# Florida's Released "Sexually Violent Predators" Are Not "High Risk" 1

Gregory DeClue, Independent Practice, Sarasota, Florida, USA. Email: <a href="mailto:gregdeclue@me.com">gregdeclue@me.com</a> Amanda Rice, Sam Houston State University, Huntsville, Texas, USA

#### **Abstract**

For 14 years, Florida Statutes required a long-term study of the efficacy of Florida's Sexually Violent Predator Program (SVPP). Data collection stopped in 2013, and the law was changed so that no further study was authorized. Florida's released "Sexually Violent Predators" have not been detected to sexually re-offend at rates higher than randomly selected sex offenders. The Static-99R was more accurate than the Static-99, but it had a smaller effect size than in the development samples. All of the <a href="www.static99.org">www.static99.org</a> comparison groups over-predict detected sexual recidivism for these people. We illustrate how to check the accuracy of individual SVP evaluators' risk predictions. Florida's completed 14-year efficacy study does not show that civil commitment reduces detected sexual recidivism.

**Keywords:** sexually violent predator, sexual recidivism, Static-99R, risk assessment, program evaluation, open records

Florida's Sexually Violent Predator (SVP) Program (SVPP) began in 1999, consistent with legislation appearing in Chapter 394 of the Florida Statutes. From 2000 through 2013, Florida Statute 394.931 included, "In addition, the Department of Children and Family Services shall implement a long-term study to determine the overall efficacy of the provisions of this part." In 2013, SVPP stopped collecting data. When the Florida Statutes were revised in 2014, the requirement to study the efficacy of Florida's civil commitment process was discontinued. We obtained the data set for this completed study from SVPP via a public-records request. SVPP verified that the study is complete, and that data collection has ceased and has not been resumed. This data set constitutes a natural experiment, which allows us to address seven questions regarding the accuracy of risk assessments and the efficacy of civil commitment in Florida.

This article is presented in four parts. Part 1 is focused on the use of the Static-99 and Static-99R in SVP evaluations in Florida. Part 2 addresses overall risk assessments (not just the Static-99 or Static-99R) of Florida's released "SVPs." Part 3 addresses how to evaluate the accuracy of an

DeClue, G. & Rice, A., (2016). Florida's released "Sexually Violent Predators" are not "High Risk." *Open Access Journal of Forensic Psychology*, 8, 22-51.

<sup>&</sup>lt;sup>1</sup> Article updated on 11/4/2016 to correct a typographical error in Table 12, page 44. The Hanson et al. 2009, "detected sexual recidivism" for the "Treated" group was incorrectly reported as 20.9%, the correct percent is 10.9%

individual evaluator's risk predictions. Part 4 is focused on whether available data show that Florida's civil commitment process reduces sexual recidivism by Florida's released "SVPs."

As of February 28, 2013, SVPP, which is within Florida's Department of Children and Family Services, reviewed 46,286 files regarding sex offenders who had been identified as nearing the end of their confinement. SVPP made a formal, written finding for 1,567 of those men, stating that each met criteria to be considered a sexually violent predator. Prosecutors filed petitions for civil commitment for most of those men and, at the time of cessation of data collection, judges had ruled on 1,482 cases. More than half (761) of those men were released from confinement prior to cessation of data collection.

At that same time, 666 other men declared by SVPP to be "SVPs" were confined at the Florida Civil Commitment Center (FCCC), 570 of whom had been civilly committed and 94 of whom were awaiting civil-commitment trials. In this article we use "SVP" in quotes to refer to men declared by SVPP to meet criteria for civil commitment, and SVP without quotes to refer to men who were civilly committed by courts as sexually violent predators. Flowcharts regarding the SVPP process are available from SVPP and at <a href="http://edr.state.fl.us/Content/resource-demand/criminal-justice/reports/sexually-violent-predators/index.cfm">http://edr.state.fl.us/Content/resource-demand/criminal-justice/reports/sexually-violent-predators/index.cfm</a>. Questions about the flowcharts and about Florida's SVPP process should be directed to SVPP. Prior discussions regarding an earlier version of this data set provide further context (Carr, Schlank, & Parker, 2013; Montaldi, 2015).<sup>2</sup>

The likelihood of future sexual reoffending is a primary consideration in some forensic cases, including those involving civil commitment of SVP (Jackson & Richards, 2008; Miller, Amenta, & Conroy, 2005; Phenix & Jackson, 2016; Rogers & Shuman, 2005; Schwartz, 1999). Actuarial tools have been readily adopted in risk assessments, including assessments of the risk for sexual re-offense (Richards, 2013; Tully, Chou, & Browne, 2013). Prior to its revision in 2009, the Static-99 (Hanson & Thornton, 2000) was considered to be the most widely used actuarial instrument for that purpose. The developers of the Static-99 now recommend use of the revised version, the Static-99R, for all purposes (Phenix, Helmus, & Hanson, 2012).

How long of a follow-up period is needed for sexual-recidivism studies based on static factors that were discernable at the time of release from confinement? A recent survival analysis of the enduring risk for sexual recidivism among 7,740 sexual offenders over a 20-year follow-up period reveals that 10 years following release is the longest meaningful time period for such studies (Hanson, Harris, Helmus, & Thornton, 2014). On average, the sexual-recidivism risk for high-

<sup>&</sup>lt;sup>2</sup> A February 2000 review of SVPP by Florida's Office of Program Policy Analysis and Government Accountability is available at http://www.oppaga.state.fl.us/reports/pdf/9936rpt.pdf

risk offenders was cut in half for each 5 years that they remained offense-free in the community. Ten years after release from confinement, the detected-sexual-recidivism rates were no longer significantly different among offenders who had initially been classified (on the basis of Static-99R scores) as low-, medium-, or high-risk.

In analyzing the data set compiled in compliance with Florida Statute 394.931, we address the following seven questions with regard to Florida's released "SVPs":

Question 1. Have most of Florida's released "SVPs" been detected as having engaged in new acts of sexual violence following their release?

Question 2. Did the Static-99R provide more accurate risk estimates than the Static-99 for Florida's released "SVPs"?

Question 3. Which <u>www.static99.org</u> comparison group leads to the most accurate risk prediction for Florida's released "SVPs"?

Question 4. Would adjustments to, or overrides of, the Static-99R risk prediction be likely to increase the accuracy of risk predictions regarding Florida's "SVPs"?

Question 5. How could SVPP and Florida SVP evaluators use these findings?

Question 6. How can these data be used to assess the accuracy of an individual Florida SVP evaluator's risk predictions?

Question 7. Does available evidence show that civil commitment reduces sexual recidivism by Florida's released "SVPs"?

#### Method

## Sample

As mentioned above, data were collected by the State of Florida, as mandated by Florida Statute 394.931. The first author of this paper was a contract Florida SVP evaluator from 1999 through summer 2010, but had no other involvement in data collection. This could introduce a bias toward finding that Florida's civil commitment of sex offenders reduces sexual recidivism (Schmucker and Lösel, 2015). The second author had no prior involvement with Florida's SVP process.

The 2015 version of Florida Statute 394.912 includes definitions: "Sexually violent predator' means any person who (a) has been convicted of a sexually violent offense and (b) suffers from a

mental abnormality or personality disorder that makes the person likely to engage in acts of sexual violence if not confined in a secure facility for long-term control, care, and treatment." "Likely" is not defined mathematically (e.g., "more likely than not"). "Likely to engage in acts of sexual violence' means the person's propensity to commit acts of sexual violence is of such a degree as to pose a menace to the health and safety of others." "Sexually violent offense" is defined broadly, to include most sex offenses and most criminal offenses considered to have been sexually motivated.

For each of the 761 men in this data set, Florida's SVPP had made a formal, written finding such as, "Mr. X DOES MEET criteria to be considered a sexually violent predator." Subsequently, each of those men was released from custody, and SVPP compiled detected-sexual-recidivism data for all 761 men. The data set contained Static-99 scores for 572 offenders who had been scored on the Static-99 at least one time, and sometimes were scored as many as three times. There were 497 men who had received scores on the Static-99 on two different occasions during the time that SVPP collected data. The one-way absolute-agreement single-evaluator ICC is .75, 95% CI [.71, .79].

From the overall sample of 761 men, we identified a "Fixed 5-Year Sample" of 441 men, and a "Fixed 10-Year Sample" of 191 men, who had been released for at least 5 years or at least 10 years, respectively, when data collection ceased. From the Fixed 5-Year Sample, 303 men had been scored on the Static-99/99R at least once; therefore, these men are included in analyses examining Static-99/99R predictive validity. For men with Static-99 scores only, we derived Static-99R scores using offender ages and evaluation dates included in the data set.

