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National Survey of Self-Injurious Behaviors in Prison, 2008

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INTRODUCTION

Self-injurious behaviors are defined as ‘‘the deliberate destruction or alteration of body tissue without conscious suicidal intent’’ (Favazza, 1989, p. 137; see also Favazza & Rosenthal, 1993, for discussion). Within incarcerated populations the “typical” manifestation of self-injury involves inmates cutting themselves with or without an object or inserting objects into their bodies. Some inmates have self-injured for many years and have comorbidity with psychological disorders, particularly Borderline Personality Disorder. Self-injurious behaviors are also known to have a contagion effect, in which non-injuring inmates learn to replicate the behavior. Prisons house a number of individuals who face significant risk of engaging in this behavior. Studies estimate that 2% to 4% of the general prison population and 15% of prisoners receiving psychiatric treatment routinely exhibited self-injury (Toch, 1975; Young, Justice, & Erdberg, 2006). When self-injuring inmates are housed in specialized units this prevalence can be as high as 52.9% (Gray et al., 2003).

This state of affairs places tremendous demands on the correctional institution. DeHart, Smith, and Kaminski (2009) found a consensus among professionals that correctional institutions are ill-equipped to adequately treat inmates who self-injure. These mental health professionals unequivocally supported a need for specialized training, equipment, and staffing to respond to acts of self-injury. To date, there is currently no epidemiological surveillance system or evidence-based treatment available that can effectively reduce acts of self-injury. A fuller understanding of processes that drive self-injury can give mental health professionals the opportunity to identify efficacious interventions.

This was the motivation for the first *National Survey of Self-Injurious Behaviors in Prison*. Our goals included:

1. Estimate the prevalence of inmate self-injury in prisons.
2. Better understand of the manifestation of self-injury in prisons.
3. Gain insight into the impact of self-injury on the prison system and identify the procedures in place for preventing and responding to self-injury.

For many people, the voluntary injury of one’s own body tissue is viewed as irrational and grotesque. Yet, it remains a “primitive method of coping” for inmates who routinely practice the behavior and most of these inmates would like to stop hurting themselves. As a whole, self-injury remains a relatively rare though significant event that consumes a disproportionate amount of prison resources. We hope this study moves towards a better understanding of the challenges this problematic behavior presents to mental health and correctional staff.

METHODOLOGY

The 2000 Census of State and Federal Adult Correctional Facilities, sponsored by the Bureau of Justice Statistics, was used to select all state facilities that reported providing mental health services and that housed 100 or more inmates (n = 862). After removal of what we considered 77 out-of-scope units our final sample consisted of 785 facilities.[1] The survey instrument was reviewed by correctional and mental health professionals from the South Carolina Department of Corrections and other correctional experts and revised accordingly. Mental health professionals in each facility were contacted via a modified Dillman survey methodology. Surveys were mailed in February, 2008 and again in May, 2008. Follow-up phone calls to remaining non-respondents were made over the subsequent two months.[2] Although surveys were mailed to individual facilities, 30 respondents (13.1%) reported summary data for multiple facilities (up to 34) and 199 (86.9%) reported data on single facilities (the number of facilities was missing for one case). Thus 230 surveys were received representing data for 473 facilities.

FINDINGS

I. Facility Characteristics and Institutional Responses to Self-Injury

Tables 1 and 2 present descriptive statistics regarding facility characteristics as reported by respondents. About 30 percent of single-facilities were maximum security institutions and another 30 percent were mixed-security institutions. Just over one-quarter (26.5%) were medium security facilities and 13.3 percent were minimum security facilities. Not unexpectedly, over half of multiple-facility respondents indicated mixed security levels (56.7%).

Table 1. Facility Characteristics

	All Respondents	Multiple-Facility Respondents	Single-Facility Respondents
Security Level		Percentage	
Minimum	13.5	10.0	13.3
Medium	26.2	23.3	26.5
Maximum	27.5	10.0	30.1
Mixed / Other	32.8	56.7	30.1
Gender Composition			
Male only	77.6	58.6	81.4
Female only	7.5	0.0	8.5
Mixed	14.9	41.4	20.2

[1] Excluded facilities included work camps, vocational camps, state jails, boot camps, probation detention centers, forestry camps, pre release units, and temporary units.

