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FINDINGS FROM THE EVALUATION OF THE CONNECTICUT JUDICIAL BRANCH'S THREE COURT-MANDATED FAMILY VIOLENCE PROGRAMS: FVEP, EXPLORE, AND EVOLVE

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Statistics show the number of family violence incidents in Connecticut has remained stable over the past two decades, with approximately 19,000 to 21,000 incidents leading to an arrest each year. In 2012, there were 19,804 family violence arrest incidents involving 41,393 individuals, including 17,411 victims and 16,073 arrested offenders (an additional 7,909 individuals were considered victims and offenders). In the majority of cases (35,637 or 86%), participants were arrested for assault (13,598), breach of peace (8,608) or disorderly conduct (13,431)². Twenty of these cases were classified as homicides³. The Connecticut Coalition Against Domestic Violence estimates the number of family violence victims to be much higher (over 50,000 in 2013) given that many victims do not call the police.⁴

Arrested offenders can be court-ordered to attend one of the Judicial Branch's three family violence programs. These programs, operated through its Court Support Services Division (CSSD), are the FVEP (pre-trial), EXPLORE (post-plea), and EVOLVE (post-plea). In addition to these three court-mandated programs, a number of providers and agencies outside of CSSD engage in individual counseling and group work with family violence offenders.

Public Act 13-247 *An Act Implementing Provisions of the State Budget* mandated, under section 53(a), that an evaluation be conducted to "...assess the effectiveness of programs maintained by [CCSD] with respect to family violence..." (i.e., FVEP, EXPLORE, and EVOLVE). Moreover, the law specified that "such assessment [...] consider findings from the Pew-MacArthur Results First Initiative's cost-benefit analysis model [to] determine whether any program changes may be implemented to improve the cost-effectiveness of such programs." This study was conducted to fulfill the legislative requirements of the Public Act.

CONNECTICUT'S FAMILY VIOLENCE PROGRAMS

The Family Violence Education Program (FVEP)

The FVEP is a 9-week pre-trial program that meets once per week for 1.5 hours. Its purpose is to educate defendants (male and female) on how violence affects relationships and to provide them with basic interpersonal skills to develop violence-free relationships. The FVEP is currently available in all 20 Geographical Area (GA) court locations.

REPORT SUMMARY

The current research was conducted pursuant to the legislative requirements outlined in Public Act 13-247. Faculty from the Institute for the Study of Crime and Justice at Central Connecticut State University were contracted to evaluate the effectiveness of the Judicial Branch's three court-mandated family violence interventions: FVEP, EXPLORE, and EVOLVE.

The study utilized a quasi-experimental research design with propensity-matched comparison groups. It looked at program completion rates, one-year post-program re-arrest rates, and statistically calculated "effect sizes" of each program. These programs had relatively high completion rates, low to moderate one year post-program arrests rates, and had low to moderate effects at reducing arrests. Offenders who successfully completed these programs were much less likely to be re-arrested than comparable offenders who did not complete the programs.

THE FULL REPORT

This publication provides an overview of the report submitted to the Connecticut General Assembly. Please see this report for a more detailed presentation of the research methods, statistics, and findings at: http://jud.ct.gov/CSSD/research/FamViolence_Eval_060914.pdf

EXPLORE

EXPLORE is a 26 session post-conviction and post-plea program for male family violence offenders (1.5 hour sessions, once per week for 26 weeks) based on a cognitive behavioral therapeutic framework. Its purpose is to foster behavioral change through developing awareness, building positive interpersonal skills, and promoting an understanding of the harmful effects family violence has on victims and children. EXPLORE was available in 13 GA court locations until 2012, when it became available in all GA court locations.

EVOLVE

EVOLVE is a 52 session (2-hour sessions, twice a week for 26 weeks) post-conviction and post-plea program. It is an intensive cognitive behavioral intervention designed for high-risk family violence offenders (male only), centering on victims and children, behavior change, interrelation and communication skill building, and responsible parenting/fatherhood. EVOLVE is currently available in four court GA court locations (Bridgeport, New Haven, New London, and Waterbury).

PRIOR RESEARCH ON FAMILY VIOLENCE PROGRAMS

Research reviews of evaluations of family violence interventions have led to inconsistent conclusions and calls for more research to better understand their effectiveness (Arias, Arce, & Vilarino, 2013). For example, Arias and associates' (2013) review found a range of post-treatment one year arrest rates. One study found that only 3% of participants were re-arrested while another found that 69% were re-arrested within one year of program discharge. At best, reviews of methodologically sound studies reveal small effects of batterers' interventions (see Arias et al., 2013; Babcock, Green, & Robie, 2004; Davis & Taylor, 1999;

Feder & Wilson, 2005; Miller, Drake, & Nafziger, 2013). These findings have led to a debate among experts over the most effective approaches to treat domestic violence offenders.

