (31%, $n = 4$) reported that because DNA evidence in kits can be entered into CODIS, it aids in the future resolution of difficult cases by identifying suspects. When asked about the role of SAK evidence in the successful completion of a case, one investigator stated,

[SAK evidence] plays a very big role. It determines that it happened, and that strengthens the case. If I have a rape kit and the presence of semen, even if he denies that something happened, his credibility has gone. Also, if the suspect is unidentified, but there's semen present, a CODIS hit may come up.

Investigators agreed that SAK evidence is not only important for obtaining an arrest warrant from the DA and clearing a case with an arrest, but also for filing charges and obtaining convictions. SAK evidence was believed to be useful in resolving disparities in victim and suspect statements and providing convincing evidence for a jury. In addition, investigators noted that prosecutors value SAK evidence, which can be critical to plea bargaining or obtaining a conviction. Overall, investigators perceived SAKs to be important for identifying suspects, proving sexual contact, and entry into CODIS and, thus, as a potential contributor to the success of past, current, and future cases.

Juvenile Sex Crimes Unit. In contrast to investigators in the Adult Sex Crimes Unit, Juvenile Sex Crimes investigators reported that victim credibility plays the most significant role in the successful resolution of a case. The majority of investigators (65%, $n = 20$) reported that cases most often cleared with an arrest have a credible, articulate victim who gives consistent, detailed, and descriptive statements. Some investigators argued that the value of physical evidence varies with credible victim claims, such that physical evidence has little use without a credible victim statement. Indeed, three investigators (10%) said that SAK evidence is only helpful if the victim is credible and cooperative. As explained by investigators,

When you have physical evidence, that's good. The main thing is that the complainant is credible and reliable.

The problem is that, even with the rape kit and evidence, you can't put a three-year-old on the stand and know what they are going to say, how it's going to change because their concept of things is going to change. It's hard.

When asked which evidence most significantly contributes to the success of a case, one investigator reported,

Disclosure—a credible disclosure. Willing participants, including parents and a willing complainant. The child's statement is most important because they always know who is the suspect. The biggest piece of evidence is the child. This is why the child's credibility is so important, particularly depending on the age of the child.

Accordingly, the majority of investigators stated that the cases least likely to result in arrest and successful prosecution are those without a credible victim, victim and parent cooperation, a timely report, or known suspects. Investigators noted that young victims are more likely to have inconsistencies in their stories, or may be unable to fully articulate what occurred. In these cases, SAK and other physical evidence become increasingly important as a means to clarify events and substantiate the victim's statement. According to investigators, however, as the victim's age increases it becomes more important that his or her statements be consistent, detailed, and credible. Despite the emphasis given to victim credibility, investigators identified lack of victim or parent cooperation as the most significant obstacle to successful arrest and prosecution. Uncooperative parents may refuse to bring their child in for interviews, or may persuade their children to change their stories through threats and coercion. False allegations motivated by "custody battles" were a salient concern for investigators.

A number of investigators (39%, $n = 12$) said that the presence of physical evidence significantly contributes to the overall success of a case (i.e., the arrest and conviction of the perpetrator). Investigators stated that SAK evidence aids in the investigation and prosecution of difficult cases by corroborating the victim's statement (35%, $n = 11$), providing evidence of sexual contact (32%, $n = 10$), supplying information for CODIS (10%, $n = 3$), identifying suspects (6%, $n = 2$), and revealing additional information (6%, $n = 2$).

Despite the importance of victim credibility, several investigators (45%, $n = 14$) indicated that SAK evidence can play a significant role in clearing cases with an arrest. According to these investigators, SAK evidence may identify or eliminate suspects, and prove that sexual contact between the victim and suspect occurred. This is particularly important in cases with children, where victims may be intimidated or unable to fully articulate their victimization, and where most victims are too young to have had sexual experiences voluntarily. Investigators stated that medical evidence, such as the presence of DNA, genital injury, sexually transmitted diseases, or other trauma, also helps corroborate victim statements and increase credibility. One investigator reported that

[The SAK] shows us what was damaged or if there was any trauma at all. It's important to see if the medical exam corroborates the victim's statements. You can also look at STD testing. If the suspect has an STD, does the child as well?