[2] The data collection process took longer than anticipated because several state Departments of Correction required the submission of a formal proposal and IRB review that caused substantial delays. The states of New York, New Jersey, Ohio, and Virginia required state-level Human Subjects Research Reviews and committee meetings. New Jersey and Virginia rejected the application. The states of Ohio and New York gave permission, although New York ultimately failed to participate despite multiple attempts to gain their cooperation.

Table 2. Descriptive Statistics for Inmates, Correctional Officers, and Mental Health Workers

	All Respondents		Multiple-Facility Respondents		Single-Facility Respondents	
	Mean	Min-Max	Mean	Min-Max	Mean	Min-Max
Inmates	3,579.8	40 - 265000	17032.6	425 - 265000	1551.7	40 - 14000
COs	426.9	12 - 12000	1639.2	65 - 12000	292.9	12 - 5000
MH Workers	20.4	0 - 320	45.0	1 - 286	16.6	0 - 320

As shown in Table 2, among single facilities, the number of inmates ranged from 40 to 14,000 (mean = 1,551.7), the number of correctional officers ranged from 12 to 5,000 (mean = 293.9), and the number of mental health workers ranged from zero to 320 (mean = 16.6). Except for the maximum number of mental health workers, multiple-facility respondents reported substantially higher numbers (though the mean number of mental health workers was higher).

II. Point Prevalence Estimates

The section includes point-prevalence estimates of self-injury and other statistics. Respondents who worked in either single-facilities or multiple facilities were included in the analysis. Single-facility point prevalence estimates for self-injury and serious self-injury were 2.5% and 0.7%, respectively. Multiple-facility respondents estimated lower values (1.6% and 0.25%, respectively). Combined this reveals a point-prevalence of 2.39% for self-injury and 0.65% for serious self-injury.[3] Self-injurious behavior is defined as "the deliberate destruction or alteration of body tissue without conscious suicidal intent" (Favazza, 1989). This includes cutting, scratching, or burning the skin; hitting oneself, pulling one's hair; reopening wounds, and breaking bones. Whereas serious self-injurious behavior includes acts that are life threatening or directed towards the face and/or genitals. Specifically, these acts include eye enucleation, face mutilation, and amputation of limbs, breasts, and genitals (Favazza, 1989).

Table 3. Descriptive Statistics for Inmates Who Self-Injure and Self-Injure Seriously

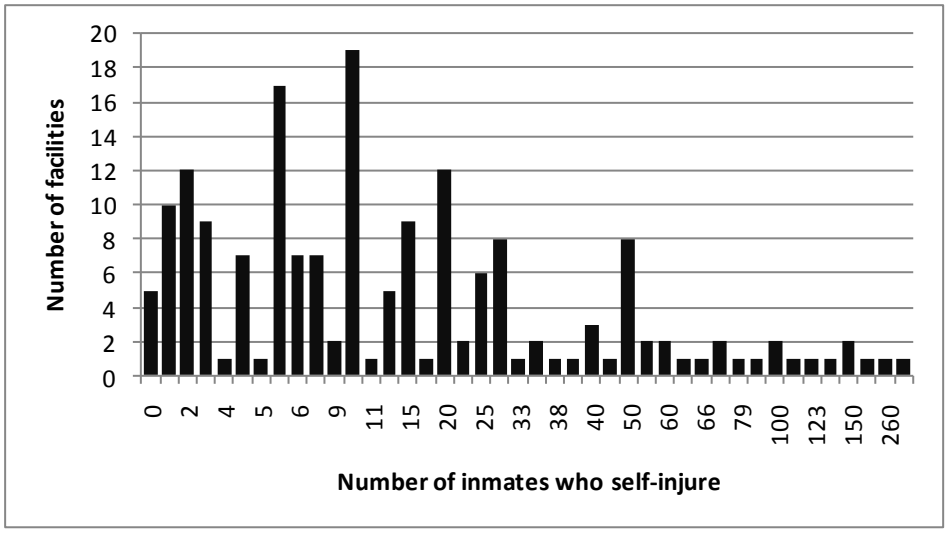
	All Respondents		Multiple-Facility Respondents		Single-Facility Respondents	
	Mean %	Min-Max	Mean %	Min-Max	Mean %	Min-Max
Self-injury	2.39	0.0 – 32.3	1.60	0.01 – 15.0	2.5	0.0 – 32.3
Serious self-injury	0.65	0.0 – 10.0	0.25	0.00 – 2.0	0.7	0.0 – 10.0