The one consistent conclusion found across reviews is that the more rigorous the study the lesser the likelihood of finding program success (Feder & Wilson, 2005). In other words, the more a study has a comparison group that closely resembles the treatment group, the less likely the study will find program effectiveness. Reviews of domestic violence program evaluations commonly consist of recommendations for more sound research to better understand the effects of these programs.

THE RESEARCH METHODOLOGY USED FOR THIS STUDY

The present study was designed to meet the requirements of Public Act 13-247 by evaluating the effectiveness of the three Judicial Branch Family Violence Programs using a rigorous methodology⁵. The results were to be used in the General Assembly's Results First cost-benefit analysis initiative.

The study had three research questions:

- (1) What were the completion rates for each program and were there statistical differences between program completers and non-completers?
- (2) Was the one-year re-arrest rate for any new offense or family violence offense for offenders who participated in the program statistically different from those offenders who did not participate in the program?
- (3) Were there measureable program effect sizes?

FURTHER READING ON FAMILY VIOLENCE PROGRAMS

For a more in-depth review of research on the effectiveness of family violence programs, please see:

Miller, M., Drake, E., & Nafziger, M. (2013). *What works to reduce recidivism by domestic violence offenders?* (Document No. 13-01-1201). Olympia: Washington State Institute for Public Policy.

Data

Data for this study were collected electronically from official records in the Judicial Branch's CSSD Case Management Information System (CMIS), the CSSD Contractor Data Collection System (CDCS), and the Connecticut Criminal History database. Information was collected for all family violence arrests occurring in the 2010 calendar year. We used arrests from 2010 so that we would be able to look at arrest rates of program participants at least one year after they were discharged from the programs.

The first step in the data collection process was to identify all family violence arrest cases from 2010 with accompanying charges. Next, these family violence cases were matched to the Connecticut Criminal History database (CCH) to collect accompanying charges and criminal history. The final step consisted of collecting CSSD family violence program data from CDCS for all offenders arrested for a family violence offense in 2010. Program data were available only for the FVEP, EXPLORE, and EVOLVE and were unavailable for defendants permitted by the court to attend non-CSSD programs.

Evaluation Methodology

The gold standard in applied evaluation research is to randomly assign offenders to a treatment or a control group (i.e., a *true* experiment). The use of this type of research design is very rare in criminal justice research due to legal and ethical concerns (Singleton & Straits, 2005). Because the current evaluation was performed *ex-post facto* and did not allow for random assignment of offenders, we employed a quasi-experimental design with propensity score matched comparison groups. In this design, the treatment group (i.e., those individuals who participated in the program) was compared to a statistically-matched comparison group of eligible individuals who did not participate in the program.

Propensity score matching (PSM) is a statistical technique allowing researchers to control for selection bias when assigning offenders to study groups in situations where random assignment prior to treatment is not possible (see Stuart & Rubin, 2008; Thoemmes, 2012). PSM calculates a propensity score to determine

the likelihood that a person would have been placed in the program based on several pieces of available information (Stuart & Rubin, 2008). As such, two individuals with the same propensity score, one treated and one not treated, can be thought of as being randomly assigned to their respective groups (Rosenbaum & Rubin, 1983).

Summary of Study Groups

Propensity score matching techniques were utilized separately for the FVEP, EXPLORE, and EVOLVE resulting in unique comparison groups for each program⁶. After we created the three comparison groups additional statistical analyses were conducted to identify differences between each program and comparison group. There were no statistically significant differences across groups for race/ethnicity, gender, DVSI-R risk scores⁷, age at offenders' 2010 family violence arrests, prior arrests, and prior family violence arrests. We believe the matching process was successful in creating comparison groups closely related to offenders in each program.

The FVEP study group contained 3,114 FVEP participants and 1,038 offenders in the comparison group. It is important to point out that the matching process normally results in equal-sized study groups. However, the number of offenders attending the FVEP was much higher than the number of eligible offenders who were not court-ordered to attend (3,891 FVEP participants vs. 1,049 non-participants). Because we did not want to omit a significant number of FVEP participants from our study (approximately 71% of FVEP participants would have been excluded), we used a 3-to-1 matching ratio (3 FVEP participants to every 1 non-participant)⁸.