#### **Procedures**

To determine whether a person had been released and whether he had a new detected sex offense, SVPP perused the following sources: Florida Department of Corrections website, Departments of Corrections in other states, Clerk of Courts Information System, federal and state sex-offender registries, Internet, and SVPP records.<sup>3</sup> In this article, except where otherwise stated, we count

<sup>&</sup>lt;sup>3</sup> In considering the likelihood that a detected sexual recidivist among these released persons would go unnoticed, it is worth considering context. Every time Florida's Sexually Violent Predator Program decided that a soon-to-be-released sex offender met criteria for civil commitment, SVPP notified, in writing, the Office of the State Attorney in the county in which the person had most recently been convicted. Florida has 67 counties, so there was an average of about 11 men per county who were recommended for civil commitment and who were subsequently released. Considering that Florida's SVP law went into effect in 1999, and that data collection for this study ceased in early 2013, this means that there was about 1 person per county per year who was so identified and then released from confinement. Almost all were registered sex offenders, required to register periodically at the county sheriff's office. Of course that does not mean that some of these men might commit a sex offense and not be detected (arrest, conviction) but it is unlikely that any of these men would be detected committing a sex offense in Florida and not be identified as a recidivist. The State did not rely solely on Florida records, but also accessed available state and national

any of the following as detected sexual recidivism: new sex-offense or sexually motivated charges, or new sex or sexually motivated convictions.

We compared the detected sexual recidivism rates among these "SVPs" to a group of randomly selected sex offenders released from Florida's prisons from 1990 through 2004 (Zgoba et al., 2015).

We calculated detected sexual recidivism rates for men released at different ages, in blocks of 10 years.

We calculated both discrimination and calibration indicators for the Static-99/99R. *Discrimination* indicators, such as the area under the receiver operating characteristic curve (AUC), address how well an instrument is able to separate those who were detected to engage in future acts of sexual violence from those who were not. *Calibration* indicators tell us how well a risk-assessment tool's predictions of risk agree with actual observed risk (DeClue & Campbell, 2013; Singh, 2013). AUCs for the Static-99 and the Static-99R were calculated via SPSS (Version 23.0). We used each person's average Static-99/99R score from as many as three evaluations to predict recidivism. Recidivism, as stated earlier, is defined in this study as any new sexual or sexually motivated charge or conviction.

We calculated calibration indicators, including positive predictive value (PPV), negative predictive value (NPV), number needed to detain (NND), and overall accuracy (Campbell, 2011; DeClue & Campbell, 2013; Fleminger, 1997; Singh, 2013), for SVPP's risk predictions and for the risk predictions of a single SVP evaluator. These calculations were made via standard 2 X 2 contingency tables and Calculator 1 at <a href="http://vassarstats.net">http://vassarstats.net</a>.

In order to compare the accuracy of using various Static-99R comparison groups with Florida's released "SVPs," we developed a frequency distribution of detected sexual recidivism for each Static-99R score for the 303 men in the Fixed 5-Year Sample for whom we had STATIC<sup>4</sup> scores. We then checked to see how many of these 303 men would be predicted to sexually reoffend if the 2009 Static-99R comparison groups or the 2015 Static-99R comparison groups were used. We used the following procedure for each of the four 2009 comparison groups on pages 1, 2, 4, and 6 at <a href="http://static99.org/pdfdocs/detailed recid tables static99r 2009-11-15.pdf">http://static99.org/pdfdocs/detailed recid tables static99r 2009-11-15.pdf</a>. For each Static-99R score, we multiplied the number of detected sexual recidivists in SVPP's Fixed 5-Year Sample (Column 2 of Table 6) by the Predicted Recidivism Rate for that Static-99R score in each of the

databases (see above list). SVPP scrutinized the men's new criminal records to consider whether any new detected criminal offenses showed apparent sexual motivation.

<sup>&</sup>lt;sup>4</sup> Consistent with Hanson, Thornton, Helmus, & Babchishin, (2015), "STATIC" refers collectively to Static-99, Static-99R, Static-2002, and Static-2002R. "STATIC development group" refers to the researchers who have developed, and continue to develop, these instruments.

2009 comparison groups (Columns 4, 6, 8, and 10 of Table 6), and then summed the results for each of those comparison groups (bottom row of Table 6).

We used a similar procedure for the two 2015 comparison groups on pages 1 and 2 at <a href="http://static99.org/pdfdocs/Supplemental Recidivism Tables Static-99R Static-2002R.pdf">http://static99.org/pdfdocs/Supplemental Recidivism Tables Static-99R Static-2002R.pdf</a>; but, for the 2015 comparison groups, we calculated the results for both the Observed Recidivism Rates and for the Predicted Recidivism Rates.

Following DeClue and Zavodny (2014), we calculated Number Needed to Treat (NNT) and/or Number Needed to Harm (NNH; Cook & Sackett, 1995; Gigerenzer, 2002; Singh, 2013) using data from several recent published meta-analyses of sex-offender treatment. We used the standard calculator at <a href="http://graphpad.com/quickcalcs/NNT1/">http://graphpad.com/quickcalcs/NNT1/</a>. We used the same procedure to calculate NNT/NNH for SVPP's Fixed 5-Year Sample, with the experimental group comprised of those men who had been civilly commitment and treated, and then released.

#### Part 1

In this part we address three questions regarding the use of the Static-99 and Static-99R in SVP evaluations in Florida.

# Question 1. Have most of Florida's released "SVPs" been detected as having engaged in new acts of sexual violence following their release?

If most of these released men were detected to sexually recidivate, then SVPP would have the bittersweet experience of being able to say, "We told you so." But, if most of those men have not been detected to sexually recidivate, then most of the men have not been found to be such dangerous sexual predators after all. We also consider whether Florida's released "SVPs" have been found to sexually recidivate at a greater rate than randomly selected sex offenders released from Florida prisons. If SVPP successfully identifies men who are likely to sexually recidivate if not confined, then their detected sexual recidivism rate should be greater than that of randomly selected sex offenders.

Previous studies, including those that led to the Static-99R revision (Hanson et al., 2015), have found that detected-sexual-recidivism declines with age. We checked to see whether that holds true for Florida's released "SVPs."

**Results.** Regarding the overall sample of 761 men, the average age at release was 45.7 years (SD = 12.39), and they had been released for an average of 6.45 years (SD = 3.91). Seventy-four (9.72%) of those men were detected to sexually recidivate.

There were 441 men who had been released into the community for at least 5 years. We looked at their detected sexual recidivism rate during those 5 years, and refer to them as the "Fixed 5-Year Sample." Those 441 men had an average age at release of 43.42 years (SD = 12.10), and had been released for an average of 9.18 years (SD = 2.65). Forty (9.07%) of those 441 men were detected to sexually recidivate during the first five years of their release from confinement.

There were 191 men who had been released into the community for at least 10 years. We looked at their detected sexual recidivism rate during those 10 years, and refer to them as the "Fixed 10-Year Sample." Those 191 men had an average age at release of 42.89 years (SD = 12.60) and had been released for an average of 11.80 years (SD = 1.07). Twenty-five (13.10%) of those 191 men were detected to sexually recidivate during the first 10 years of their release from confinement. Within the Fixed 10-Year Sample, 19 (9.90%) were detected to sexually recidivate during the first 5 years of their release from confinement, and 6 (3.10%) were detected to sexually recidivate during the second 5 years of their release from confinement.

Table 1 compares the detected sexual recidivism rates of these released "SVPs" to those of randomly selected sex offenders released from Florida's prisons about a decade earlier (Zgoba et al., 2015).

Table 1

Detected Sexual Recidivism Rates for Two Groups of Sex Offenders Released from Florida

	Randomly Selected	Released
	<b>Released Sex Offenders</b>	"SVPs"
5-Year Fixed Sample	5.3% (25 of 474)	9.2% (28 of 303)
10-Year Fixed Sample	13.8% (33 of 240)	13.1% (25 of 191)

As can be seen in Table 1, most of Florida's released "SVPs" have not been detected to sexually recidivate after their release. Although their early (5-year) detected sexual recidivism rate exceeded that of randomly selected sex offenders, after 5 years following release, their continuing detected sexual recidivism rate was no higher than that of randomly selected sex offenders. SVPP appears to have successfully identified a group of sex offenders who *initially* are more dangerous than randomly selected sex offenders, but available evidence does not show that, as a group, these men meet statutory criteria for being *likely to engage in new acts of sexual violence if not confined*. Over 90% of these men are not detected to sexually recidivate within 5 years after their release, and after that they are no more dangerous than randomly selected sex offenders.

