ViCAP Usage and Viability for Sexual Assault Investigations:

Findings from a Survey of SAKI Sites *

Michaela E. Benson-Goldsmith[1], Brad Campbell[2], Tara N. Richards[1], and Justin Nix[1]

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[1] School of Criminology and Criminal Justice, University of Nebraska at Omaha, NE USA
[2] Department of Criminal Justice, University of Louisville, KY USA

Corresponding Author: Michaela E. Benson-Goldsmith, School of Criminology and Criminal Justice, University of Nebraska at Omaha, 218 CPACS, 6001 Dodge Street, Omaha, NE 68182, USA. Email: michaelagoldsmith@unomaha.edu

Abstract

In 2018, the Bureau of Justice Assistance Sexual Assault Kit Initiative (SAKI) began mandating SAKI funding awardees submit eligible cases to the Violent Criminal Apprehension Program (ViCAP), a database which allows for the identification and analysis of serial violent crimes. Limited research has examined the use of ViCAP by SAKI sites or SAKI site personnels' perceptions of ViCAP. To address this gap, we conducted a survey of SAKI sites (*N*=24) to identify trends regarding ViCAP personnel and training, ViCAP case entry and eligibility processes, and barriers/opportunities to increase use of ViCAP. Findings show most sites are entering cases into ViCAP, but the utility of ViCAP as an investigatory tool is hindered by structural barriers in hiring/retention and training which prevent SAKI sites from fully leveraging ViCAP's resources.

Keywords: ViCAP, SAKI, Police Investigation, Law Enforcement

The Violent Criminal Apprehension Program (ViCAP) was created by the Federal Bureau of Investigation (FBI) in 1985 to improve communication and cooperation between law enforcement agencies and aid in the investigation and apprehension of violent serial offenders (Haskins, 2019; Howlett et al., 1986). ViCAP is a national database containing criminal case information (e.g., modus operandi, suspect and victim characteristics, situational factors) to connect serial violent offenders across incidents through characteristics of their crimes (Bennell et al., 2012; Powers & Mills, 2018). Additionally, FBI analysts at ViCAP can aid local agencies in developing timelines for cases, sending nationwide alerts for suspects, and making additional connections with cases from other agencies. Thus, ViCAP offers a mode for linking cases based on unique characteristics of the crime, in a similar vein to the Combined DNA Index System (CODIS) which connects serial crimes based on DNA evidence. ViCAP's utility, like that of CODIS, is dependent on the quality of data entered in the system and the number of agencies both entering case information and searching the system for similar cases (Bennell et al., 2012; Haskins, 2019).

Participation in ViCAP and CODIS is voluntary for law enforcement agencies, resulting in inconsistent use and a strong reliance on establishing buy-in from agencies to encourage widespread utilization (Howlett et al., 1986). CODIS has received considerable attention in both researcher and practitioner realms. Since its creation in 1998, the number of DNA profiles in CODIS has exceeded 20 million (FBI, 2021), leading to an ever-increasing ability to link offenders across cases and jurisdictions (Campbell et al., 2018). ViCAP, however, is still rarely discussed in published research, and knowledge on the system varies greatly from jurisdiction to jurisdiction. Haskins (2019) points to "the [limited] number of local and state agencies using

ViCAP" as a major barrier preventing ViCAP from being the "robust investigative tool" it was meant to be (p. 15).

The Bureau of Justice Assistance's (BJA) Sexual Assault Kit Initiative (SAKI) grant program provides funds to law enforcement agencies to test previously untested sexual assault kits (SAKs) and support new investigatory leads. In 2018, SAKI mandated that grantees submit all eligible sexual assault cases to ViCAP to "increase the chances of identifying and apprehending violent serial offenders who pose a serious threat to public safety" (BJA, 2018, p. 8). The SAKI-ViCAP partnership may also strengthen ViCAP's investigative power by increasing the number of agencies using ViCAP and the number of violent crimes entered in the system. ViCAP has been primarily used for homicide cases, but it may be particularly useful in sexual assault cases because victims are often alive and able to provide details about the offender or incident (Melton, 2020; Powers & Mills, 2018). ViCAP can serve as an additional tool to identify serial sexual offenders as only about half of sexual assault kits produce DNA profiles eligible for CODIS (Melton, 2020; Power & Mills, 2018).

