# Moving Beyond Violence Results

## Corcoran State Prison SNY IV 3-B Participants Phases I through IV Combined (N=154)

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## FINDINGS:

The overall impact of the intervention (Moving Beyond Violence) was measured using multiple measures of anger, aggression, mental health and trauma (including PTSD), which were collected immediately prior to the participants starting the intervention and then again immediately after they had competed it. The results reported below indicate the irrefutable success of this program delivered to 154 SNY IV 3-B participants at Corcoran, delivered over four phases of treatment. The measures are highly focused on violence, anger, and aggression. The outcomes show statistically significant reductions for the majority of problematic behavior traits measured. The changes are reported as "scores" derived from standardized tests and indicate significant reductions in scores from pre and post intervention tests. (lower scores show reductions in severity of problematic behavior). SHU research at male institutions are currently underway.

### MOVING BEYOND VIOLENCE:

Participants in this program reside on the SNY IV 3-B yard at CSP- Corcoran. To date, pre- and post-program data have been collected from 154 participants, collected over four phases of treatment. **Table 1** below presents demographic and descriptive statistics on these participants.

# Overall, participants who have completed the program to date represent an older (average age=38 years) and extremely high-risk population with severe and violent criminal backgrounds (both in and out of prison), mental health issues, and histories of alcohol and drug use.

- ✓ Slightly over half of the participants were Latino (52%) and have never been married (52%).
- ✓ On average participants had experienced 10 arrests in their lifetimes, with the first arrest occurring at the age of 14.
- ✓ On average, participants reported having been incarcerated 18.4 years in their lifetime.
- ✓ Two thirds of the participants reported that the controlling offense that resulted in their current incarceration was a violent offense.
  - 31% reported that the controlling offense was homicide (murder, manslaughter).
  - 14% reported that the controlling office was attempted murder.
  - 21% reported some other form of violent crime as the controlling offense (assault, carjacking, kidnapping, rape).
- ✓ Nearly two thirds of the participants (65.4%) reported having spent time in a Secured Housing Unit (SHU) while incarcerated.
  - These participants reported spending an average of 5.5 years (>2,000 days) in SHU confinement.
- ✓ Over two thirds of participants (66.7%) reported having received at least one mental health diagnosis.
- Most participants reported using alcohol or drugs in the 12 months prior to their incarceration (78.9% and 79.2%, respectively).
  - The most commonly used drug after alcohol (78.7%) was marijuana (76.2%), followed by methamphetamine (48.8%), cocaine (24.6%), and heroin (18.0%).

## <u>Specific improved behaviors are as follows (25 out of 32 behaviors measured were significantly improved).</u>

- Depression improved significantly
- Mental Health Screen Overall, mental health improved significantly including reductions in Post-Traumatic Stress Disorder
- All measures of Aggression showed improvements from pre- to post- intervention.
  - Physical Aggression,
  - Verbal Aggression,
  - o Anger,
  - Hostility,
  - Indirect Aggression
  - Reduction in aggression, anger, and hostility have led to reductions of violence and behavior problems on the level IV yard.
- Trauma Symptoms Checklist (Dissociation, Anxiety, Depression, Sex Abuse, Sleep, Sexual Problems) – Overall, the participants showed a significant decrease in experiencing trauma symptoms, especially—as as it related to Depression, Anxiety, and Sleep Disturbance.
- State-Trait Anger Over ½ of the measures of state and trait anger improved significantly from pre- to post-intervention.

**Table 2** below shows the cumulative results of the SNY IV 3-B participants who have completed the program to date.

**Table 3** below summarizes these results by phase (Phases I - IV).

Following **Table 3** is an explanation of the scales used to collect data from participants prior to starting the program and then again following the completion of the program.

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## **Table 1: Descriptive Statistics**