We found lower detected-sexual-recidivism rates for men released at older ages. In particular, of the 96 men released at age 60 or over, 1 had a new sex-offense or sexually motivated charge, and 0 had a new sex-offense or sexually motivated conviction. See Tables 2 and 3. (In Tables 2 and

3, the *Felony Charge* and *Misdemeanor Charge* columns consist of men who had a new sexually motivated charge, but not a conviction. Men who had a sexually motivated conviction are not included in the *Felony Charge* and *Misdemeanor Charge* columns.)

Table 2

Rates of Detected Sexual Recidivism for Age Groups (Main Sample)

v			v	1 '	1 /	
Age	n	Felony	Misdemeanor	Felony	Misdemeanor	Total (%)
		Conviction	Conviction	Charge	Charge	
18 - 29	79	3	0	1	0	4 (5.1)
30 - 39	159	17	1	8	0	26 (16.4)
40 - 49	264	17	5	6	6	34 (12.9)
50 - 59	162	5	0	4	0	9 (5.6)
60+	96	0	0	1	0	1 (1.0)
Total	761	42	6	20	6	74 (9.7)

Table 3

Rates of Detected Sexual Recidivism for Age Groups in Fixed 5-Year Sample

				•	-	
Age	n	Felony	Misdemeanor	Felony	Misdemeanor	Total (%)
		Conviction	Conviction	Charge	Charge	
18 - 29	60	1	0	0	0	1 (1.7)
30 - 39	113	13	1	4	0	18 (15.9)
40 - 49	148	13	1	1	2	17 (11.5)
50 - 59	81	3	0	1	0	4 (4.9)
60+	39	0	0	0	0	0 (0.0)
Total	441	30	2	6	2	40 (9.1)

Question 2. Did the Static-99R Provide More Accurate Risk Estimates than the Static-99 for Florida's Released "SVPs"?

The Static-99 (Hanson & Thornton, 2000) is a 10-item measure, which can be scored solely from record review, making it rather efficient and relatively simple for many jurisdictions to use as part of standard practice. The 10 Static-99 items relate to offender or offense characteristics and most items are dichotomous in nature, with a few exceptions. For instance, some items address whether the offender had a male victim, while others involve the counting of previous sexual offenses or sentencing occasions. The revised instrument, the Static-99R, was first unveiled in 2009 (Phenix et al., 2012). The Static-99R includes the same 10 items as the Static-99, with a revision to the age-at-release item. The developers changed this item to greater reflect the influence that age has on a person's likelihood to sexually re-offend. Whereas on the original measure this item was scored 0 or 1, the Static-99R age item scoring ranges from -3 to 1.

There have been many published articles examining the predictive validity of the Static-99 and Static-99R. A meta-analysis of Static-99 scores reported an average effect size of .67 (Cohen's *d*, 95% CI [.62, .72]) in the prediction of sexual recidivism among 63 studies, suggesting the Static-99 is a moderate to large predictor of sexual re-offending (Hanson & Morton-Bourgon, 2009). A more recent review of sex-offender risk-assessment measures reported a mean AUC value of .69 for the Static-99 in prediction of sexual recidivism, again suggesting moderate to large predictive validity (Tully et al., 2013). A meta-analysis examining the predictive validity of the Static-99R among 22 samples revealed similar predictive validity to the Static-99 (mean AUC = .69; Helmus, Hanson, Thornton, Babchishin, & Harris, 2012).

Although analyses of the development samples showed moderate to large AUC values for the Static-99 and Static-99R, field validity studies present more inconsistent data. For instance, the first field validity study of Static-99 scores out of Texas revealed an AUC value of .60 (d = .36), which falls much lower than what the meta-analyses would suggest (Boccaccini, Murrie, Caperton, & Hawes, 2009). However, in a sample of 475 sexual offenders field-scored in California, the Static-99 and Static-99R produced AUC values of .82 in the prediction of any sexual recidivism (Hanson, Lunetta, Phenix, Neeley, & Epperson, 2014).

**Results.** Within the overall sample, SVPP had STATIC scores for 572 people (75.15% of the overall sample). Fifty-six (9.79%) of them had been detected as sexual recidivists. The Static-99 demonstrated poor predictive validity in this sample (AUC = .56, 95% CI [.48, .64]). The mean Static-99 score was higher among recidivists than among non-recidivists, but only slightly (d = .17). The Static-99R performed slightly better than the Static-99 in the prediction of sexual recidivism (AUC = .61, 95% CI [.53, .69]).

Results were similar in SVPP's Fixed 5-Year Sample. SVPP had STATIC scores for 303 men (68.71% of the Fixed 5-Year Sample). Twenty-eight (9.24%) were detected as sexual recidivists. For the Static-99, AUC is .59, 95% CI [.47, .70]. The mean Static-99 score was higher among recidivists than among non-recidivists, but only slightly (d = .24). Again, the Static-99R performed slightly better than the Static-99 in the prediction of sexual recidivism (AUC = .62, 95% CI [.51, .73]). The difference between Static-99R means for recidivists and non-recidivists also demonstrated a slightly stronger effect (d = .37). The effect size for the Static-99R in this field study is similar to that in the recent Texas field study by Boccaccini et al. (2009).

Question 3. Which <u>www.static99.org</u> Comparison Group Leads to the Most Accurate Risk Prediction for Florida's Released "SVPs"?

**Static-99R Comparison Groups.** Beginning in 2009, the developers of the Static-99R have provided multiple reference groups from which evaluators can choose. This introduces a substantial amount of subjective "professional judgment" into an otherwise highly structured actuarial tool (Hanson et al., 2015). Notably, recent research has shown that, when evaluators are allowed to adjust the results of empirical actuarial risk tools, the adjustments typically decrease the predictive accuracy of the resultant risk prediction (Gore, 2007; Storey, Watt, Jackson, & Hart, 2012; Wormith, Hogg, & Guzzo, 2012; see also reviews by DeClue, 2013; DeClue & Zavodny, 2014; and Hanson & Morton-Bourgon, 2009).

For a few years, the developers of Static-99R offered four groups from which evaluators could choose (Helmus et al., 2012). Recently, they have gone with a recommendation for two, rather than four, groups (Hanson et al., 2015). Florida's SVP evaluators have usually used the <a href="https://www.static99.org">www.static99.org</a> comparison group with the highest rates of sexual recidivism (Carr et al., 2013). Because the current study provides a field-validity test of some of the recommendations presented by Hanson et al. (2015), we will summarize parts of that article to put their recommendations in context.

Perhaps the most important points to note about the STATIC development group's recommendations are, as they note on page 4, "none of the proposed procedures for selecting Static-99R reference groups has been directly evaluated in applied use (DeClue & Zavodny, 2013)," and none of the samples in the current "High-Risk/High-Need" comparison group come from SVP samples or, indeed, from any USA sample (Hanson et al., 2015).

Hanson et al.'s (2015) current Recommendations for Practice include the following:

- 1. "When Static-99R or Static-2002R is used as a stand-alone measure, our general recommendation is to report only the recidivism rates for routine/complete samples, as these are the most representative of the population of all convicted sex offenders, and these samples are easiest to define conceptually. ... It is important to remember that routine/complete samples include all offenders, including those who meet the criteria for high-risk/high-need samples and treatment samples. In the routine/complete samples, however, special groups are represented in the proportion that they naturally occur and are not overrepresented as they are in the preselected samples" (pp. 23-24).
- 2. "Although the recidivism rates for the routine/complete should be the default choice, we believe that the recidivism rates for the high-risk/high-need samples should be used when there is a strong, case-specific justification. A primary consideration in this justification should be density of risk factors external to the STATIC measure, such as scores on the Stable-2007. ... Although we recommend that comprehensive evaluations consider both reference groups, the ability of evaluators to improve accuracy by choosing reference groups has yet to be empirically tested" (p. 24).

3. "The use of any norms for any scale requires a professional judgment concerning their validity. There is widespread agreement that inferences about individual recidivism rates should be based on sound scientific procedures and that the recidivism rate estimates should be based on samples that most closely resemble the case at hand. ... Even if an expert witness uses a mechanical risk assessment tool, the professional opinions proffered by the expert should not be mechanical. Instead, expert opinion should be based on a carefully reasoned judgment concerning the appropriateness of this specific risk assessment procedure, for this specific offender, for this specific purpose" (p. 25).