There has been limited examination of the use of ViCAP in sexual assault investigations (c.f. Perry et al., 2018; DOJ, 2022). Following the 2018 SAKI-ViCAP mandate, it is unclear whether SAKI sites are using consistent eligibility requirements for selecting cases, using ViCAP as an investigatory tool, or receiving sufficient training regarding ViCAP. As such, further research on the SAKI-ViCAP partnership is needed. To begin addressing these gaps, we conducted a national survey of SAKI sites regarding their use of ViCAP for sexual assault cases.

Methods

Sample

The sample consisted of the 64 SAKI sites across the U.S., identified from the SAKI Training and Technical Assistance (TTA) website (SAKI, 2023). Contact information for the SAKI sites was collected from the SAKI training and technical assistance website, individual agency websites, and personal communication with the BJA). The survey was developed in Qualtrics and distributed to SAKI sites' point-of-contact through email. We received 37 responses (57.8% response rate); however, 13 were missing substantial information (over half of the questions were left unanswered). After removing incomplete submissions, the final sample consisted of $N = 24$ SAKI sites (37.5% completion rate).

The age, type, and size of sampled SAKI sites were diverse (See Table 1). Sites had been working on SAKI projects from three to eight years, with an average of 5.70 years (σ=1.69). Most respondents were from local/city-level SAKI sites, while six responses came from county-level and state-level SAKI sites each. SAKI sites served jurisdictions ranging from 650 to 10,000,000 citizens, with an average size of 1,839,148 citizens (σ=2,909,322; M=665,000). Finally, sites received between $219,496 – $9,897,530 in SAKI funding ($\bar{x}$=$4,060,114, σ=$3,112,972, M=$3,076,921) and the number of previously untested SAKs at each SAKI site ranged from 22 to 6,000 untested SAKs, with an average of 1,791 previously untested SAKs at each site (σ=1,594; M=1,350).

Survey Questions

The survey explored three research questions: (1) how are SAKI sites using ViCAP and what trainings have they received, (2) what are SAKI sites' perceptions of ViCAP as an investigative tool, and (3) what barriers prevent ViCAP use? Survey questions were developed based on prior interviews of two SAKI sites and consultation with BJA SAKI and ViCAP leadership. We asked open- and closed-ended questions regarding case entry in ViCAP, ViCAP

personnel and training, use of ViCAP as an investigatory tool, and the barriers and opportunities to increase use of ViCAP.

Survey Procedure

The Qualtrics survey was distributed through email to SAKI sites in September 2023 and follow-up email reminders were sent weekly for four weeks. SAKI site contacts were informed about the purpose of the survey (i.e., to gather information on how SAKI sites are using ViCAP and identify ways in which the ViCAP system and training can be improved for investigators and SAKI teams) and asked to identify the best person to complete the survey. Participants were also informed that the survey was approved by BJA SAKI and ViCAP representatives, their participation was voluntary, and all responses would be kept confidential. The research was determined to be a program evaluation and exempt from review by the first author's university Institutional Review Board.

Results

ViCAP Use and Training

To begin, we asked respondents whether their site had designated ViCAP personnel. Most sites (*n*=21, 88%) reported having either part- or full-time personnel designated for ViCAP case entry under SAKI, with sites having an average of 1.79 (σ=2.08) ViCAP personnel (See Table 1). Across all responding sites, a total of 43 personnel dedicated to ViCAP entry were identified. As Figure 1 depicts, these personnel were predominantly law enforcement or retired law enforcement (*n*=28, 65%), but 16% (*n*=7) were data or crime analysts, 12% (*n*=5) were SAKI coordinators, and 7% (*n*=3) held another position (e.g., student intern, administrative assistant). Most respondents reported that their ViCAP entry personnel had received training from BJA (*n*=22, 61%). A third of respondents (*n*=8, 33%) reported learning about the ViCAP training from

a SAKI TTA provider, 25% (*n*=6) from BJA, and 8% (*n*=2) from another SAKI site. Further, one site reported attending a ViCAP training at a regional conference, while 8% of sites (*n*=2) reported learning about the training directly from ViCAP.