Other investigators noted the utility of SAK evidence, when available:

Medical plays a 100% role. If you can get the test done in the 72-hour period, it opens up all information that you need to say that something happened here. Then you can take the rape kit and compare it to the suspect's DNA. So, it makes your case much simpler.⁸

If we have a rape kit it plays a major part. I have the DNA of the suspect. Then I ask them for a buccal swab, then I get the arrest. It puts the victim and suspect together and shows that something sexual occurred.

It would be confirming with physical evidence. You might have the circumstantial evidence, but with the rape kit you confirm evidence of sexual activity.

In addition, investigators reported that SAKs include victims' statements to doctors and nurses, and these can be compared with previous statements made by the victim. Investigators also noted that the reports of medical professionals can be useful during trial. In describing the utility of this form of SAK evidence, investigators reported,

Even in the rape kit [the victims] make a statement. So we would look at these statements compared to the other statements they make. There is a reason why we do it this way. There will be a statement from the patrol officer, then in the SAK, then the story they tell us when they come in. It is hard to lie consistently when the stories are spread out over time. If they tell the story the same over and over then we know that something happened. [The DA] wants the statement from the SAK, because then the DA can put the doctor on the stand.

The evidence helps because of the statement the complainant gives to the SANE [sexual assault nurse examiner] nurse. It's also important if there is any DNA in there because that proves that some type of sexual act occurred.

Overall, Juvenile Sex Crimes investigators agreed that SAK evidence facilitates arrest and successful prosecution when it is present. Investigators reported that physical evidence is primarily helpful in verifying contact between the victim and suspect, corroborating the victim's statement, establishing consistency in statements, and identifying suspects.

Summary

Interviews with sex crimes investigators suggest that we should temper our views about the utility of forensic evidence; it is not a magic bullet across the aggregate of cases. This evidence appears to have a limited impact during criminal investigations. Investigators indicated that other case elements are more critical, especially victim credibility. They reported that forensic evidence alone is not sufficient for case clearance, and that victims who lack credibility can undermine the value of forensic evidence. The findings suggest that evidence contained in SAKs is useful for corroborating victim statements, identifying suspects, establishing that intimate contact has occurred, and clarifying the nature of such contact. These uses of forensic evidence did not lead investigators to articulate that it is an essential tool for case resolution.

Discussion

Survey data show that pieces of forensic evidence in seemingly large numbers of criminal cases are collected but never tested (Pratt et al., 2006; Strom & Hickman, 2010). Some contend that unanalyzed evidence denies justice to victims (Human Rights Watch, 2009). This conclusion depends, at least partially, on the value that untested evidence holds for the resolution of cases in the justice system, about which there is still much to be learned.⁹ One purpose of this study was to document the utility of forensic evidence during the criminal investigation process. The data were unique in that case file information and case outcomes were not examined. Rather, sex crimes investigators provided qualitative details about the manner in which they use SAK evidence.

The results are consistent with other studies that have shown criminal investigators do not rely extensively on forensic evidence (Eck, 1983; Gaensslen & Lee, 2001; Horvath & Meesig, 1996; Peterson et al., 1984), and with studies that show lab analyses often do not produce results that are beneficial to investigations (Horvath & Meesig, 1996; Pierce & Zhang, 2011). Similar to the findings of Gaensslen and Lee (2001), investigators primarily rely on non-biological evidence, including victim and suspect credibility, cooperation, witnesses, photographs, and victim statements made to various actors, throughout the course of an investigation. These findings are consistent with prior research that has documented the significance of victim credibility for the prosecution of sexual assault cases (Beichner & Spohn, 2005; Rose & Randall, 1982; Spohn, 2008). Moreover, the findings suggest that forensic evidence alone is not sufficient for case clearance or prosecution. Subsequently, it appears that the utility of forensic evidence in sexual assault cases is dependent on the presence of other evidentiary factors such as victim credibility and witness statements.