The EXPLORE and EVOLVE study groups were matched using a 1-to-1 ratio and contained the same number of offenders in both groups. The EXPLORE study groups were comprised of 788 offenders in each study group (a total of 1,576) while EVOLVE had 185 offenders in each study group (370 total study participants).

Table 1 provides a summary of the FVEP, EXPLORE, and EVOLVE program participants for race/ethnicity, age at the time of offenders' 2010 family violence arrests,

DVSI-R risk category (the higher the risk category the greater the likelihood the offender will commit another family violence offense), and the average number of arrests prior to their 2010 family violence arrest. As expected, FVEP was comprised mostly of lower risk offenders (based on DVSI-R scores and prior arrests) while EXPLORE and EVOLVE had mostly higher risk offenders.

TABLE 1. SUMMARY OF PROGRAM PARTICIPANTS⁹

	FVEP	EXPLORE	EVOLVE
White	46%	41%	29%
African-American	28%	29%	27%
Hispanic	24%	29%	32%
Average Age (Yrs)	32.8	33.5	31.6
High or Very High Risk	29%	68%	74%
Moderate Risk	47%	27%	23%
Low Risk	24%	4%	3%
Average Prior Arrests	2.8	7.4	7.7

EVALUATION FINDINGS

Program Completion

For the first research question we looked at the completion rates for program participants and identified differences between completers and non-completers. Our results were consistent with CSSD internal reports in finding that the completion rate for the FVEP was 84%, 68% for EXPLORE, and 65% for EVOLVE. The non-completers across all three programs were generally younger, had a greater risk of recidivism, and had more extensive criminal histories.

The EXPLORE and EVOLVE completion rates were similar to or higher than studies of other cognitive behavioral programs for male batterers. For instance, completion rates for 24 to 52 week programs have ranged from 40% (Mills, Barocas, and Ariel, 2012) to 66% (Herman, Rotunda, Williamson, & Vodanovich, 2014). For all types of batterer interventions, Jewell and Wormith’s (2010) meta-analysis of 30 studies found that completion rates ranged from 22% to 78%.

One Year Arrest Rates Following Program Discharge

To address the second research question we compared one year arrest rates for program participants to their respective comparison groups¹⁰. The arrest rates were calculated using any criminal arrest (which could include family violence arrests). We found that those offenders who completed each program had significantly lower arrest rates than offenders who did not complete each program or who were in a comparison group.

TABLE 2. ONE YEAR ARREST RATES

	FVEP	EXPLORE	EVOLVE
Program Completers	21%	23%	29%
Program Non-Completers	48%	45%	46%
Comparison Group	36%	51%	55%

Calculated Program Effect Sizes

The third research question attempted to quantify the effects of the programs. Effect sizes provide estimates of how much a program is able to change the outcome of its participants compared to a similar group of individuals who did not attend the program (Ferguson, 2009). They are useful by allowing for the comparison of effects across multiple programs to determine whether some programs are more or less effective than others.

Effect sizes were calculated by comparing the differences in one year arrest rates for program participants to the comparison groups. When interpreting effect sizes it is important to keep in mind the greater the negative effect size, the greater the effect at reducing recidivism. We found small effects for the FVEP at reducing new criminal arrests for all program participants (-0.29), moderate effects for EXPLORE participants (-0.54), and moderate effects for EVOLVE participants (-0.50). However, when looking only at offenders who completed the programs, the effects were much more pronounced. The FVEP produced moderate effects (-0.45) while EXPLORE and EVOLVE had large effects on program completers (-0.75 and -0.66 respectively).

TABLE 3. ONE YEAR PROGRAM EFFECT SIZES

	All Participants	Program Completers
FVEP	-0.29	-0.45
EXPLORE	-0.54	-0.75
EVOLVE	-0.50	-0.66

Another way to assess program effects is through the use of odds ratios. Odds ratios provide a more meaningful measure for explaining the magnitude of effects. Odds ratios show the likelihood that one group of offenders will be rearrested compared to a second group (Ferguson, 2009).

For the FVEP, offenders in the comparison group were 1.61 times more likely to be arrested than offenders who participated in the FVEP (regardless of completion status). Moreover, offenders who never attended the FVEP were 2.11 times more likely to be arrested than offenders who completed the FVEP. Similar to the results for effect sizes, EXPLORE completers were the least likely to be arrested post-program (3.48 times less likely) followed by offenders who completed the EVOLVE program (2.99 times less likely).