[3] Self-injurious behavior is defined as the deliberate destruction or alteration of body tissue without conscious suicidal intent. This includes cutting, scratching, or burning the skin; hitting oneself, pulling one's hair; reopening wounds, and breaking bones. Serious self-injurious behavior is life threatening or directed towards the face and/or genitals. Specifically, these acts include eye enucleation, face mutilation, and amputation of limbs, breasts, and genitals (Favazza, 1989). Note, however, respondents self-defined seriousness.

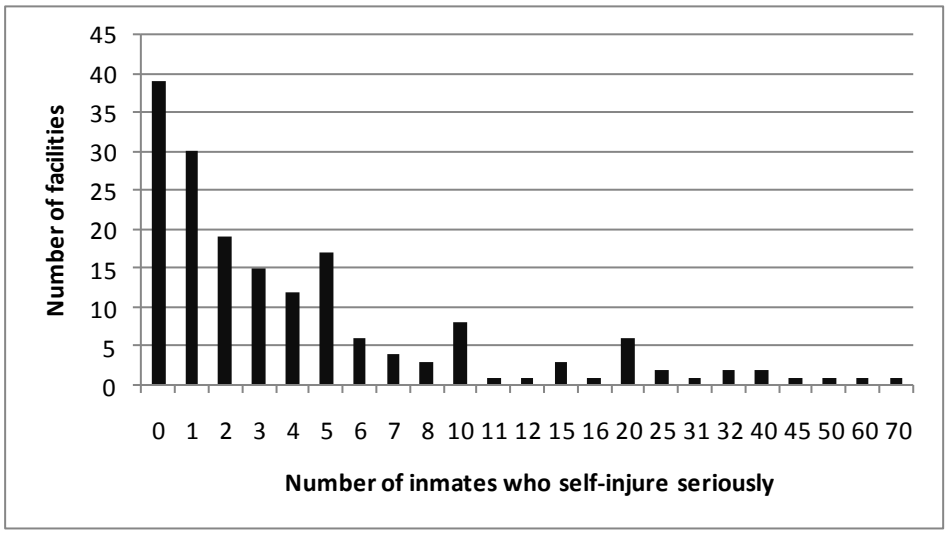
Panels 1 and 2 in Figure 1 show the single-facility distributions of self-injury and serious self-injury, respectively. A majority of respondents reported the presence of one or more self-injurers in their facility at the time of the survey, with most reporting housing between 1 and 10.

Figure 1. Distribution of Dependent Variables (single facilities only, n = 199)

Panel A. Self-Injury



Panel B. Serious Self-Injury



Respondents reported substantially fewer inmates who self-injured seriously. Many prison facilities reported no inmates who committed acts of serious self-injury. Typically, there were between 1- 5 serious self-injurers. Given the potential for harm and the expenditures of resources necessary for dealing with serious self-injury (e.g., medical costs, staff time), the presence of even a few serious self-injurers warrants concern.

Ninety-eight percent of all respondents and 97.2 percent of single-facility respondents indicated that one or more inmates self-injured at the time of the survey. Table 4 presents a categorical breakdown of the percentage of inmates who self-injured and self-injured seriously for single-facility respondents.