## SNY IV 3-B Participants: Phases I-IV (N=154) - Descriptve Statistics

	Mean	SD		%
Age	38.2	(9.62)	Offense leading to current incarceration	
Lifetime Arrests <sup>1</sup>	9.6	(9.42)	Homicide/Murder/Manslaughter	31.1%
Age of first arrest	14.4	(3.74)	Attempted Murder	13.9%
Lifetime yrs of incaceration	18.4	(9.70)	Assault	10.6%
Number of times incarcerated in SHU <sup>2</sup>	1.7	(1.83)	Theft/Robbery	14.6%
Lifetime years in SHU <sup>2</sup>	5.5	(5.51)	Carjacking	4.6%
			Kidnapping	3.3%
	%		Rape/Sex	2.6%
Ethnicity			Drugs	5.3%
Latin	51.9%		Other	13.9%
White	18.2%			100.0%
Black	17.5%			
Multi-racial	8.4%		Drugs Used 12 Months prior to Arrest <sup>3</sup>	
Other	4.0%		Alcohol	78.7%
	100.0%		Marijuana	76.2%
Marital Status			Cocaine	24.6%
Never Married	52.3%		Heroin	18.0%
Legally Married	12.4%		Amphetamines	48.8%
Living Together	24.2%		Prescription Drugs	9.0%
Separated/Divorced/Widowed	11.1%		Designer Drugs	13.9%
	100.0%		Hallucinogens	13.1%
Education				
No HS	9.2%			
Some HS	29.3%			
HS Diploma	9.2%		Drugs of Choice	
GED	28.1%		None	10.4%
Vocational Certificate	2.0%		Alcohol	29.9%
Some College	19.0%		Marijuana	35.7%
College Degree	3.2%		Cocaine	6.5%
-	100.0%		Heroin	7.1%
	40.00/		Amphetamines	22.1%
Obtained GED in prison?	40.0%		Prescription Drugs	1.9%
Any college in prison?	16.6%		Designer Drugs	1.9%
MH Diagnosis Ever?	66.7% 78.9%		Hallucinogens Other	2.6% 1.3%
Alcohol Use 12 mos prior to incarceration?	78.9% 79.2%		other	1.5%
Drug Use 12 mos prioe to incarceration? Ever spent time in SHU?	79.2% 65.4%			
ever spent time in sho:	03.470			

<sup>1</sup> Mean (SD) computation excluded respondents who reported "too many to count" arrests (n=13)

<sup>2</sup> Means (SDs) computed based on number who reported having spent time in SHU (n=100)

<sup>3</sup> Percents are based on those who reported using drugs (n=122).

## Table 2: Cumulative Results for Moving Beyond Violence

## SNY IV 3-B Participants: Phases I-IV (N=154) - Results

	Pre-Intervention Count %		Post-Intervention Count %			
Patient Health Questionnaire - Anxiety Subscale Presence of Anxiety Disorder	40	26.0%	15	9.7%		
	Pre-Intervention		Post-Intervention			
	Mean	(SD)	Mean	(SD)	Change	Significance
Patient Health Questionnaire - Depression Subscale	7.8	(6.13)	5.1	(5.27)	(2.7)	p<.001
Short Screen Scale: DSM-IV PTSD	6.1	(5.51)	3.9	(4.72)	(2.2)	p<.001
K6 Brief Mental Health Screen	6.3	(5.69)	4.8	(5.40)	(1.5)	p<.001
Buss-Warren Aggression Questionnaire						
Physical Aggression	17.8	(7.31)	15.4	(6.51)	(2.4)	p<.001
Verbal Aggression	11.9	(4.43)	10.8	(4.20)	(1.1)	p<.001
Anger	14.3	(6.02)	12.3	(5.08)	(2.1)	p<.001
Hostility	17.6	(6.76)	15.5	(6.39)	(2.2)	p<.001
Indirect Aggression	11.6	(4.61)	10.3	(3.61)	(1.3)	p<.001
Trauma Symptoms Checklist (TSC-40)						
Dissociation	5.4	(4.03)	3.9	(3.50)	(1.4)	p<.001
Anxiety	6.5	(4.80)	4.5	(4.57)	(2.0)	p<.001
Depression	8.1	(5.49)	6.1	(5.12)	(1.9)	p<.001
Sexual Abuse Trauma Index	4.7	(3.76)	3.6	(3.47)	(1.1)	p<.001
Sleep Disturbance	7.1	(4.78)	5.0	(4.66)	(2.0)	p<.001
Sexual Problems	2.7	(3.63)	2.4	(3.74)	(0.3)	n.s.
TSC-40 Total Score	31.7	(19.95)	23.7	(19.17)	(7.9)	p<.001
State/Trait Anger Expression Inventory (STAXI-2)						
State Anger Feelings	1.6	(2.91)	1.0	(2.48)	(0.5)	p<.05
State Anger Verbal	1.0	(2.67)	0.8	(2.26)	(0.3)	n.s.
State Anger Physical	0.7	(2.20)	0.4	(1.57)	(0.3)	p<.05
State Anger Composite Score	3.3	(7.18)	2.2	(5.69)	(1.1)	p<.05
Trait Anger-Temperment	2.1	(2.79)	1.3	(1.90)	(0.8)	p<.001
Trait Anger-Reaction	3.1	(3.00)	2.0	(2.31)	(1.1)	p<.001
Trait Anger-Expression Out	6.4	(4.09)	5.0	(3.54)	(1.4)	p<.001
Trait Anger-Expression In	9.3	(4.57)	7.4	(4.13)	(1.8)	p<.001
Trait Anger-Control Out	13.1	(5.36)	13.3	(5.82)	0.2	n.s.
Trait Anger-Control In	13.6	(5.98)	13.7	(6.24)	0.1	n.s.
Trait Anger Composite Score	6.4	(6.35)	4.0	(4.56)	(2.4)	p<.001
Anger Expression	15.6	(7.33)	12.4	(6.58)	(3.2)	p<.001
Anger Control	26.8	(10.95)	27.1	(11.66)	0.3	n.s.
Rev Instrumental and Expressive Representation Scales						
Instrumental Anger Score	21.0	(8.27)	18.6	(7.31)	(2.4)	p<.001
Expressive Anger Score	24.5	(6.25)	22.4	(6.51)	(2.1)	p<.001