Next, we asked sites whether they were entering cases into ViCAP; four sites (17%) indicated they had not yet entered cases in ViCAP. Respondents were asked how their site determined which SAKI cases were eligible for entry in ViCAP. Reponses suggested wide variation in decision-making processes across sites; however, only 18 of 24 sites (75%) responded to this question. More than one in three sites (*n*=9, 38%) indicated that cases were chosen for ViCAP if they involved an unknown/stranger suspect, were committed by a known serial offender, or there was something "unusual" about the case. In addition, 25% of sites (*n*=6) indicated that all cases that met the "ViCAP criteria or guidelines" were entered, while 13% of sites (*n*=3) reported that *all* SAKI cases were entered into ViCAP. Specifically, one site noted in an open-ended response: "SAKI cases are sexual assaults, they should all be entered."

ViCAP as an Investigatory Tool

Over half of respondents somewhat or strongly agreed that *ViCAP is a useful investigatory tool*; 25% (*n*=6) were neutral and one somewhat disagreed (see Figure 2). One site noted, "We believe ViCAP is a valuable resource" while another explained, "ViCAP is a great tool that would be much more useful if there was greater participation across the country." Of note, only one-third of responding sites indicated they had received assistance from a ViCAP crime analyst. One of these sites noted, "Working with the BJA ViCAP Analysts has proven to be effective in helping us build strong cases." Several sites questioned whether the time and resources needed to enter cases into ViCAP was worthwhile. One site noted, "Data entry for cases is long and doesn't seem particularly helpful to [criminal sexual conduct] cases. Most of

our cases have nothing unusual about them making ViCAP unnecessary." Another noted, "Older cases such as those processed through SAKI are less likely to benefit from ViCAP due to lack of entry from other agencies." Indeed, the number of "hits" for cases in ViCAP was low, with only two sites (8%) indicating they had received a "hit" from ViCAP (1 out of 150 cases entered on average) (See Table 1).

Barriers and Opportunities to Increase ViCAP Use

All sites reported barriers to ViCAP usage. Personnel shortages were a barrier for nearly half (*n*=11, 46%) of responding sites, followed by personnel turnover (*n*=6, 25%), and insufficient resources (*n*=5, 21%) (See Table 2). For example, one site noted:

> *Our site does not have positions funded for ViCAP through SAKI…[cases are] entered by the state's ViCAP specialist, but we have not been able to share information or receive information from them.*

Other sites reported, "Our site has been attempting to hire a crime analyst for a few months… [who] will be responsible for entering cases into ViCAP," and "We have two new employees that will assist in ViCAP, but their [Law Enforcement Enterprise Portal (LEEP)] accounts have not come through. It has been 2 months since their applications were completed." Half of respondents (*n*=12) agreed that additional personnel to enter information would be helpful to increase ViCAP usage, while 42% of respondents (*n*=10) agreed that overtime pay for case entry would be helpful (See Figure 3).

Problems obtaining relevant information to enter in ViCAP were noted by 25% of sites (*n*=6). One site reported, "The lack of data is a tremendous hinderance to entering quality data into ViCAP." Notably, inadequate/ineffective training was *not* identified as a barrier to ViCAP usage. However, lack of training was noted by 17% of sites (*n*=4), lack of familiarity with or

clarity regarding case eligibility requirements by 17% (*n*=4) and 13% (*n*=3) of sites, respectively. Approximately one-third of respondents agreed that training from SAKI (*n*=8, 33%) or BJA (*n*=7, 29%) would be helpful to increase ViCAP usage, while 25% (*n*=6) agreed that better access to case information would be helpful.

Discussion

These findings show most respondents from SAKI sites view ViCAP as a helpful investigatory tool; however, several sites questioned whether ViCAP was worth the resource investment for SAKI cases. SAKI sites indicated they had received few ViCAP "hits." It may be challenging to gain support and involvement from agencies/personnel when the effort required to enter each case does not appear to reap substantial benefits, particularly in comparison to other databases like CODIS. However, this line of thinking can lead to a self-fulfilling prophecy, as the ability of ViCAP to identify links between cases is hindered by a lack of participation across agencies (e.g., lower numbers of offenses/offenders in ViCAP). A lack of participation has been a consistent barrier for ViCAP, but utilization has increased over time, due at least in part to initiatives like the SAKI-ViCAP partnership (Haskins, 2019; Howlett et al., 1986; Witzig, 2003). Of note, however, findings suggest assistance from ViCAP analysts is under-utilized by participating sites and may be due to a lack of awareness regarding the investigative resources available through ViCAP.