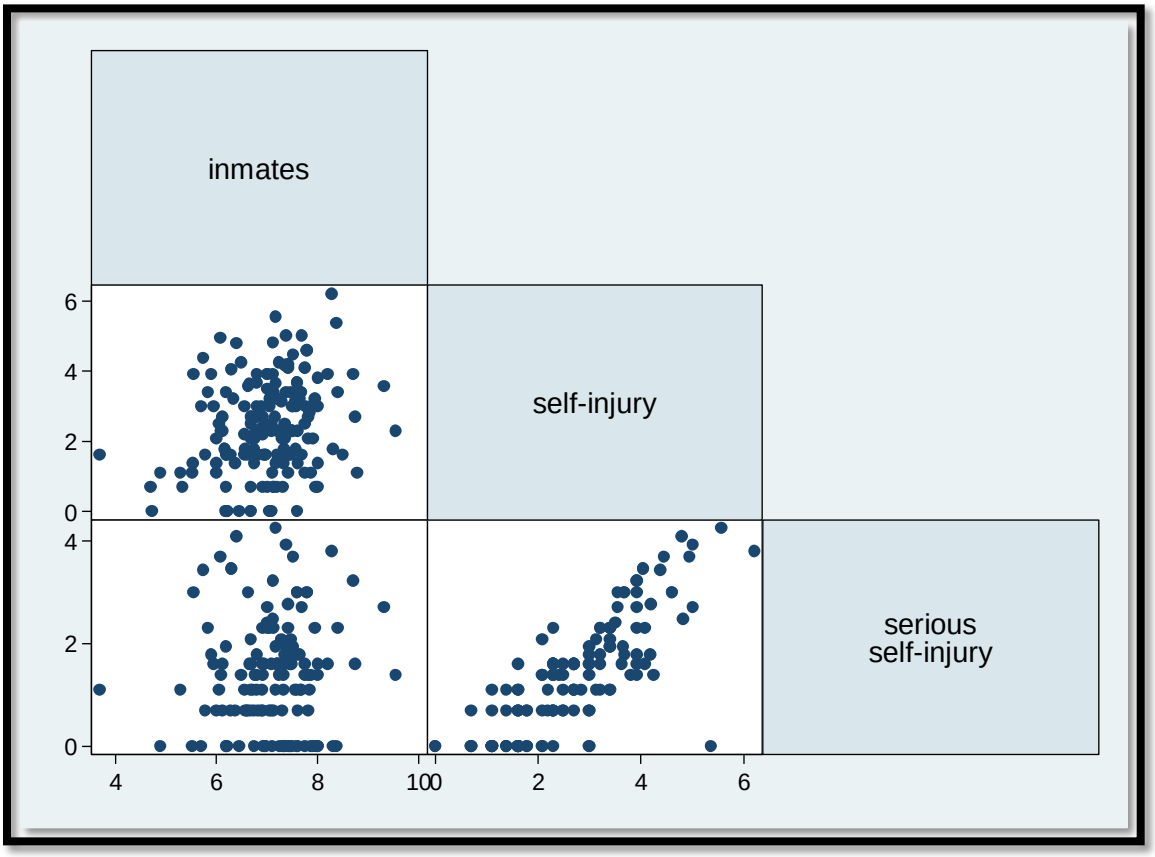
Table 4. Categorical Distributions of Inmates Who Self-Injured and Self-Injured Seriously (single facilities only)

	Self-Injury (n = 178)	Serious Self-Injury (n = 176)
Category	Percent / N	Percent / N
0	2.8 / 5	22.2 / 39
1 – 4	21.9 / 39	43.2 / 76
5 – 10	29.8 / 53	21.6 / 38
11 – 20	15.7 / 28	6.8 / 12
12 – 32	9.6 / 16	2.8 / 5
33 – 50	9.6 / 17	2.3 / 4
51 +	11.2 / 20	1.1 / 2

Nearly all respondents reported that one or more inmates self-injured in their facility (97%, n = 173) while substantially fewer reported that one or more inmates self-injured seriously in their facility (78%, n = 137). The modal category for the number of inmates who self-injured is 5-10 (30%, n = 53) and the modal category for the number of inmates who self-injured seriously is 1-4 (43%, n = 76). Substantially fewer respondents reported large numbers of inmates who self-injured. Of course, we would expect larger facilities and psychiatric facilities to house more inmates who self-injure. Although we do not have information identifying psychiatric facilities, we examine the relationship between facility size and the number of inmates who self-injure.

Figure 2 shows scatter plots of the log of the number of reported inmates against the logs of the estimated number of inmates who self-injured and self-injured seriously. There appears to be a slight linear relationship between the log of the total number of inmates and the log of the number of inmates who self-injured, though there does not appear to be a linear relationship between facility size and the number of inmates and inmates who self-injure seriously. This is confirmed by estimating linear regression models using the logged variables. Each 10 percent increase in the log of the number of inmates is associated with 3.8 percent increase in the log of the number of inmates who self-injured (b = .378, p = .001). However, facility size explains little of the variation across facilities in the number of inmates who self-injure (R^2 = .06) and there is no statistically significant relationship between facility size and the number of inmates who self-injured seriously (b = .082, p = .479). Obviously, additional facility characteristics are necessary to adequately explain variation in inmate self-injury.