### Summary Results by Cohort

Table 3 on the following page presents an easy to read comparative summary of the results of cohorts to date. The Legend table below explains how to interpret the table.

Legend				
↑	Positive Change (no statistical test of significance perfomed)			
$\checkmark$	Negative change (no statistical test of significance perfomed)			
<b>↑</b>	Significant Positive Change			
↓	Significant Negative Change			
↔	No significant change			

— See Table 3 on next page —

## Table 3: Summary Results by Phase

## SNY IV 3-B Participants: Facilitators (N=15) & Phases I-IV (N=154)

	Fac N=15	l N=31	II N=45	III N=42	IV N=36	I-IV N=154
Patient Health Questionnaire - Anxiety Subscale						
Presence of Anxiety Disorder	$\leftrightarrow$	↑	↑	↑	↑	↑
Patient Health Questionnaire - Depression Subscale	<b>•</b>	1	1	<b>•</b>	↔	1
Short Screen Scale: DSM-IV PTSD	↔	1	1	1	<b>•</b>	1
K6 Brief Mental Health Screen	1	1	1	1	↔	1
Buss-Warren Aggression Questionnaire						
Physical Aggression	$\leftrightarrow$	<b>•</b>	<b>•</b>	<b>•</b>	<b>•</b>	<b>•</b>
Verbal Aggression	$\leftrightarrow$	<b>•</b>	<b>•</b>	$\leftrightarrow$	$\leftrightarrow$	<b>•</b>
Anger	$\leftrightarrow$	<b>•</b>	<b>•</b>	<b>•</b>	<b>•</b>	<b>•</b>
Hostility	$\leftrightarrow$	· •	$\leftrightarrow$	<b>•</b>	↑	<b>•</b>
Indirect Aggression	↔	$\leftrightarrow$	<b>•</b>	1	$\leftrightarrow$	<b>•</b>
Trauma Symptoms Checklist (TSC-40)						
Dissociation	$\leftrightarrow$	<b>•</b>	· 个	<b>•</b>	<b>•</b>	<b>•</b>
Anxiety	<b>•</b>	<b>•</b>	<b>•</b>	<b>•</b>	<b>•</b>	<b>•</b>
Depression	<b>•</b>	<b>•</b>	<b>•</b>	<b>•</b>	$\leftrightarrow$	<b>•</b>
Sexual Abuse Trauma Index*	<b>•</b>	$\leftrightarrow$	$\leftrightarrow$	<b>•</b>	<b>•</b>	<b>•</b>
Sleep Disturbance	<b>•</b>	<b>•</b>	<b>•</b>	<b>•</b>	<b>•</b>	<b>•</b>
Sexual Problems	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$
TSC-40 Total Score	<b>•</b>	1	<b>•</b>	<b>•</b>	<b>•</b>	1
State/Trait Anger Expression Inventory (STAXI-2)						
State Anger Feelings	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	↑
State Anger Verbal	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$
State Anger Physical	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	<b>•</b>
State Anger Composite Score	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	<b>•</b>
Trait Anger-Temperment	$\leftrightarrow$	<b>•</b>	<b>•</b>	<b>•</b>	$\leftrightarrow$	<b>•</b>
Trait Anger-Reaction	$\leftrightarrow$	<b>•</b>	<b>•</b>	↑	<b>•</b>	<b>•</b>
Trait Anger-Expression Out	$\leftrightarrow$	<b>•</b>	<b>•</b>	$\leftrightarrow$	<b>•</b>	<b>•</b>
Trait Anger-Expression In	$\leftrightarrow$	↑	<b>↑</b>	↑	↑	↑
Trait Anger-Control Out	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$
Trait Anger-Control In	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$
Trait Anger Composite Score	$\leftrightarrow$	<b>•</b>	<b>•</b>	<b>•</b>	<b>•</b>	<b>•</b>
Anger Expression	$\leftrightarrow$	1	1	1	1	1
Anger Control	↔	↔	↔	↔	↔	↔
Rev Instrumental and Expressive Representation Scales						
Instrumental Anger Score	$\leftrightarrow$	↑	<b>•</b>	$\leftrightarrow$	$\leftrightarrow$	<b>•</b>
Expressive Anger Score	↔	↔	1	1	1	1