ViCAP is first and foremost a law enforcement tool and was designed based on law enforcement terminology and case files, a potential concern with more than one-third of designated ViCAP entry personnel being from *non*-law enforcement backgrounds. Additionally, to gain access to and use ViCAP (e.g., searching ViCAP for connected cases and triangulating with other law enforcement data sources), personnel must receive permission and access to

LEEP. In open-ended responses, sites described difficulties obtaining these permissions and indicated approval sometimes took several months, during which ViCAP entry was reduced or stalled.

Finally, sites viewed the quality of available training positively, but indicated that additional training access would be helpful. The BJA offers extensive ViCAP training online, at annual SAKI grantee meetings, and for jurisdictions that request it, but BJA indicated they "struggle to fill seats at some of these events" (A. Williamson, personal communication, July 11, 2024). A ViCAP newsletter, Plugged In, is also regularly shared with SAKI sites describing available training, how to contact regionally-assigned ViCAP analysts, and tips on using the system. Considering concerns about buy-in for ViCAP and staff turnover, personnel responsible for using ViCAP may not know about or be motivated to seek out these trainings. To address this, SAKI sites should prioritize ViCAP as a part of their organizational or investigative processes and encourage and/or require all SAKI staff to attend the BJA's ViCAP trainings.

While research on the use and effectiveness of CODIS has proliferated (Campbell et al., 2018; Lovell et al., 2020; Wells et al., 2019), similar research on ViCAP has been limited. Our study revealed that some SAKI sites have not yet entered cases into ViCAP while others are fully leveraging ViCAP, and that sites perceive a lack of buy-in and structural constraints in staffing and training as barriers to ViCAP usage. More research is needed to unpack what predicts SAKI sites' level of ViCAP utilization (e.g., organizational size, jurisdiction type, funding level) and whether addressing these factors can modify site behavior and improve ViCAP utility for sexual assault investigations.

While the present study used novel survey data to provide an initial picture of the SAKI-ViCAP partnership, there were limitations. First, the completion rate for the survey was 37.5%,

so findings may not be representative of all SAKI sites. Additionally, some sites skipped questions on the survey, resulting in missing data; however, this data was not missing in any systematic way. Further, while we requested SAKI site personnel most familiar with their site's use of ViCAP complete the survey, some sites may not have heeded our request.

Conclusion

While some SAKI sites are not fully leveraging ViCAP, others have embraced ViCAP and indicate a desire to see greater involvement across SAKI sites and law enforcement agencies. Staffing and resource limitations remain major barriers to increased use of ViCAP, particularly personnel availability, turnover, and time to enter cases. Sites suggested increased support and training from SAKI/ViCAP could ease case entry burdens, reduce turnover, and increase use of ViCAP for sexual assault investigations. The ViCAP-SAKI partnership has potential to increase cross-jurisdictional collaboration in sexual assault investigations. However, the 2018 SAKI mandate to enter cases into ViCAP alone may not accomplish this goal. Greater buy-in and participation from SAKI sites across the country is needed. Future research should continue to evaluate the use of ViCAP among SAKI sites to better understand how ViCAP can be used for sexual assault investigations.

Declarations

The authors have no competing interests to declare that are relevant to this article. No funding was received to assist with conducting this study or preparation of this manuscript.

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Tables

Table 1.

Descriptive Statistics of Responding SAKI Sites (N = 24 sites)

	Missing(%)	*n*(%)	$\bar{x}(\sigma)$ [Range]
Site Age (in years)	1 (4.2)		5.70(1.69) [3–8 years old]
U.S. Region	0		
West[a]		5 (20.8)	
Midwest		7 (29.2)	
South		10 (41.7)	
Northeast		2 (8.3)	
Jurisdiction Type	1 (4.2)		
Local/City		11 (45.8)	
County		6 (25.0)	
State		6 (25.0)	
Population Size	1 (4.2)		1,839,148 (2,909,322) [650 – 10,000,000]
SAKI Funding[b]	0		$4,060,113.79 ($3,112971.70) [$219,496 – 9,897,530]
Number of Untested SAKs	4 (16.7)		1,791.15 (1,594.37) [22 – 6,000 SAKs]
Site Entering into ViCAP (Yes)	2 (8.3)	18 (75.0)	
Number ViCAP Entries	2 (11.1)		150.06 (250.20) [1 – 776 Entries]
Number ViCAP Hits	2 (11.1)		0.13 (0.35) [0 – 1 Hits]
Has Designated ViCAP Entry Personnel (Yes)		21 (87.5)	
Number of Designated ViCAP Personnel			1.79 (2.08) [0 – 10 Personnel]
Received Assistance from ViCAP Analyst (Yes)	11 (45.8)	8 (33.3)	
Received ViCAP training		22 (61.5)	

Notes: ViCAP = Violent Criminal Apprehension Program, SAK/I = Sexual Assault Kit/Initiative.