Use of www.static99.org Comparison Groups with the Current Sample. In laying out the purported need for multiple STATIC comparison groups, Hanson et al. (2015, p. 20) write, "Following DeClue (2013), another option would be to restrict interpretation to Static-99R and Static-2002R norms for routine/complete samples. Pegging STATIC recidivism rate estimates to routine/complete samples has the conceptual advantage of providing a stable waypoint for evidence-based debate concerning the recidivism rates that *ought* to be associated with specific scores. Using only routine/complete norms in practice also minimizes the problems associated with selecting comparison groups. Furthermore, the routine/complete sample recidivism rates should be plausible estimates for most cases. The problem, of course, is that routine/complete sample norms would underestimate the risk for offenders who have low or moderate STATIC scores but are high risk for other reasons (e.g., first conviction for a sexual offense but multiple paraphilias and frontal lobe damage)."

In this study we test whether, in practice, use of only the routine/complete comparison group leads to an underestimate of detected sexual recidivism among released persons who have been considered (by a state agency) to meet criteria for confinement as sexually violent predators. The 2015 version of Florida Statute 394.910 includes, "The Legislature finds that a small but extremely dangerous number of sexually violent predators exist. . . . Sexually violent predators generally have antisocial personality features which are unamenable to existing mental illness treatment modalities, and those features render them likely to engage in criminal, sexually violent behavior. The Legislature further finds that the likelihood of sexually violent predators engaging in repeat acts of predatory sexual violence is high. . . . It is therefore the intent of the Legislature to create a civil commitment procedure for the long-term care and treatment of sexually violent predators." Similarly, a press release from the Illinois Attorney General includes, "The legislation strengthens the state's Sexually Violent Persons (SVP) Act to ensure that the worst of the worst sex offenders – those offenders whom authorities believe will rape again – are confined indefinitely." What better place to test for underprediction than among persons that a state agency considers to be the "worst of the worst," or the most likely to sexually reoffend if not confined?

<sup>&</sup>lt;sup>5</sup> http://www.illinoisattorneygeneral.gov/pressroom/2006\_05/20060523.html Accessed October 23, 2015.

**Results.** Table 4 shows the frequency distribution of Static-99R scores for the 303 men in this sample, along with the frequency distributions for the two comparison groups currently recommended by Hanson et al. (2015). Table 5 shows detected sexual recidivism rates for each Static-99R score. A total of 28 of these 303 men (9.24%) had a detected sex-offense charge or conviction within five years following their release, with most (22) of those detections leading to felony convictions.

Table 4

Distributions of Static-99R Scores in Fixed 5-Year Samples

Percent of Each Sample

C	Florida SVP	20	15
Score	(n = 303)	Routine/Complete	High Risk/Needs
-3	0.0%	1.4%	0.1%
-2	0.0%	2.1%	0.6%
-1	1.0%	8.3%	2.4%
0	2.0%	10.8%	3.3%
1	2.0%	13.6%	7.4%
2	5.9%	15.3%	7.3%
3	8.3%	15.6%	12.0%
4	13.2%	13.3%	17.7%
5	20.1%	8.4%	16.6%
6	17.2%	5.3%	14.2%
7	18.8%	3.1%	10.0%
8	8.3%	1.8%	5.2%
9	1.3%	0.6%	2.1%
10	1.7%	0.2%	0.9%
11	0.3%	0.1%	0.1%
Total	100.0%	100.0%	100.0%

Table 5

Fixed 5-Year Detected Sexual-Recidivism Rates by Static-99R Score

Score	n	Felony Conviction	Misdemeanor Conviction	Felony Charge	Misdemeanor Charge	Total (%)
-3	0					
-2	0					
-1	3	0	0	0	0	0 (0)
0	6	0	0	0	0	0 (0)
1	6	0	0	0	0	0 (0)
2	18	2	0	0	0	2 (11.1)
3	25	0	0	0	1	1 (3.9)
4	40	5	0	0	0	5 (12.5)
5	61	1	0	0	0	1 (1.6)
6	52	3	1	0	1	5 (9.6)
7	57	7	0	1	0	8 (14.0)
8	25	4	0	1	0	5 (20.0)
9	4	0	0	1	0	1 (25.0)
10	5	0	0	0	0	0 (0)
11	1	0	0	0	0	0 (0)
12	0					
Total	303	22	1	3	2	28 (9.2)

The next two tables show how many of these men would be predicted to be detected as sexual re-offenders if the 2009 (Table 6) or 2015 (Table 7) comparison groups were used to predict sexual recidivism for a group of offenders with the frequency distribution of Static-99R scores that we found for SVPP's Fixed 5-Year Sample. For both Tables 6 and 7, the bottom row shows how many men would be predicted to be detected as sexual re-offenders for each of the <a href="https://www.static99.org">www.static99.org</a> comparison groups.

Table 6

Calculating Predicted 5-Year Detected Sexual Recidivism Rates Using 2009 Static-99R Comparison Groups

			2009							
	Flo	rida SVP	Routine /	FULLPOP	Non-routine		Selected for Treatment Needs		High Risk/High Needs	
				Would be		Would be		Would be		Would be
		Detected	Predicted	Predicted to	Predicted	Predicted to	Predicted	Predicted to	Predicted	Predicted to
Score	n	Recidivists	Recidivism	be Detected	Recidivism	be Detected	Recidivism	be Detected	Recidivism	be Detected
		(%)	Rate	as Sexual	Rate	as Sexual	Rate	as Sexual	Rate	as Sexual
	_			Recidivists		Recidivists		Recidivists		Recidivists
-3	0		1.2	0	2.2	0	1.7	0		0
-2	0		1.6	0	3.0	0	2.3	0		0
-1	3	0(0.0)	2.1	.06	4.0	.12	3.1	.093	5.4	.16
0	6	0 (0.0)	2.8	.17	5.3	.318	4.1	.246	7.2	.43
1	6	0 (0.0)	3.8	.23	7.0	.42	5.5	.33	9.4	.56
2	18	2 (11.1)	5.0	.90	9.1	1.64	7.2	1.296	12.2	2.20
3	25	1 (4.0)	6.6	1.65	11.9	2.98	9.5	2.375	15.8	3.95
4	40	5 (12.5)	8.7	3.48	15.4	6.16	12.3	4.92	20.1	8.04
5	61	1 (1.6)	11.4	6.95	19.6	11.96	15.9	9.70	25.2	15.37
6	52	5 (9.6)	14.7	7.64	24.7	12.84	20.2	10.50	31.2	16.22
7	57	8 (14.0)	18.8	10.72	30.6	17.44	25.4	14.48	37.9	21.60
8	25	5 (20.0)	23.7	5.93	37.2	9.3	31.4	7.85	45.0	11.25
9	4	1 (25.0)	29.5	1.18	44.3	1.77	38.1	1.52	52.4	2.10
10	5	0 (0.00)	29.5	1.475	51.6	2.58	38.1	1.905	59.7	2.985
11	1	0 (0.00)	29.5	.295	51.6	.516	38.1	.381	59.7	.597
Total	303	28 (9.24)		40.678		68.041		55.601		85.471

Table 7

Calculating Predicted 5-Year Detected Sexual Recidivism Rates Using 2015 Static-99R Comparison Groups

			2015							
	Flo	rida SVP		Routine /	Complete			High Risk /	High Needs	
				Would be		Would be		Would be		Would be
		Detected	Observed	Predicted to	Predicted	Predicted to	Observed	Predicted to	Predicted	Predicted to
Score	n	Recidivists	Recidivism	be Detected						
		(%)	Rate	as Sexual						
		1		Recidivists		Recidivists		Recidivists		Recidivists
-3	0		0.0		0.9		0.0			
-2	0		1.1		1.3		0.0			
-1	3	0 (0)	2.8	0.08	1.9	0.06	4.8	0.14	5.6	0.17
0	6	0 (0)	2.8	0.17	2.8	0.17	3.6	0.22	7.2	0.43
1	6	0 (0)	3.9	0.23	3.9	0.23	7.8	0.47	9.0	0.54
2	18	2 (11.1)	3.6	0.65	5.6	1.01	17.5	3.15	11.3	2.03
3	25	1 (4.0)	7.1	1.78	7.9	1.98	9.7	2.43	14.0	3.50
4	40	5 (12.5)	10.1	4.04	11.0	4.40	19.7	7.88	17.3	6.92
5	61	1 (1.6)	14.2	8.66	15.2	9.27	19.6	11.96	21.2	12.93
6	52	5 (9.6)	20.3	10.56	20.5	10.66	24.6	12.80	25.7	13.36
7	57	8 (14.0)	27.1	15.45	27.2	15.50	26.7	15.22	30.7	17.50
8	25	5 (20.0)	36.7	9.18	35.1	8.78	31.1	7.78	36.3	9.08
9	4	1 (25.0)	38.5	1.54	43.8	1.75	33.3	1.33	42.2	1.69
10	5	0 (0.0)	50.0	2.50	53.0	2.65	62.5	3.13	48.4	2.42
11	1	0 (0.0)	66.7	0.67			0.0	0.00		
Total	303	28 (9.2)	8.3	55.50		56.46	19.1	66.48		70.57