## **Explanation of Scales**

#### Patient Health Questionnaire – Anxiety Subscale

The Patient Health Questionnaire Anxiety Subscale is a 6-item subscale that measures anxiety symptoms felt over the past four weeks (Spitzer, Kroenke, & Williams, 1999). All item-responses were based on a Likert-type scale (0 = Not at all to 3 = Nearly every day). The presence of an anxiety disorder is indicated when at least three items are scored as 2 (*More than half the days*) or greater.

#### Patient Health Questionnaire – Depression Subscale

The Patient Health Questionnaire Depression Subscale is a 9-item subscale that measures current depressive symptomology (Kroenke & Spitzer, 2002; Spitzer et al., 1999). Participants report on the symptoms they have experienced in the preceding two-week period. Responses are based on a 4-point Likert-type scale ranging from 0 (*Not at all*) to 3 (*Nearly every day*), and are summed into an overall symptom severity scale score that feel between 0 and 27.

**Alternative Scoring:** Several alternative scoring guidelines exist for this scale (see Kroenke & Spitzer, 2002), however for the sake of parsimony we used the guidelines for determining who met diagnostic criteria for major depressive disorder which required that the participants: a) reported feeling down depressed or hopeless or had experienced little interest or pleasure in doing things, and b) experienced five or more symptoms at least scored as 2 (*More than half the days*).

Due to the small number of individuals involved, I did not use this alternative scoring method.

#### Short Screening Scale for DSM-IV PTSD (modified version)

The modified version of the Short Screening Scale for DSM-IV Posttraumatic Stress Disorder (Breslau, Peterson, Kessler, & Schultz, 1999) is used to assess current symptoms of PTSD. Respondents who responded affirmatively to the question "In your life, have you ever had any experience that you considered frightening, horrible, or upsetting?" were then asked to complete a 7-item Short Screening Scale, concerning symptom frequency in the prior four-week period. Item responses were based on a Likert-type scale, ranging from 0 (*Not at all*) to 3 (*Nearly every day*), and scale scores ranged from 0 to 21. A scale score of greater than or equal to 4 is indicative of PTSD (Breslau et al., 1999; Kimerling et al., 2006).

#### K6 Brief Mental Health Screen

The K6, a 6-item brief mental health screening tool (Kessler et al., 2002, 2003), is used to assess participant's overall mental health. Responses, based on a Likert-type scale, ranging from 0 (*None of the time*) to 4 (*All of the time*), are summed into an overall scale with scores ranging from 0 to 24, with higher scores indicating a less healthy state of mental health.

### **Buss-Warren Aggression Questionnaire (AQ)**

Buss-Warren Aggression Questionnaire (AQ), formally the Buss Perry Aggression Questionnaire, is a 34-item instrument used to assess anger and aggression (Buss & Warren, 2000). The Buss-Warren includes five scales: Physical Aggression (PHY), Verbal Aggression (VER), Anger (ANG), Hostility (HOS), and Indirect Aggression (IND). The respondent rates the description on a Likert-type scale, ranging from 1 (*Not at all like me*) to 5 (*Completely like me*).

#### Trauma Symptoms Checklist (TSC-40)

The TSC-40 is a 40-item self- report instrument consisting of six subscales: Anxiety, Depression, Dissociation, Sexual Abuse Trauma Index (SATI), Sexual Problems, and Sleep Disturbance, as well as a total score. Each symptom item is rated according to its frequency of occurrence over the prior two months, using a four-point scale ranging from 0 ("never") to 3 ("often").

The score for each subscale is the sum of the relevant items. Lower scores indicate a lower manifestation of the symptom.