Research on sexual assault cases indicates that forensic evidence is available in only a small portion of investigations, and this evidence is unlikely to influence the progression of a case (McEwen, 2011; Peterson et al., 2010; Pierce & Zhang, 2011). Parallel with these findings, investigators in the current study estimated that forensic evidence is available in less than 50% of cases during the course of an investigation. Despite the common lack of forensic evidence during investigations, investigators reported that, when available, SAK evidence can help expedite cases. It was reported that SAK evidence is most useful in combination with multiple factors, including timely reporting of the assault, credible victim statements, presence of injury, and victim cooperation. Forensic evidence is used to corroborate victim statements, identify or eliminate suspects, and establish contact between victim and suspect. Thus, the data support prior studies (e.g., Frazier & Haney, 1996; Kerstetter, 1990) that suggest SAK evidence serves as a tool to enhance victim credibility by establishing the presence of trauma and DNA foreign to the victim.

The current study makes a new contribution to existing findings through the bifurcation of investigators into adult and juvenile units. Prior research has focused solely

on adult sexual assaults or has failed to draw out distinctions between procedures in these cases (see Beichner & Spohn, 2005; Gaensslen & Lee, 2001; Tasca et al., 2012). The results presented here reveal important differences in the perceptions of the Juvenile and Adult Sex Crimes Units regarding the utility of forensic evidence. Juvenile Sex Crimes investigators reported that forensic evidence is frequently absent in sexual assaults against youth because of the nature of the assault (e.g., touch cases, indecency), and because juvenile sex crimes often lack timely report (i.e., within 72 hr of the incident). Conversely, Adult Sex Crimes investigators perceive SAK evidence to be more important for clearing cases with an arrest, for prosecutors to accept charges, and to corroborate victim statements made to the police.

Other differences were found in perceptions of the cases in which SAK evidence is most useful. Adult Sex Crimes investigators believed that SAK evidence is most useful in cases involving aggravated assaults and in stranger cases, whereas Juvenile Sex Crimes investigators believed that SAK evidence is most helpful when victims are too young to articulate details of the assault. Although noteworthy, these findings may be unique to this particular study, as other jurisdictions may not utilize investigators who specialize in juvenile and adult victim cases. Moreover, it is important to note that investigators' perceptions of the utility of forensic evidence may be influenced by their work experiences and may not reflect the more objective value of the evidence. The current analyses were explicitly intended to document investigators' perspectives as the individuals who utilize this evidence; their opinions are important because they shape the way this evidence is used. In short, the purpose was to capture investigators' views regarding the role and use of DNA evidence in sexual assault investigations.

Prior research has underscored the importance of victim credibility and cooperation in successful case completion (Rose & Randall, 1982; Spohn, 2008). The present findings revealed an interaction between SAK evidence and victim credibility, such that investigators' perceptions about the value of SAK evidence depend on assessments of victim credibility. Additional research examining police discretion in evaluating victim credibility may inform efforts to develop training and education for investigators regarding victim behavior and traumatic responses (R. Campbell, 2012; B. A. Campbell et al., 2015; Lonsway, Welch, & Fitzgerald, 2001). Such training may enhance the accuracy of victim credibility assessments and help investigators understand victims' behavioral reactions to trauma and ultimately use forensic evidence more effectively.