[a] Alaska and Hawaii are counted in the Western region.

[b] Source: https://www.sakitta.org/sakisites/

Table 2.

SAKI Site Perceptions of Barriers to ViCAP Usage.

What are the barriers to ViCAP usage?	*n*	*%*
Personnel shortage	11	45.8
Personnel turnover	6	25.0
Obtaining relevant information from eligible cases	6	25.0
Insufficient resources	5	20.8
Lack of training	4	16.7
Unfamiliarity with case eligibility requirements	4	16.7
Unclear case eligibility requirements	3	12.5
Inadequate or ineffective training	0	0.0
Other barriers (e.g., limited access for rural agencies, stringent ViCAP eligibility criteria, lack of participation by other agencies)	8	33.3

Note: Categories are not mutually exclusive. Two sites (8.3%) did not respond to this question.

Figures

Figure 1.

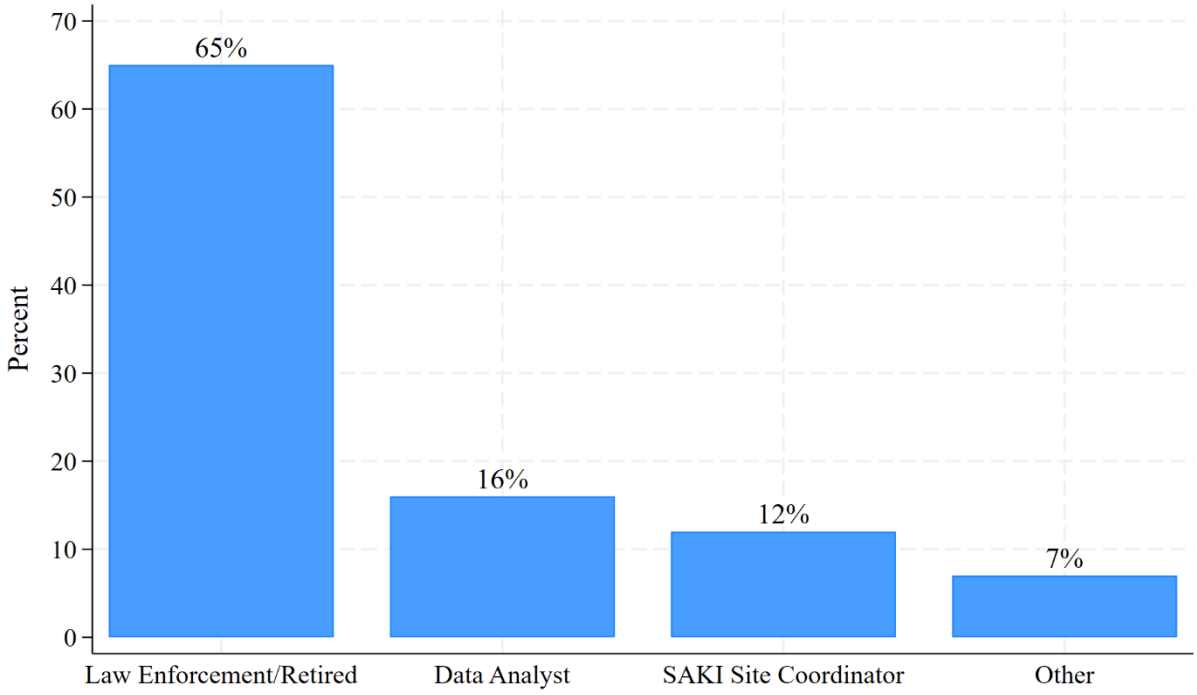

Figure 2.