OAJFP - SSN 1948-5115 - Volume 8. 2016

Summing the numbers in Column 7 of Table 7 shows that, if the 2015 Routine/Complete comparison group were used to predict sexual recidivism in a sample with a frequency distribution such as this, 56.455 men would be predicted to be detected sexual recidivists. That is approximately twice as many men as the 28 men in SVPP's sample who were actually detected to sexually recidivate. Table 8 summarizes the findings from Tables 6 and 7, and shows the percent overprediction for each of the 2009 and 2015 comparison groups from <a href="www.static99.org">www.static99.org</a>. Use of any of the comparison groups at <a href="www.static99.org">www.static99.org</a> over-predicts sexual recidivism among Florida's released "SVPs." Use of the 2009 Routine comparison group would lead to less overprediction (and greater accuracy) than use of any other <a href="www.stattic99.org">www.stattic99.org</a> comparison group.

Table 8

Predicting 5-Year Detected Sexual Recidivism in the Florida SVP Study Using Available Static99R Comparison Groups

		Predicted to be Detected as Sexual Recidivists (Rate)	Detected Sexual Recidivists (Rate)	Percent Over-prediction
	Florida SVP Study		28 (9.2)	
	High Risk/High Needs	85 (28.0)		204%
2009	Preselected for Treatment	56 (18.5)		100%
Comparison Groups	Non-routine	68 (22.4)		143%
Groups	Routine	41 (13.5)		46%
2015	High Risk/High Needs	71 (23.4)		154%
Comparison Groups	Routine/Complete	56 (18.5)		100%

Part 2

In this part we address two questions regarding overall risk assessments of Florida "SVPs."

# Question 4. Would Adjustments to, or Overrides of, the Static-99R Risk Prediction Be Likely to Increase the Accuracy of Risk Predictions Regarding Florida's "SVPs"?

As mentioned previously, research has shown that, when evaluators are allowed to adjust the results of empirical actuarial risk tools, the adjustments typically decrease the predictive accuracy of the resultant risk prediction. The same studies show that, when evaluators decide to adjust or override the actuarial-based risk prediction based on additional factors, the evaluators tend to predict that the person is *more dangerous* than the actuarial-based prediction would indicate (Gore, 2007; Storey et al., 2012; Wormith et al., 2012; see also reviews by DeClue, 2013; DeClue & Zavodny, 2014; and Hanson & Morton-Bourgon, 2009).

Florida's SVP evaluators have generally considered risk factors outside of the Static-99R and have tended to estimate that the evaluated persons are more likely to sexually recidivate than would be expected on the basis of the actuarial instrument, especially for the men who were identified by SVPP as meeting criteria for civil commitment (Carr et al., 2013; Montaldi, 2015). Such case-by-case adjustments or overrides would only be expected to increase accuracy if the number of detected sexual recidivists among Florida's released "SVPs" exceeds the number that would be predicted when using the <a href="https://www.static99.org">www.static99.org</a> comparison groups.

**Results and Discussion.** As described above, use of any of the <a href="www.static99.org">www.static99.org</a> comparison groups would lead to over-prediction of detected sexual recidivism for Florida's released "SVPs." If Florida SVP evaluators were to routinely or frequently arrive at final risk predictions that exceed the risk associated with the person's Static-99R score, that would likely lead to an even greater over-prediction of detected sexual recidivism for these people, and a decrease in the overall accuracy of SVP risk assessments in Florida.

This is not to say that an SVP evaluator should never adjust or override the Static-99R risk prediction, no matter what. In their article introducing the Static-99, Hanson and Thornton (2000) mention two examples of "special features" of a case that would likely warrant an override of an actuarial instrument: debilitating disease or stated intentions to re-offend. Wormith et al. (2012) found that overriding risk predictions to *lower* risk level was done rarely, and was found to enhance accuracy in their study. DeClue (2013) provides theoretical, ethical, and practical guidelines regarding when an SVP evaluator should override an actuarial-based prediction.

## **Question 5. How Could SVPP and Florida SVP Evaluators Use These Findings?**

When local findings for an actuarial instrument such as the Static-99R are developed, there are at least four potential ways they could be used by evaluators. One way would be to develop risk tables such as those at <a href="http://static99.org/pdfdocs/detailed recid tables static99r 2009-11-15.pdf">http://static99.org/pdfdocs/Supplemental Recidivism Tables Static-99R 2009-11-15.pdf</a> and <a href="http://static99.org/pdfdocs/Supplemental Recidivism Tables Static-99R Static-2002R.pdf">http://static99.org/pdfdocs/Supplemental Recidivism Tables Static-99R Static-2002R.pdf</a>. The developers of the Static-99R "recommend that local STATIC norms be used only when they have greater scientific credibility than the available aggregated norms. Local norms can account for the unique cultural and social features of a specific jurisdiction, but they are difficult to produce with confidence. . . . We recommend 100 recidivists for stable logistic regression estimates" (Hanson et al., 2015). Concurrently, though, for other risk-assessment tools, the same researchers recommend the use of sets of norms that contain fewer than 100 recidivists (Helmus, Hanson, Babchishin, & Thornton, 2014). If it is decided to follow Hanson et al.'s recommendation, then a risk table with local norms for each score would only be constructed if the study's sample includes at least 100 detected sexual recidivists.

The second potential way that evaluators could use local findings would be to recognize whether the <a href="www.static99.org">www.static99.org</a> comparison groups tend to over-predict or under-predict detected sexual recidivism, and to mention that in their reports and testimony.

A third potential way to use local findings would be for evaluators to be mindful of findings regarding over- or under-prediction of detected sexual recidivism as evaluators consider whether to adjust or over-ride actuarial-based risk predictions in individual cases. For example, if it turned out that using comparison groups from <a href="www.static99.org">www.static99.org</a> would lead to under-prediction of detected sexual recidivism among Florida's released "SVPs," then an evaluator might be inclined to adjust or override the Static-99R prediction in the direction of predicting greater risk in cases in which there are identified factors outside the actuarial instrument that would suggest greater risk.

A fourth potential way for evaluators to use local findings would be to use the first three columns in Table 6 to develop a 2 X 2 contingency table for relevant cut scores on the Static-99R in order to calculate calibration indicators, including the Positive Predictive Value (PPV), the Number Needed to Detain (NND), and overall accuracy (Campbell, 2011; DeClue & Campbell, 2013; Fleminger, 1997; Singh, 2013).

**Results and Discussion.** In considering the first option, there were 303 men who had been at risk for at least 5 years and for whom we had Static-99R scores. If the detected-sexual-recidivism rate for this Fixed 5-Year Sample had been higher than 33%, we would have had 100 or more detected sexual recidivists, and we could have proceeded with logistic regression to develop a risk table using local findings. As shown in Table 5, the detected-sexual-recidivism rate was much lower, at 9.24%, and there were only 28 detected sexual recidivists in this sample. Therefore, we did not proceed with development of a risk table of local norms for Florida's released "SVPs."

Regarding the second option, as mentioned above, we found that using any of the <a href="https://www.static99.org">www.static99.org</a> comparison groups would lead to an over-prediction of detected sexual recidivism for Florida's "SVPs." Florida SVP evaluators could mention that in their reports and testimony.

Regarding the third option, Florida SVP evaluators could be mindful of the fact that the <a href="https://www.static99.org">www.static99.org</a> comparison groups would lead to an over-prediction of detected sexual recidivism for Florida's "SVPs" as Florida SVP evaluators consider whether to adjust or over-ride their actuarial-based risk predictions.

Regarding the fourth option, Table 9 presents a standard 2 X 2 table for a Static-99R Score of 7 for the Fixed 5-Year Sample.

Table 9
Standard 2 X 2 Table for a Static-99R Score of 7 in the Fixed 5-Year Sample

		Detected to		
		Yes	No	Total
Predicted to	Yes	14	78	92
Reoffend	No	14	197	211
	Total	28	275	303

For the Fixed 5-Year Sample, the PPV for a score of 7 or higher is .15, 95% CI [.09, .25]. In other words, if we predicted that all of the men in the Fixed 5-Year Sample with a Static-99R Score of 7 or above would be detected to sexually re-offend within 5 years of their release, we would be correct about 15% of the time and incorrect about 85% of the time. Overall accuracy (correct predictions divided by number of cases) is 70%. In contrast, if one predicted that 0 persons would be detected to sexually reoffend within 5 years, overall accuracy would be 91%.