There is a need for a nuanced understanding of the importance of victim credibility and its impact on the investigative process. Studies have suggested that investigators' emphasis on victim credibility can be understood as part of a "downstream orientation" of justice, where investigators anticipate the case characteristics believed to be significant to prosecutors and important to conviction (B. A. Campbell et al., 2015; Frohmann, 1991, 1997; Spohn & Tellis, 2012). Other research has indicated that victim credibility is an evidentiary factor that augments or diminishes probable cause (Gaensslen & Lee, 2001). In light of these findings

and those of the current study, which imply that the perceived value of forensic evidence is proportional to victim credibility, it is essential that future research disentangle these relationships and clarify the role of victim credibility in sexual assault cases.

The findings described here indicate that policy makers should be aware that mandating and encouraging more comprehensive testing may not generate, by itself, the intended results. Some jurisdictions (e.g., Los Angeles, New York, Texas) have instituted comprehensive testing policies (Human Rights Watch, 2009; OVAW, 2010). These policies, in the aggregate, may have a minimal impact on investigations of sexual assaults, particularly without planning and the commitment of additional resources (see OVAW, 2010). Jurisdictions should be prepared to invest in the additional resources that may be required to enhance the outcomes of comprehensive testing. The following examples illustrate what may be required.

It will be important to ensure that labs are adequately staffed with personnel to review testing results and upload profiles into CODIS. More comprehensive testing will lead to increased demands on lab staff to screen and test evidence, to review test results obtained from outsourced labs, to conduct quality assurance testing, and to upload profiles to CODIS. Labs must also be equipped with high-quality information management and communication technologies, such as the Lab Information Management System (LIMS; see Nelson, n.d.). These technologies will ensure that testing results and CODIS hits are effectively communicated to the justice system actors who can use results and allow labs to effectively monitor the processing of evidence.

Next, jurisdictions should be prepared to develop and offer training for investigators and prosecutors in potentially new methods for using SAKs and results from SAK testing. For instance, investigators must understand how SAK evidence and DNA testing results can be used to understand the validity of a consent defense. Relying almost exclusively on DNA testing results to assist the investigation of stranger cases will limit the impact of forensic testing (Police Executive Research Forum, 2012). Prosecutors must be aware of the ways SAK evidence and DNA testing results might be used more broadly, such as enhancing sentences for offenders and at parole hearings when the statute of limitations has expired in a specific case but a CODIS hit is returned. In addition, more comprehensive testing may produce greater numbers of CODIS hits and require investigations into cold cases. Police agencies will need to be prepared for the complex demands of investigating these cases (Davis, Jensen, & Kitchens, 2011; Gabriel et al., 2010). Finally, the current study highlighted differences between adult and juvenile investigators' perceptions. A more nuanced understanding of the varying benefits that SAK evidence and DNA testing have in different types of cases may improve investigations. It may be possible for training to incorporate specific practices for the use of evidence in adult victim compared with juvenile victim cases. Testing evidence in greater numbers of SAKs must be accompanied by investments into ensuring testing results will be effectively utilized.

Appendix A

Coding Protocol With Thematic Categories.

How might evidence gathered in SAKs aid in the investigation and prosecution of cases least likely to result in arrest or prosecution?

| Themes | Juvenile investigators | Adult investigators |
|--|-----------------------------------|--------------------------|
| Evidence of sexual contact | 104; 108; 115; 121; 127; 131; 132 | 112; 129 |
| Evidence of contact between suspect and victim | 110; 114; 127; 134 | 147 |
| Child's statement to doctor/nurse | 104; 105; 125; 136; 141; 146s | |
| Not helpful | 136 | 109 |
| Not helpful w/o victim cooperation/credibility | 117s; 137; 144; 145s; 146s | |
| CODIS | 118; 119; 139s; 149 | 107s; 122; 130; 143; 148 |
| Corroborate victim statement | 108; 111; 114; 121; 131; 134 | 126; 129; 143; 147 |
| Reveal additional information | 120; 132; 140s | 124s; 147; 148 |
| Identify suspect | 125; 128 | 124s |
| No response | 101; 102 | 103s |
| Other | 106; 133 | 138 |

Note. SAK = sexual assault kit; CODIS = Combined DNA Index System.