#### State-Trait Anger Expression Inventory—2 (STAXI-2)

The STAXI-2 is a fifty-seven item instrument used to measure the experience and intensity of anger as an emotional state (State Anger) and as an emotional trait (Trait Anger). The State Anger scale assesses the intensity of angry feelings at a particular time and the Trait Anger scale measure how angry emotions are expressed over time.

For the 15 State Anger items, participants rate the intensity of their emotions "right now" on a 4 point Likert scale ranging from 1 (*Not at all*) to 4 (*Very much so*).

For the 10 Trait Anger items, participants rate how they 'generally' feel on a 4 point Likert scale ranging from 1 (*Almost never*) to 4 (*Almost always*).

For the 32 Anger Expression and Anger Control items, participants rated how they generally react in certain situations also on a 4 point Likert scale ranging from 1 (*Almost never*) to 4 (*Almost always*).

The STAXI-2 has 6 scales, 5 subscales, and an Anger Expression Index.

The State Anger scale (*S*-*Ang*) consists of three subscales, Feeling Angry (*S*-*Ang/F*), Feel like Expressing Anger Verbally (*S*-*Ang/V*), and Feel like Expressing Anger Physically (*S*-*Ang/P*).

**State-Anger** (*S*-*Ang*) – Persons with high *S*-*Ang* scores are experiencing relatively intense angry feelings.

**Feeling Angry** (*S*-*Ang/F*) – Persons with high *S*-*Ang/F* scores report relatively intense feelings of angry emotions ranging from annoyed to furious.

**Feel Like Expressing Anger (S-Ang/V)** – Persons with high S-Ang/V scores are experienced intense feelings to expression their anger verbally (e.g. by yelling, shouting, or screaming) either at someone or in general.

**Feel Like Expressing Anger Physically (S-Ang/P)** – Persons with high S-Ang/P scores experience intense feelings to express their anger physically (e.g., hitting someone or breaking things).

The Trait Anger scale (*T-Ang*) consists of two subscales, Angry Temperament (*T-Ang/T*) and Angry Reaction (*T-Ang/R*).

**Trait Anger** (*T*-*Ang*) – Persons with high *T*-*Ang* scores frequently experience angry feelings and often feel that they are treated unfairly by others. Such persons also are likely to experience a great deal of frustration.

**Angry Temperament** (*T-Ang/T*) – Persons with high scores on the *T-Ang/T* subscale are quick-tempered and readily express their angry feelings with little provocation. Such individuals are often impulsive and lacking in anger control, but they are not necessarily vicious or vindictive in attacking other persons.

**Angry Reaction** (*T*-*Ang/R*) – Persons with high *T*-*Ang/R* scores are highly sensitive to criticism, perceived affronts, and negative evaluation by others. They experience intense feelings of anger under such circumstances.

The Anger Expression and Anger Control scales consist of 4 subscales, Anger Expression-Out (*AX-O*), Anger Expression-In (*AX-I*), Anger Control-Out (*AC-O*), Anger Control-In (*AC-I*).

**Anger Expression-Out** (*AX-O*) – Persons with high *AX-O* scores frequently express their anger in aggressive behavior directed toward other persons or objects in the environment.

**Anger Expression-In** (*AX-I*) – Persons with high *AX-I* scores frequently experience intense angry feelings, but they tend to suppress these feelings rather than expressing them either physically or verbally.

**Anger Control-Out (AC-O)** – Persons with high AC-O scores tend to expend a great deal of energy in monitoring and preventing the outward experience and expression of anger. Although controlling outward or external manifestations of anger may be desirable, over control can lead to passivity, depression, and withdrawal.

**Anger Control-In (AC-I)** – Persons with high AC-I scores expend a great deal of energy in calming down and reducing anger as soon as possible. The development of internal controls over the experience and expression of anger is generally seen in a positive light, but it can reduce the person's awareness of the need to respond with assertive behavior when this might facilitate a constructive solution to a frustrating situation.

### **Revised Instrumental and Expressive Representation Scales**

Instrumental and expressive anger were assessed through Revised Instrumental and Expressive Representation Scales invented by Campbell and colleagues. The scales had 16 items with 2 subscales (instrumental and expressive) assessing anger expression (Campbell, Muncer, McManus, & Woodhouse, 1999).

In the first subscales, respondents answered the degree of agreement about 8 items measuring instrumental anger. The second subscales assessed expressive anger using 8 items. Participants responded on a scale from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). The eight items from each subscale are summed.