Figure 2. Scatter Plot Matrix of the Log of Inmates, Inmates Who Self-Injured and Inmates Who Self-Injured Seriously



III. Self-Injury Manifestation

This section details the manifestation of self-injury as perceived by mental health professionals working in prisons. The estimates provided by single-facility and multiple-facility respondents are fairly similar (see Table 5). The vast majority of respondents indicated scratching with an object (95.7%) and cutting with an object (94.3%) occurred in their facilities. High percentages of respondents also reported that head banging (84.8%), scratching without an object (82.2%), opening old wounds (81.3%), and inserting objects (70.9%) occurred in the facilities. Smaller percentages of respondents indicated occurrences of biting (42.6%), burning/branding (36.1%), pulling own hair (29.1%), and bone breaking (11.7%).

Many of these self-injurious behavior manifestations require the use of objects, cutting devices, and burning tools. Respondents indicated considerable difficulty in keeping these implements away from self-injuring inmates (Table 6). Specifically, over 61% of respondents indicated that restricting prohibited implements from self-injuring inmates was moderately to very difficult.

Table 5. Percentage of Respondents Indicating Type of Self-Injury Occurs in Facility

	All Respondents	Multiple Facility Respondents	Single Facility Respondents
Self-Injury	% Yes	% Yes	% Yes
Scratching w/ object	95.7	100.0	95.5
Cutting w/ object	94.3	93.3	95.0
Head banging	84.8	100.0	82.9
Scratching w/o object	82.2	96.7	80.4
Opening old wounds	81.3	80.0	81.9
Inserting objects	70.9	73.3	70.9
Other	45.4	41.4	46.2
Biting	42.6	46.7	42.2
Burning / branding	36.1	36.7	36.2
Pulling own hair	29.1	26.7	29.6
Bone breaking	11.7	27.6	9.5

Table 6. Degree of Difficulty Keeping Prohibited Implements Away From Inmates Who Self Injure

	All Respondents	Multiple Facility Respondents	Single Facility Respondents
	Percentage		
Not at all	7.7	0.0	8.9
Somewhat	31.2	23.3	32.5
Moderately	24.4	40.0	22.0
Very	36.7	36.7	36.6

Respondents reported substantial general concern regarding inmate self-injury (Table 7). Among all respondents, over half (55%) indicated that self-injury generated a lot or extreme concern, and 83.4 percent expressed moderate to extreme concern for the behavior. This suggests that self-injurious behaviors are a significant problem for mental health professionals working in correctional facilities.

Table 7. Degree of General Concern About Inmate Self-Injury

	All Respondents	Multiple Facility Respondents	Single Facility Respondents
Concern	%	%	%
None	0.9	0.0	1.0
A little	15.7	6.7	17.1
Moderate	28.4	30.0	28.1
A lot	37.1	36.7	37.2
Extreme	17.9	26.7	16.6

In a related question, respondents specified which self-injurious behaviors generated the most concern. Among all respondents, cutting with an object ranked highest, with 61.4 percent of respondents indicating they were most concerned about this behavior. Substantially lower rankings were applied to inserting objects (10.0%), ingestion (7.7%), head banging (4.1%), and opening old wounds (3.2%).

Table 8. Self-Injurious Behavior Respondents Most Concerned About

	All Respondents	Multiple Facility Respondents	Single Facility Respondents
Behavior	% Yes	% Yes	% Yes
Cutting w/ object	61.4	55.6	57.1
Inserting objects	10.0	14.8	11.0
Ingestion	7.7	7.4	9.4
Other	4.5	14.8	3.1
Head banging	4.1	0.0	4.7
Opening old wounds	3.2	0.0	3.7

IV. Institutional Responses to Self-Injury

Table 9 presents the types of procedures respondents reported were in place in their facilities for dealing with inmate self-injury. Overall, 91.2 percent of respondents reported having some type of procedure for preventing or responding to inmate self-injury. For all respondents, this included assessment at intake (82.6%), counseling/psychiatric services (81.3%), watch cell/placement in special location (80.8%), staff training (66.1%), live/remote monitoring (59.8%), other (28.7%), and injury prevention team (17.0%). Multiple-facility respondents were more than twice as likely as single-facility respondents to report having a procedure not listed (58.6% vs. 24.3%, respectively), while single-facility respondents were substantially more likely than multiple-facility respondents to report utilizing live/remote monitoring (82.1% vs. 58.5%, respectively.