- 106 The problem is that even with the rape kit, and evidence, if you can't put a three-year-old on a stand and knowing what they are going to say, how it's going to change because their concept of things is going to change, it's hard. When they are older they comprehend the difference between a truth and a lie, then you can do something. But with a three-year-old it's hard, nobody wants to put their three-year-old through a trial.
- 133 What we need from the parents is the forensic interview with the victim, we need an outcry, their next step is to get a medical done. Then they'll ask questions related to the sexual abuse. If they disclose then, the testimony can be used in court. If you get everything you need, then you have enough to file.
- 138 They couldn't do any better. They do more than what I think they should do, especially County Hospitals. These forensic nurses are very well trained and they do a very good job. Probably the best in the country.

Appendix B

Interview Themes and Items

1. The use of sexual assault kit (SAK) evidence during investigations
 - a. In general, what role does physical evidence (including, but not limited to rape kit evidence) play in sexual assault case investigations?
 - b. What pieces of physical evidence are most important for case processing?

- c. How important is rape kit evidence compared with other physical evidence?
- d. How do you use rape kit evidence during your investigations?
- e. During the course of an investigation, can you explain how the timeliness of getting rape kit test results might affect the investigation?
- f. How important are rape kit test results for identifying suspects and making arrests?
- g. In the past 12 months, about what percentage of sexual assault cases that you investigated had rape kits that were collected and tested by the lab?
- h. Describe the role that rape kit evidence plays in inactive case investigations.
- a. Would testing more rape kits be helpful to sexual assault investigations?
 - o Why/how so/in what ways?
 - o Why not?

Example Quote: “[The SAK] establishes and eliminates possible suspects . . . that’s what the SAK is designed to do, point us in the right directions. It helps in known cases and unknown suspects.”

2. Characteristics of cases in which SAK evidence is least and most useful

- a. In what kinds of cases is evidence in rape kits most useful?
- b. Are there particular offense characteristics (e.g., between strangers) that make some types of physical evidence more critical during the investigation?
- c. In which kinds of cases does it make sense to NOT test SAKs? Why?
- d. In which kinds of cases does it make the most sense to test the kits? Why?
- e. In a triage approach, what cases should be given highest priority for testing?
- f. How about the rape kit in inactive cases?
- g. In your opinion, does it make sense to test these kits? Why or why not?

Example Quote: “Any type of fresh case or any type of case where there is semen. Rape kits are very important in the fresh cases but in the delayed cases then they aren’t important.”

3. The impact of SAK evidence on the success of a case (i.e., arrest and successful prosecution)

- a. In your experiences, what are the characteristics of sexual assault cases that are most often cleared with an arrest?
- b. What role does evidence gathered in rape kits play in these kinds of cases?

- c. In your experiences, which types of sexual assaults are least likely to result in arrest and successful prosecution?
- d. What are the obstacles that you encounter in these types of cases?
- e. How might evidence gathered in rape kits aid in the investigation and prosecution of these kinds of cases?
- f. What pieces of evidence in sexual assault cases are most critical for district attorney (DA) to charge? To get a conviction?
- g. What are the “decision rules” that you follow in deciding to present your case to the DA when requesting to make an arrest?
- h. When you decide a suspect should be arrested, what case characteristics or evidence need to be established for you to present a really strong case to the DA?
- i. What are the basic elements the DA’s office requires for them to issue an arrest warrant in sexual assault cases?

Example Quote: “Cases with a credible victim, where they’ve provided a sworn statement, there is physical evidence that some kind of sex took place. There would be bruising, or signs of force being used. Then we look at the credibility of the suspect. What his statement was and whether or not it makes sense. The sexual assault kit would be completed and we know for sure that some type of sex has occurred between the suspect and the victim.”