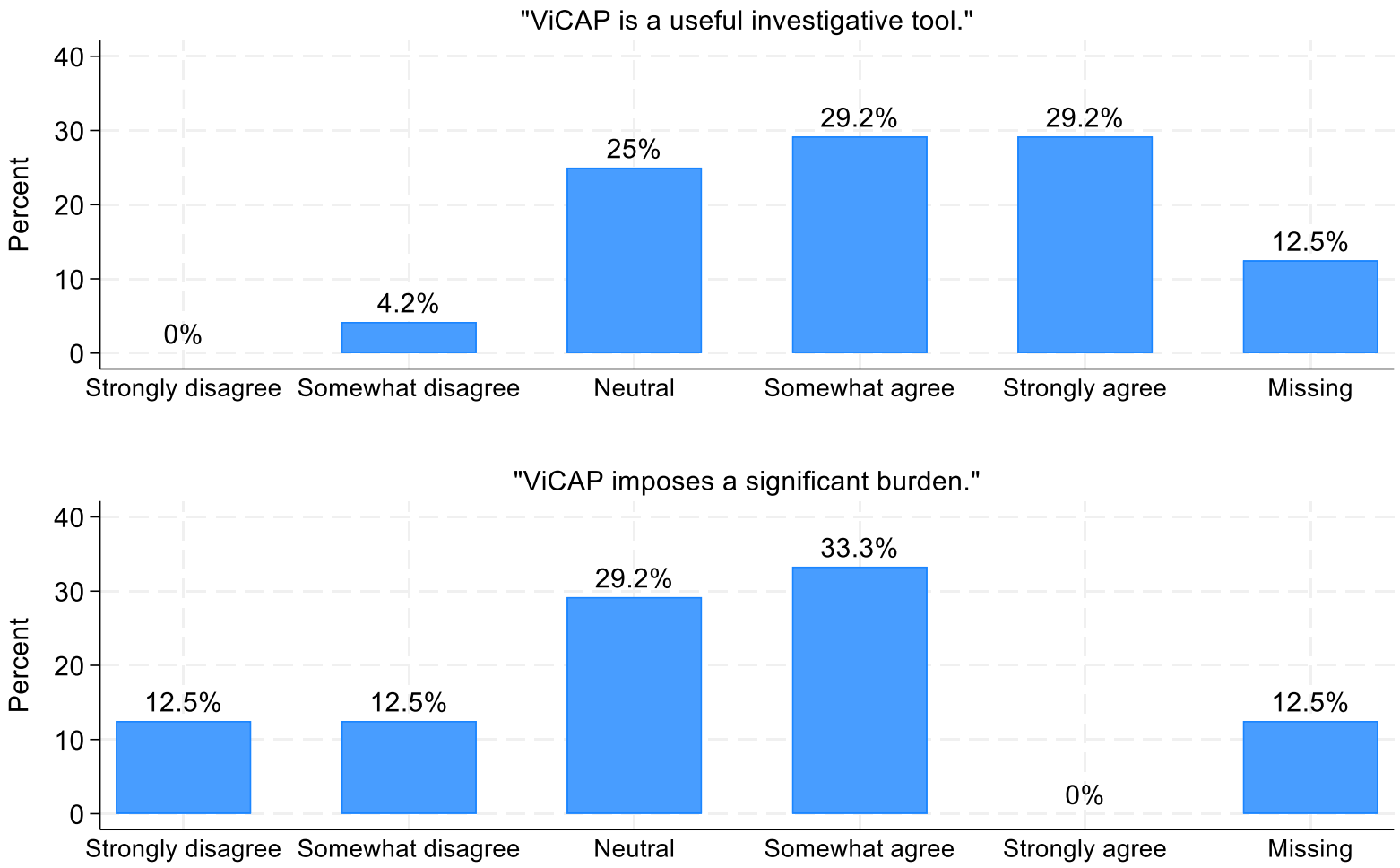
"ViCAP is a useful investigative tool."
Percent
40
30
20
10
0
0%
4.2%
25%
29.2%
29.2%
12.5%
Strongly disagree
Somewhat disagree
Neutral
Somewhat agree
Strongly agree
Missing
"ViCAP imposes a significant burden."
Percent
40
30
20
10
0
12.5%
12.5%
29.2%
33.3%
0%
12.5%
Strongly disagree
Somewhat disagree
Neutral
Somewhat agree
Strongly agree
Missing

Figure 3.