Table 9. Procedure In Place for Preventing Self-Injury

	All Respondents	Multiple Facility Respondents	Single Facility Respondents
	% Yes	% Yes	% Yes
Assessment at intake	82.6	93.1	81.0
Counseling / psychiatric service	81.3	79.3	81.5
Watch cell / special location	80.8	72.4	82.1
Staff training	66.1	72.4	65.1
Live / remote monitoring	59.8	58.6	82.1
Other	28.7	58.6	24.2
Injury prevention team	17.0	27.6	15.4

Respondents were asked to specify the types of other procedures in place in their facility. These responses, largely unedited, are listed in alphabetic order below:

Specialized unites for inmates who self-injure
Behavioral management plans
Behavioral incentives in self injurious programs
Behavioral protocol
Behavioral management teams
Coping skills development
Counseling
Counselor intervention with placement in acute care unit, crisis unit, etc.
Crisis intervention placement that includes property restrictions
Crisis intervention team
Crisis intervention team that focuses on intervention & stabilization
Crisis management psychiatric units
Crisis management unit
Crisis prevention plan
Crisis response staff
Critical incidents team
DBT (dialectical behavior therapy)
Deterrence with disciplinary action
Disciplinary measures
Infirmary care
Inmate observers
Inmate suicide companions
Involuntary commitment to correctional treatment center
Encouraged to participate in therapy (one-on-one or groups)
Monthly suicide prevention meeting (in-person) and monthly statewide teleconference about suicide prevention
Multidisciplinary treatment teams & behavioral management committees
Specialized mental health training for new hires; pre-screening of inmates prior to placement in segregation
Nurse screening at intake
Offender companions to provide constant monitoring
Transfer it to medical facility
Personalized management plans at varied levels of intensity
Physical/chemical restraints
Policy and procedures for high-risk inmates
Removal of items used to self harm, segregation, special clothing
Restraints; Restraint chair
Risk-assessments at critical times, e.g., return to or from court, medical “bad news”, segregation
Special treatment planning as indicated
Specialized self-injury unit for most severe offenders
Staff referral once warning signs present; safety plan developed, use of 1-10 rating scale
Suicide prevention aids (inmates helping inmates)
Suicide prevention and review team
Suicide/risk assessment done by medical staff upon admission
Training of mental health staff; communication with inmates and other staff
Transfer to state primary medical correctional facility
Transfer to a special unit
Transfer to inpatient crisis stabilization unit

SUMMARY

The National Survey of Self-Injurious Behaviors in Prisons obtained data representing 473 adult correctional facilities. What follows is a brief summary of study goals and related findings;

1. Estimate the prevalence of inmate self-injury in prisons.

Respondents estimated a point-prevalence of 2.39 percent for self-injury and 0.65 percent for serious self-injury. Moreover, 98 percent of all respondents indicated that one or more inmates self-injured at the time of the survey. This suggests that self-injury is a problem facing the majority of prison facilities and their professional staff.

2. Better understand of the manifestation of self-injury in prisons.

Respondents indicated that typical manifestations of self-injury was scratching with an object and cutting with an object, with both occurring in over 94 percent of facilities. However self-injury in prison was a commonly recognized phenomenon with acts of self-injury fairly diverse in the prison milieu. To this end, mental health professionals working closely with self-injurers had considerable concern about self-injurious behaviors, and further concern regarding the restriction of implements that inmates utilized on a regular basis to self-injure.

3. Gain insight into the impact of self-injury on the prison system and identify the procedures in place for preventing and responding to self-injury.

Over 91 percent of respondents reported having some type of procedure for preventing or responding to inmate self-injury. These procedures were varied and often site-specific. Assessments at intake followed by therapeutic treatments were the strategies most favored by prison facilities.