4. Importance of SAK evidence relative to other evidence

- a. In general, what role does physical evidence (including, but not limited to rape kit evidence) play in sexual assault case investigations?
- b. What pieces of physical evidence are most important for case processing?
- c. How important is rape kit evidence compared with other physical evidence?
- d. What pieces of evidence in sexual assault cases are most critical for DAs to charge? To get a conviction?

Example Quote: “Photos of injuries and medical records that document the injuries are the most important. The next most important would be whether the reports that the victim gives to a nurse and the patrol match up. Then whether they [the investigators] find the DNA of the suspect on the victim and whether the suspect can be identified or not by this.”

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Authors' Note

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Notes

1. The Combined DNA Index System (CODIS) is a national DNA database system, containing DNA information for persons convicted of homicide, sexual assault, aggravated assault, burglary of a habitation, or an offense or conviction of which registration as a sex offender is required. CODIS also contains DNA profiles believed to be from perpetrators and obtained from victims, clothing, SAKs, and crime scenes (Houston Police Department, 2012).
2. Five investigators were unable to participate in the interviews. Four of these investigators were on vacation, and one investigator was assigned to an interagency task force and was unavailable during data collection.
3. The Uniform Crime Report replaced its definition of forcible rape in 2012 with a broader measure of sexual assaults. The new definition will more accurately capture sex offenses.
4. After reviewing these five items, the authors agreed that investigator responses to two of the items were not pertinent to understanding the role of forensic evidence in investigations. Accordingly, these two items were removed from the analysis.
5. See Appendix A for an example of the coding protocol used to analyze responses to this item.
6. See Appendix B for a listing of items associated with each theme.
7. Four investigators did not respond to this question because they were supervisors and did not carry an active caseload during the data collection period. An additional nine investigators did not provide percentages, and instead provided the number of cases with SAKs collected and tested by the lab. Responses ranged from 2-40 SAKs collected and tested in the past year.
8. The two major hospitals that collect SAKs in Harris County use a 96-hr guideline and will complete SAKs beyond 72 hr. Officers who refer to a 72-hr period of time may not be aware of changes to the window of time in which SAKs are collected.
9. It is important to recognize that "justice" for victims has multiple meanings, and that the value of screening and testing evidence in SAKs can achieve important outcomes other than aiding in the successful prosecution of criminal cases. For example, testing evidence may provide a degree of closure to victims and demonstrate that the justice system has taken steps to resolve the case.

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Author Biographies

Tasha A. Menaker has an MA in clinical psychology and a PhD in criminal justice from Sam Houston State University. She is currently Sexual Assault Response Manager at the Arizona Coalition to End Sexual and Domestic Violence. Her research focuses on trauma and posttraumatic growth, sexual and domestic violence, and the commercial sexual exploitation of women and girls. Her recent work has appeared in *Journal of Interpersonal Violence*, *Journal of Criminal Justice*, *Victims and Offenders*, and *Feminist Criminology*.

Bradley A. Campbell is an assistant professor in the Department of Criminal Justice at the University of Louisville. He received his PhD from Sam Houston State University in 2015. His research interests are focused on policing, particularly police investigations, organizations, responses to victims, and use of force. His work has recently appeared in *Journal of Criminal Justice*, *Police Quarterly*, and *Policing: An International Journal of Police Strategies and Management*.

William Wells is a professor in the Department of Criminal Justice and Criminology at Sam Houston State University and director of Research in the Law Enforcement Management Institute of Texas. From 2012 to 2015, Prof. Wells served as the lead research partner on a National Institute of Justice action-research project that studied the problem of unsubmitted sexual assault kits in Houston and implemented multiple reforms. He collaborated with the Houston Police Department on an experiment that tested different methods of administering photo spreads to witnesses in 2013. His published research has recently appeared in the *Proceedings of the National Academy of Sciences*, *Journal of Quantitative Criminology*, *Journal of Research in Crime & Delinquency*, and *Justice Quarterly*.