Similarly, the NND for a score of 7 or higher is 7. In other words, if we wanted to prevent one detected sexually violent act over a 5-year period among men with Static-99R scores of 7 or above in the Fixed 5-Year Sample, we would have to detain 7 such men. Substituting these numbers into a quote from Singh (2013, p. 13), "Some may consider the unnecessary detention of six people to prevent the violent behavior of a seventh an appropriate measure to ensure public safety, whereas others may feel that the civil rights of those six unnecessarily detained individuals are of greater importance." In Florida SVP cases, evaluators could include such data and calculations in reports and testimony, so that decision makers can better appreciate the consequences of the choices they make.

#### Part 3

In this part we address how to evaluate the accuracy of an individual evaluator's risk predictions.

# Question 6. How Can These Data Be Used to Assess the Accuracy of an Individual Florida SVP Evaluator's Risk Predictions?

When performing risk assessments, forensic psychologists often conduct a careful one-time assessment, offer a prediction regarding an individual person's risk, and never receive or examine feedback regarding the accuracy of the evaluator's risk prediction. We examined the accuracy of one Florida SVP evaluator's risk predictions, as encapsulated in this data set. Recall that, for every subject in this entire data set, SVPP had found that the person met criteria for civil commitment as an SVP. In some of the cases in this data set, one SVP evaluator had opined that the particular person met commitment criteria, and another SVP evaluator opined that the person did not.

The first author of this article was a contract evaluator for SVPP from 1999 through summer 2010. We identified which of these subjects he had evaluated for SVPP, whether or not this evaluator opined that the person met commitment criteria, and whether the person was detected to sexually recidivate during the time that data were collected. We constructed two 2 X 2 contingency tables; in 1 table counting sexual recidivism consisting of a charge or conviction, and in the other table only counting new convictions.

**Results.** Tables 10 and 11 present accuracy rates for one Florida SVP evaluator's risk predictions.

Table 10

Accuracy of One Evaluator's Risk Predictions (Charge or Conviction)

Predicted	Re-offense (charge or conviction)	No Detected Re-offense	Total
Yes	5	49	54
No	1	18	19
Total	6	67	73

Table 11

Accuracy of One Evaluator's Risk Predictions (Conviction Only)

Predicted	Re-offense (conviction)	No Detected Re-offense	Total
Yes	3	51	54
No	0	19	19
Total	3	70	73

This evaluator assessed 73 (9.6%) of the men in this data set. When counting sexual or sexually motivated charge or conviction as detected sexual recidivism (Table 10), the detected-sexual-recidivism rate was 8.22% (which is not unexpected, given that the overall detected-sexual-recidivism rate for the 761 men in the data set was 9.72%). For the data in Table 10, PPV = .09, 95% CI [.04, .21], and NPV = .95, 95% CI [.72, 1.00]. Thus, of the 54 men declared by this evaluator to be likely to engage in new acts of sexual violence if they were released from confinement, 5 (9%) were detected to have a new sexual or sexually motivated charge or conviction during the time that SVPP collected data. Of the 19 men declared by this evaluator to not be likely to engage in new acts of sexual violence if released, 18 (95%) had no new sexual or sexually motivated charge or conviction.

When counting sexual or sexually motivated *conviction* as detected sexual recidivism (Table 11), the detected-sexual-recidivism rate was 4.11%. For the data in Table 11, PPV = .06, 95% CI [.01, .16], and NPV = 1.00, 95% CI [.79, 1.0]. Thus, among the 54 men that this evaluator declared

were likely to sexually recidivate if they were released, 51 (94%) were not convicted of a new sexual or sexually motivated offense. Among the 19 men declared by this evaluator to not be likely to sexually recidivate, 0 were convicted of a new sexual or sexually motivated offense.

**Discussion.** Any SVPP contract evaluator could calculate the accuracy of his or her risk predictions using this same technique: request the data from SVPP, identify which cases he or she evaluated and whether he or she had opined that the person met criteria for civil commitment, and count how many of those men were detected to sexually recidivate following release. Because these data are public records, any interested person could obtain the data regarding any contract SVP evaluator and then determine that evaluator's numbers of hits and misses.

#### Part 4

This part is focused on whether available data show that Florida's civil commitment process reduces sexual recidivism by Florida's released "SVPs."

# Question 7. Does Available Evidence Show That Civil Commitment Reduces Sexual Recidivism by Florida's Released "SVPs"?

To address this question, which is at the heart of the statutory mandate to conduct an efficacy study, we wanted to compare *persons who were not committed* versus *persons who were committed, treated, and then released following a judicial finding that they no longer met commitment criteria.* This type of analysis addresses whether committing persons to involuntary, indefinite detention reduces detected sexual recidivism.

This question is related to the question of whether sex-offender treatment reduces sexual recidivism. DeClue and Zavodny (2014) used data from published meta-analyses to calculate Number Needed to Treat (NNT) for sex-offender treatment. NNT is a useful measure of treatment effectiveness (Cook & Sackett, 1995; Gigerenzer, 2002; Singh, 2013). Calculating NNT is very straightforward: NNT is the inverse of the absolute risk reduction. It is the average number of patients needed to be treated to prevent one bad outcome; that is, the number of patients that need to be treated for one patient to benefit, compared with a control group. For sex-offender treatment, NNT can be operationalized as the average number of sex offenders needed to be treated to prevent one re-arrest or re-conviction for a sexual offense.

DeClue and Zavodny (2014) calculated NNT for three recent meta-analyses. The authors of one of those studies (Lösel and Schmucker, 2005) updated their meta-analysis in 2015. In the most recent meta-analysis, Schmucker and Lösel (2015) restricted their analysis to comparisons with equivalent treatment and control groups, and to studies with official measures of recidivism as outcome criteria. The studies included in their meta-analysis were predominantly reported in the

last two decades, with nearly half appearing since 2000. All treatment programs involved psychosocial treatment, with cognitive-behavioral treatment predominating.

In addition to examining whether available data show that civil commitment reduces detected sexual recidivism, we wanted to see whether it does so with greater efficacy than the overall efficacy of sex-offender treatment in the most recent meta-analysis (Schmucker & Lösel, 2015). Regarding Florida's released "SVPs," we compared two groups of released "SVPs." All of the men in both groups had the following in common: their files had been reviewed by SVPP and they had been referred for one or more face-to-face evaluations. In at least one, and usually more than one of those evaluations, the evaluator declared, to a reasonable degree of certainty, that the person was likely to engage in acts of sexual violence if he was not confined. All of the men in both groups had been declared by SVPP to be likely to engage in future acts of sexual violence if released.

The differences in the two groups only emerged after the SVP evaluators and SVPP had completed their evaluations:

- The 24 men who comprised one subgroup were civilly committed by a court, treated at FCCC, and then released on the basis of a judicial finding that they no longer met criteria for civil commitment. The average Static-99R score for the 16 men for whom SVPP had STATIC scores was 4.2.
- The 417 men who comprised the other subgroup were released without ever being civilly committed by a court. The average Static-99R score for the 286 men for whom SVPP had a STATIC score was 5.3. Most of these cases were resolved by releasing the men without the men ever going to a civil-commitment trial.

In calculating NNT, we treated detected sexual recidivism (new charge or conviction) as the "bad outcome." The "good outcome" was not being detected to have sexually recidivated. For Florida's released, "SVPs," we used the Fixed 5-Year Sample of 441 subjects. We entered the number of men who had been committed, treated, and subsequently released as the "experimental" subjects, and "SVPs" who were released without ever being committed as "controls." If the NNT would turn out to be a positive number, that would suggest that, for this sample, civil commitment reduced detected sexual recidivism. If the NNT for Florida's committed-then-released "SVPs" is lower than the NNT for Schmucker and Lösel's (2015) meta-analysis, that would suggest that civil commitment had a greater, positive effect on Florida's committed-then-released "SVPs" than the average efficacy of sex-offender treatment in that recent meta-analysis.

When NNT turns out to be a negative number, that indicates that subjects in the experimental group had more bad outcomes than subjects in the control group. The results are characterized as

Number Needed to Harm (NNH). For the SVPP sample, if the calculator would yield NNH rather than NNT, that would indicate that the committed-treated-released "SVPs" were detected to sexually recidivate at a rate that is greater than the number of never-committed "SVPs."