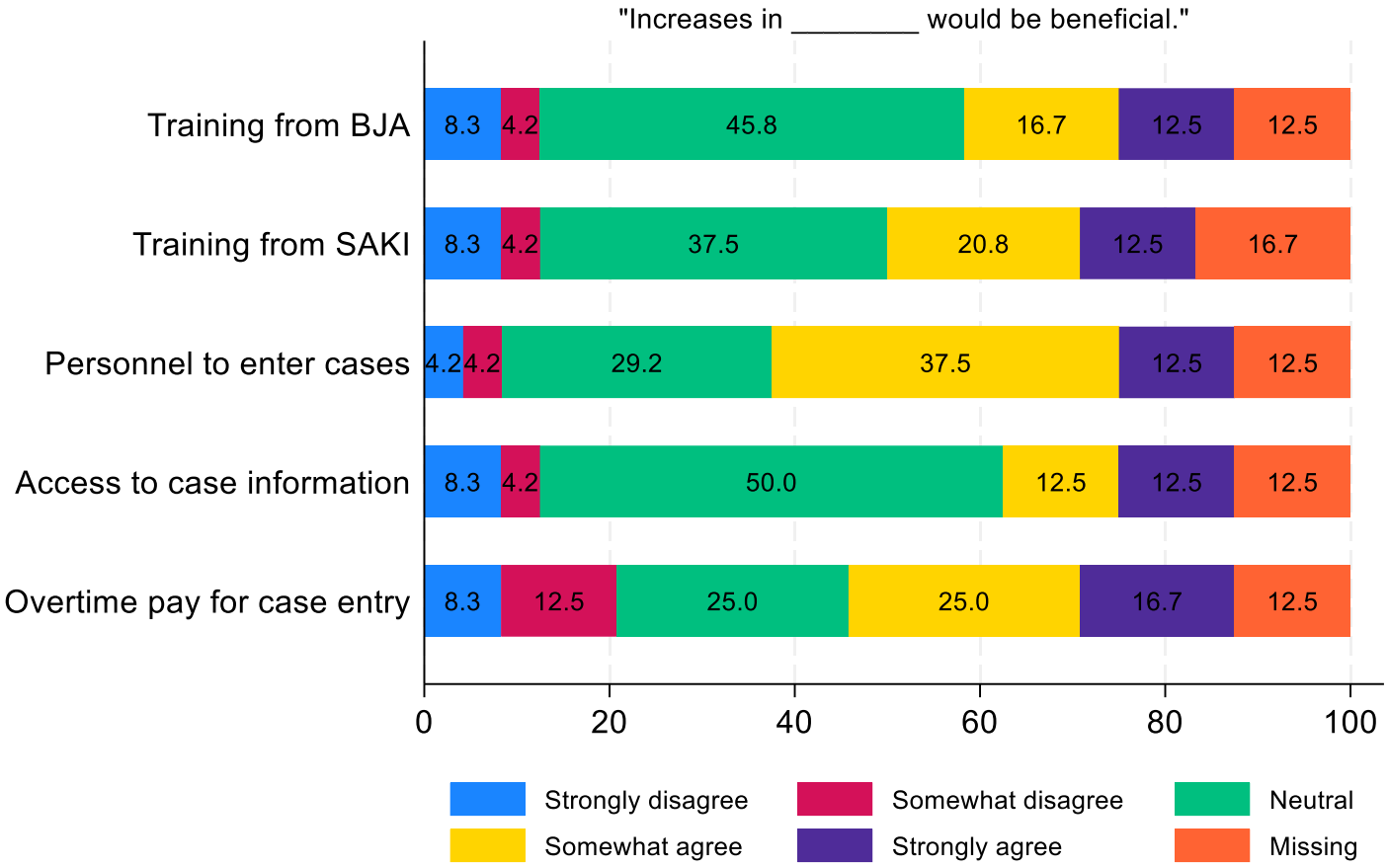
"Increases in _____ would be beneficial."
Training from BJA
8.3
4.2
45.8
16.7
12.5
12.5
Training from SAKI
8.3
4.2
37.5
20.8
12.5
16.7
Personnel to enter cases
4.2
4.2
29.2
37.5
12.5
12.5
Access to case information
8.3
4.2
50.0
12.5
12.5
12.5
Overtime pay for case entry
8.3
12.5
25.0
25.0
16.7
12.5
0
20
40
60
80
100
Strongly disagree
Somewhat disagree
Neutral
Somewhat agree
Strongly agree
Missing

Figure Captions

1. *Position of Designated ViCAP Personnel Across All SAKI Sites (n = 43 staff)*
2. *Perceived Usefulness/Burden of ViCAP*
3. *Perceived Needs to Increase ViCAP usefulness.*