We hope this report adds to the limited information on self-injury within the prison milieu. Our research team found the mental health professionals who responded to the survey to be proficient and enthusiastic about this topic and we hope to continue future research and collaborations that constitute evidence-based interventions. We welcome any concerns, questions, or comments that this report may have stimulated.

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REFERENCES

DeHart, D. D., Smith, H. P., & Kaminski, R. J. (2009). Institutional responses to self-injurious behavior among inmates. *Journal of Correctional Health Care, 15*, 129-141.

Favazza, A. R. (1989). Why patients mutilate themselves. *Hospital and Community Psychiatry, 40*, 137-145.

Favazza, A. R., & Rosenthal, R. J. (1993). Diagnostic issues of self-mutilation. *Hospital and Community Psychiatry*, *44*, 134-140.

Gray, S. G., McGleish, A., MacCulloch, M. J., Hill, C., Timmons, D., & Snowden, R. (2003). Prediction of violence and self harm in mentally disordered offenders. *Journal of Clinical Psychology*, *182*, 443-451.

Toch, H. (1975). *Men in crisis: Human breakdowns in prison*. Chicago: Aldine.

Young, M. H., Justice, J. V., & Erdberg, P. (2006). Risk of harm: Inmates who harm themselves while in prison psychiatric treatment. *Journal of Forensic Sciences*, *51*, 152-156.

APPENDIX A – LIST OF QUESTIONS USED IN SURVEY INSTRUMENT

Directions: In the following questions, "self injury" refers to inmates hurting themselves, but without the intention of committing suicide. Please answer each question regarding the situation in your facility.

1. What types of self injury do inmates at your facility engage in?

		mark one answer for each type		
		yes	no	not sure
a.	Biting	☐	☐	☐
b.	Bone breaking	☐	☐	☐
c.	Burning or branding	☐	☐	☐
d.	Cutting with an object	☐	☐	☐
e.	Scratching with an object	☐	☐	☐
f.	Scratching without an object	☐	☐	☐
g.	Head banging	☐	☐	☐
h.	Inserting objects into body or under skin	☐	☐	☐
i.	Opening old wounds	☐	☐	☐
j.	Pulling own hair	☐	☐	☐
k.	Other	☐	☐	☐

↳(*please describe*) _____

2. Please indicate the types of self injury you are most concerned about in terms of management difficulties, medical costs for treatment, etc., by ranking your top three concerns from the above list.

1. _____ most concern 2. _____ next most concern 3. _____ next most concern

3a. About how many inmates in your facility self injure? _____ **3b**. How many self injure seriously? _____

4. Overall, how much concern is there about self-injurious behaviors in your facility?

☐ no concern ☐ a little concern ☐ moderate concern ☐ a lot of concern ☐ extreme concern

5. Excluding suicide, does your facility have specific procedures for preventing self injury? Check all that apply.

☐ yes ☐ no ➔ *if no, please skip to question 6*

☐ Assessment of risk of self injury at intake - Specify:_____
☐ Staff training in self-injury prevention
☐ Special inmate counseling or psychiatric services
☐ Live or remote monitoring of high risk inmates
☐ Self-injury watch cell or special location
☐ Inmate self-injury prevention teams
☐ Other procedure - Specify:_____

6. How difficult is it to keep prohibited implements (e.g. razor blades) out of the hands of inmates who self-injure?

☐ not at all difficult ☐ somewhat difficult ☐ moderately difficult ☐ very difficult

7. Does your facility house male or female inmates?

☐ males ☐ females ☐ both

8. What is the current total inmate population of your facility? ..... _____ (*total inmates*)

9. How many correctional officers are currently employed by your facility? .... _____ (*total officers*)

10. How many mental health workers are currently employed by your facility? _____ (*mental health employees*)

11. What is the security level of your facility?

☐ minimum ☐ medium ☐ maximum ☐ other – please specify:_____

12. Facility name: _____

13. Does your position involve working in: ☐ single facility? ☐ more than one facility? #_____

14. Your name: _____ **15**. Your job title: _____

16. E-mail address: _____ **17.** Phone number: _____

18. May we contact you to discuss self-injurious behavior among inmates? ☐ yes ☐ no

19. Would you like findings from this research e-mailed to you? ☐ yes ☐ no

20. Is there any additional information regarding self-injurious behavior you would like to add?