**Results.** Table 12 presents NNT for sexual-recidivism meta-analyses, including Schmucker and Lösel's 2015 update. For these three meta-analyses, NNT varies from 13 to 28. An NNT of 28 means that about 1 in 28 sex-offender patients benefits from treatment (i.e., has a lowered rate of detected sexual recidivism).

Table 12

Rates of Detected Sexual Recidivism & Number Needed to Treat (NNT) in Three Recent Meta-Analyses

Meta-Analysis	Detected Sexual		
Weta-Allarysis	Treated	Untreated	NNT
Hanson, Bourgon, Helmus, & Hodgson (2009)	10.9%	19.2%	13
Hanson et al. (2002)	12.3%	16.8%	23
Schmucker & Lösel (2015)	10.1%	13.7%	28

Table 13 presents NNT results for Florida's released "SVPs." Considering Florida's released "SVPs" in this context, we can use the NNT from Schmucker and Lösel's (2015) meta-analysis as a fair, though admittedly low, benchmark. Does available evidence show that more than 1 in 28 civilly committed SVPs benefited from involuntary detention (had a lower rate of detected sexual recidivism)? Of course, that question could also be worded in terms of whether *society* benefited from involuntarily detaining these SVPs prior to their release; either way, the question is whether the civilly committed persons had a lower rate of detected sexual recidivism than those who were not civilly committed.

Table 13

Number Needed to Treat/Harm

"Florida's Released 'SVPs", Fixed Five-Year Sample		
	Not Detected to Sexually Reoffend	Detected to Sexually Reoffend
Not Committed	380	37
Committed	21	3

## Calculated Results

8.9% of not-committed subjects were detected to sexually reoffend.

12.5% of committed-treated-and-released subjects were detected to sexually reoffend.

The difference, the absolute risk increase, is 3.6%.

The 95% confidence interval for this difference ranges from -9.9% to 17.1%.

The NNH (Number Needed to Harm) is 28. This means that about one in every 28 patients will be harmed by the treatment.

Because the 95% confidence interval for the absolute risk reduction extends from a negative number (treatment may harm) to a positive number (treatment may benefit), we cannot say with 95% certainty whether commitment increases risk, decreases risk, or has no effect.

In Schmucker and Lösel's (2015) meta-analysis, on average, the studies included 358 offenders. SVPP's Fixed Five-Year Sample included 441 offenders. However, at the time SVPP stopped collecting data, only 24 of the subjects in the Fixed 5-Year Sample had been committed prior to their release. The smaller numbers in Florida's released "SVP" study, especially the small number of committed-treated-released "SVPs," lead to a wide confidence interval for Florida's released "SVP" study.

As shown in Table 13, the available evidence does not show that involuntary, indefinite confinement for long-term control, care, and treatment of SVPs reduces detected sexual recidivism. These results actually trend in the opposite direction. Because the confidence interval for Florida's released SVPs extends from a negative number (civil commitment may harm) to a positive number (civil commitment may benefit), available evidence does not prove that Florida's civil-commitment process makes people more likely to commit new acts of sexual violence.

#### **General Discussion**

In response to a legislative mandate, the State of Florida conducted a 14-year efficacy study of its program to involuntarily, indefinitely, and preventively detain persons that it considered to have a "propensity to commit acts of sexual violence . . . of such a degree as to pose a menace to the health and safety of others." SVPP confirmed to us that the study has been completed; data collection has stopped and has not been resumed. In this article, we report the results of this completed study.

More than half of the men declared by SVPP to be dangerous sexual predators have been released from confinement. Most of Florida's released "SVPs" have not been detected to engage in new acts of sexual violence following their release. Although their early (5-year) detected sexual recidivism rate exceeded that of randomly selected sex offenders, by 10 years following release, their detected-sexual recidivism rate was no higher than that of randomly selected sex offenders. SVPP appears to have successfully identified a group of sex offenders who *initially* are more dangerous than randomly selected sex offenders, but available evidence does not show that, as a group, these people really meet statutory criteria for being *likely to engage in new acts of sexual violence if not confined.* Over 90% of these men are not detected to sexually recidivate within 5 years after their release, and by 10 years after release their detected-sexual-recidivism rate is no greater than that of randomly selected sex offenders.

The Static-99R provided more accurate risk estimates than the Static-99, which is consistent with prior research. Accuracy levels in this field study are lower than in the development samples, but are comparable to a prior field study conducted in Texas (Boccaccini et al, 2009). The Static-99R is not worthless for this population; released "SVPs" with higher scores tended to have greater detected-sexual-recidivism rates than those with lower Static-99R scores. Although most of the

men with higher Static-99R scores are not detected to sexually re-offend once they are released, that is even truer for men with lower Static-99R scores.

All of the <u>www.static99.org</u> comparison groups lead to over-prediction of detected sexual recidivism among Florida's released "SVPs." The 2009 Routine/Complete comparison group would lead to the least over-prediction, compared to the other <u>www.static99.org</u> comparison groups.

SVPP and Florida's SVP evaluators could identify relevant cut points and use the data in the first three columns of Table 6 to develop 2 X 2 contingency tables such as the one presented as Table 9. Those can be used to calculate calibration indicators, including the Positive Predictive Value (PPV), the Number Needed to Detain (NND), and overall accuracy (Campbell, 2011; DeClue & Campbell, 2013; Fleminger, 1997; Singh, 2013). Those calibration indicators can be reported to decision makers, to enhance understanding of the consequences of decisions to confine or release persons.

Because (a) by far, most released "SVPs" are not detected to sexually recidivate and (b) SVP evaluators are not very precise at identifying in advance those who probably will, overall accuracy of risk assessments would be greatest if SVPP predicted that 0 prisoners would be detected to sexually reoffend following their release from confinement. Unfortunately, during the first 14 years of its attempt to prevent sex crimes via involuntary commitment, the State of Florida has apparently done more "rounding up of the usual suspects" (detaining people who were detected to have committed sex offenses in the past but would not have been sexual recidivists in the future) than precisely targeting future perpetrators (only detaining the men who would have become detected sexual recidivists had they not been subjected to preventive detention).

In addressing whether civilly committing a person reduces risk for engaging in new acts of sexual violence, we relied on *available evidence* regarding *detected sexual recidivism* and we used a low bar: Does available evidence show that civil commitment benefits (reduces risk) for at least 1 in 28 persons who are involuntarily detained? Despite 14 years of statutorily mandated program evaluation, the answer is no. Available evidence does not show that civil commitment reduces people's risk to commit future acts of sexual violence at all.<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> More data are needed to determine whether Florida's civil-commitment process increases, decreases, or has no effect on detected sexual recidivism. Most helpful in this regard would be an updated account of the detected-sexual-recidivism rates of *persons who were not committed* and especially *persons who were committed*, *treated*, *and then released following a judicial finding that they no longer met commitment criteria*. Resumption of the efficacy study could yield meaningful results quickly. At the time data collection was halted, SVPP's data set contained only 24 committed-treated-and-released persons *who had been at risk for at least 5 years*, but there were already 104 persons who had been committed-treated-and-released. Furthermore, as of February 2016 there were 178 such persons. See <a href="http://edr.state.fl.us/Content/resource-demand/criminal-justice/reports/sexually-violent-predators/svppflowchart.pdf">http://edr.state.fl.us/Content/resource-demand/criminal-justice/reports/sexually-violent-predators/svppflowchart.pdf</a>. If and when data collection is resumed, periodic updates to Table 13 would eventually yield valuable information

Throughout this paper, we have characterized this as a *completed* study, because data collection has stopped and has not been resumed, and because the portion of the law mandating the study was deleted when the Florida Statutes were revised in 2014. Those involved in the initial discussion regarding the results of the study (Carr et al., 2013) have reported that, upon seeing that the results appeared to show flaws in the status quo, data collection was halted and the relevant portion of the law mandating analysis of the program's efficacy was deleted from the Florida Statutes (Montaldi, 2015). We recommend that data collection resume immediately, and that the efficacy of the program be further analyzed as data are added.

#### Limitations

All sexual-recidivism studies focus on *detected* sexual recidivism among *released* sex offenders. This study is no exception. As always, we do not know how many, if any, sex offenses went undetected. And we do not know how many men still confined as SVPs in Florida would have reoffended if they had been released. This is no different from other detected-sexual-recidivism studies, including all of the studies whose samples comprise the <a href="www.static99.org">www.static99.org</a> comparison groups.

# Acknowledgements

Some of these data were presented at the Annual Meeting of the American Psychology-Law Society in San Diego, California, on March 21, 2015. The authors thank the State of Florida for releasing these data, following our public-records request, and for providing some guidance to understand the data file. Thanks also to the following for helpful comments and suggestions: Jill Levenson, Gianni Pirelli, Denis Zavodny, Brian Abbott, Dan Montaldi, and Phil Witt.

regarding whether civil commitment in Florida appears to increase, decrease, or have no discernable effect on a person's likelihood to become a detected sexual recidivist.

## References

- Boccaccini, M. T., Murrie, D. C., Caperton, J. D., & Hawes, S. (2009). Field validity of the Static-99 and MnSOST-R among sex offenders evaluated for civil commitment as Sexually Violent Predators. *Psychology, Public Policy, and Law, 15*, 278-314. doi: 10.1037/10017232
- Campbell, T. W. (2011). Predictive accuracy of Static-99R and Static-2002R. *Open Access Journal of Forensic Psychology*, *3*, 82-106.
- Carr, C., Schlank, A., & Parker, K. C. (2013). *Review of Florida's Sexually Violent Predator Program Office*, *September 23*, 2013. Accessed February 15, 2016, from <a href="http://media.cmgdigital.com/shared/news/documents/2013/09/23/09.23\_SVPP\_Report.pdf">http://media.cmgdigital.com/shared/news/documents/2013/09/23/09.23\_SVPP\_Report.pdf</a>
- Cook, R. J., & Sackett, D. L. (1995). The number needed to treat: A clinically useful measure of treatment effect. *British Medical Journal*, *310*, 452–454. DOI:10.1136/bmj.310.6977.452.
- DeClue, G. (2013). Years of predicting dangerously. *Open Access Journal of Forensic Psychology*, 5, 16-28.
- DeClue, G., & Campbell, T. W. (2013). Calibration performance indicators for the Static-99R: 2013 update. *Open Access Journal of Forensic Psychology*, *5*, 82-88.
- DeClue, G., & Zavodny, D. L. (2013). Forensic use of the Static-99R: Part 3. Choosing a comparison group. *Open Access Journal of Forensic Psychology*, 5, 151-182.
- DeClue, G., & Zavodny, D. L. (2014). Forensic use of the Static-99R: Part 4. Risk communication. *Journal of Threat Assessment and Management, 1*, 145-161.
- Fleminger, S. (1997). Number needed to detain. *British Journal of Psychiatry*, 171, 287. DOI:10.1192/bjp.171.3.287a.
- Gigerenzer, G. (2002). Calculated risks: How to know when numbers deceive you. New York: Simon & Schuster.
- Gore, K. S. (2007). Adjusted actuarial assessment of sex offenders: The impact of clinical overrides on predictive accuracy. *Dissertation Abstracts International*, 68(07), 4824B. (UMI No. 3274898).

- Hanson, R. K., Bourgon, G., Helmus, L., & Hodgson, S. (2009). The principles of effective correctional treatment also apply to sexual offenders: A meta-analysis. *Criminal Justice and Behavior*, *36*, 865-891.
- Hanson, R. K., Gordon, A., Harris, A. J. R., Marques, J. K., Murphy, W., Quinsey, V. L., et al. (2002). First report of the Collaborative Outcome Data Project on the effectiveness of psychological treatment of sex offenders. *Sexual Abuse: A Journal of Research and Treatment*, 14, 169-194.
- Hanson, R. K., Harris, A. J. R., Helmus, L., & Thornton, D. (2014). High-risk sex offenders may not be high risk forever. *Journal of Interpersonal Violence*, *29*, 2792-2813.
- Hanson, R. K., Lunetta, A., Phenix, A., Neeley, J., & Epperson, D. (2014). The field validity of Static-99/R sex offender risk assessment tool in California. *Journal of Threat Assessment and Management*, 1, 102-117.
- Hanson, R. K., & Morton-Bourgon, K. E. (2009). The accuracy of recidivism risk assessments for sexual offenders: A meta-analysis of 118 prediction studies. *Psychological Assessment*, 21, 1-21. doi:10.1037/a0014421
- Hanson, R. K., & Thornton, D. (2000). Improving risk assessments for sex offenders: A comparison of three actuarial scales. *Law and Human Behavior*, *24*, 119-136.
- Hanson, R. K., Thornton, D., Helmus, L-K., & Babchishin, K. M. (2015). What sexual recidivism rates are associated with static-99R and Static-2002R scores? *Sexual Abuse: A Journal of Research and Treatment*. First published online on March 25, 2015 as doi:10.1177/1079063215574710.
- Helmus, L., Hanson, R. K., Babchishin, K. M., & Thornton, D. (2014). Sex offender risk assessment with the Risk Matrix 2000: Validation and guidelines for combining with the STABLE-2007. Journal of Sexual Aggression. Advance online publication. doi:10.1080/13552600.2013.870241
- Helmus, L., Hanson, R. K., Thornton, D., Babchishin, K. M., & Harris, A. J. R. (2012). Absolute recidivism rates predicted by Static-99R and Static-2002R sex offender risk assessment tools vary across samples: A meta-analysis. *Criminal Justice and Behavior*, *33*, 1148-1171.

- Jackson, R. L., & Richards, H. J. (2008). Evaluations for the civil commitment of sexual offenders. In R. Jackson (ed.), *Learning forensic assessment* (pp. 183-209). New York: Routledge.
- Lösel, F., & Schmucker, M. (2005). The effectiveness of treatment for sexual offenders: A comprehensive meta-analysis. *Journal of experimental Criminology, 1*, 117-146.
- Miller, H. A., Amenta, A. E., & Conroy, M. A. (2005). Sexually violent predator evaluations: Empirical evidence, strategies for professionals, and research directions. *Law and Human Behavior*, 29, 29-54.
- Montaldi, D. (2015). A study of the efficacy of the sexually violent predator act in Florida. *William Mitchell Law Review*, 41. Accessed February 10, 2016, from http://open.mitchellhamline.edu/wmlr/vol41/iss3/4
- Phenix, A., Helmus, L., & Hanson, R. K. (July 26, 2012). Static-99R & Static-2002R Evaluators' Workbook. Accessed June 27, 2013, from www.static99.org
- Phenix, A., & Jackson, R. L. (2016). Evaluations for sexual offender civil commitment. In R. Jackson & R. Roesch (eds.), *Learning forensic assessment: Research and practice* (2<sup>nd</sup> ed.) (pp. 162-201). New York: Routledge.
- Richards, H. (2013). Statistical controversies in the Sexually Violent Predator Evaluation (SVPE) Practice Community: Bayesian departure and polarization. In Helfgott, J. B. (Ed.) (2013). Criminal psychology (Vol. 3): Implications for forensic assessment, policing, and the courts. Santa Barbara, CA: Praeger.
- Rogers, R., & Shuman, D. W. (2005). Fundamentals of forensic practice: Mental health and criminal law. New York: Springer.
- Schmucker, M., & Lösel, F. (2015). The effects of sexual offender treatment or recidivism: An international meta-analysis of sound quality evaluations. *Journal of Experimental Criminology*, 11, DOI: 10.1007/s11292-015-9241-z.
- Schwartz, B. K. (1999). The case against involuntary commitment. In A. Schlank & F. Cohen (Eds.), *The sexual predator: Law, policy evaluation, and treatment* (pp. 4:1-4:22). Kinston, NJ: Civic Research Institute.
- Singh, J. (2013). Predictive validity performance indicators in violence risk assessment: A methodological primer. *Behavioral Sciences and the Law, 31,* 8-22.

- Storey, J. E., Watt, K. A., Jackson, K. J., & Hart, S. D. (2012). Utilization and implications of the Static-99 in practice. *Sexual Abuse: A Journal of Research and Treatment*, 24, 289-302. doi:10.1177/1079063211423943
- Tully, R. J., Chou, S., & Browne, K. D. (2013). A systematic review of the effectiveness of sex offender risk assessment tools in predicting sexual recidivism of adult male sex offenders. *Clinical Psychology Review*, *33*, 287-316.
- Wormith, J. S., Hogg, S., & Guzzo, L. (2012). The predictive validity of a general risk/needs assessment inventory on sexual offender recidivism and an exploration of the professional override. *Criminal Justice and Behavior*, *39*, 1511-1538. doi:10.1177/0093854812455741
- Zgoba, K. M., Miner, M., Levenson, J., Knight, R., Letourneau, E., & Thornton, D. (2015). The Adam Walsh Act: An examination of sex offender risk classification systems. *Sexual Abuse: A Journal of Research and Treatment*, 1079063215569543, first published on February 5, 2015.