TABLE 4. ONE YEAR ARREST ODDS RATIOS

	All Participants	Program Completers
FVEP	1.61	2.11
EXPLORE	2.42	3.48
EVOLVE	2.27	2.99

SUMMARY AND CONCLUSIONS

The study produced three primary findings:

- (1) Each program had completion rates similar to or higher than other domestic violence programs.
- (2) Program participants and especially program completers were significantly less likely to be arrested after program discharge than offenders in the comparison group.

- (3) The calculated effect sizes demonstrated that these programs were effective at reducing recidivism, albeit the FVEP having smaller effects than EXPLORE and EVOLVE.

Overall, these findings were encouraging given the results of reviews of domestic violence program evaluations that have widely found that batterers' programs produce small effects or no overall effects. The findings were even more pronounced when looking at the success of offenders who completed these programs.

RECOMMENDATIONS FOR FUTURE RESEARCH

The present evaluation accomplished its goal of calculating the effects of the FVEP, EXPLORE, and EVOLVE family violence programs. While it addressed the requirements of the legislation, we suggest undertaking additional research on these programs to better understand what makes them effective.

First, we were unable to conduct process evaluations of these three programs due to the narrow scope and time constraints of Public Act 13-247. Process evaluations are helpful in determining program fidelity and also collecting more detailed information from program participants. This study was limited to official automated records from the Judicial Branch and the Connecticut Criminal History database so we were unable to explore the influence of offenders' attitudes and perceptions of family violence, their criminal thinking, their psycho-social profiles, or their self-reported criminal activities. These data would have provided more insight as to why some offenders did well in these programs and others did not. Additional studies of the three family violence programs should have a broader scope and a longer study period to allow for the collection and analysis of data from a wider variety of sources.

Second, we initially planned to have an 18 to 24-month follow-up period to measure longer term effects of these three programs. However, this was not possible due to several unanticipated factors beyond our control (namely, the amount of time between the initial arrest and case disposition, the number of court continuances

for family violence cases, the length of time between the initial arrest and program entry, and the lack of automated program data prior to 2010). Therefore, we recommend the Judicial Branch continue to collect arrest data for the study groups to assess future criminal behavior and program effects beyond the one year follow-up period.

Third, the overarching purpose of the evaluation was to assess the three programs' effects on offenders' return to the criminal justice system. While this was important to better understand the cost-benefits of these programs for future funding decisions, it is also important to measure and understand the effects these programs have on the lives of family violence victims. Although an offender may not get rearrested (and would be considered successful in this evaluation) he/she may still be abusing or traumatizing his/her victims. It was beyond the scope of this study to collect data from victims and we recommend that future research include their involvement.

LEGISLATIVE RECOMMENDATIONS

This evaluation of the three Judicial Branch family violence programs found they have been effective in reducing recidivism of program participants. Therefore, we recommend continued legislative support of these programs.

We also recommend legislation requiring all non-Judicial family violence programs be grounded in evidence-based practices (EBPs). Connecticut is only one of six states that do not have guiding policies or requirements for family violence programs (along with Arkansas, Mississippi, New York, South Dakota, and Wyoming). Without guidelines, it is possible for family violence offenders, who are eligible for one of the three court-mandated programs, to attend different types of programs that have not been shown to be effective at reducing future violence.

Although we do not know why offenders in the comparison groups did not attend a court-mandated program, we believe many of them attended an alternative program and likely had higher arrest rates than offenders completing a court-mandated program, where the Judicial Branch has created and monitors

specific program requirements. Therefore, we recommend the General Assembly consider legislation mandating all family violence programs be state-certified and required to adopt consistent protocols for screening and assessment, program content and modality, program length, staff education and training qualifications, data collection and reporting, and periodic outcome evaluations and dissemination of findings. Such legislation should also prohibit the substitution of alternative approaches to family violence treatment in lieu of state-certified programming.

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- ¹ Correspondence can be made to Stephen Cox at coxs@ccsu.edu or 860-832-3138.
- ² See the Department of Emergency Services and Public Protection's 2012 Family Violence Summary Report at www.dpsdata.ct.gov/dps/ucr/data/2012/2012%20Family%20Violence%20Summary%20Report.pdf.
- ³ See the Department of Emergency Services and Public Protection's 2012 Family Violence Homicide Report at: <http://www.dpsdata.ct.gov/dps/ucr/data/2012/2012%20Family%20Violence%20Homicide%20Report.pdf>.
- ⁴ See the CCDAV Domestic Violence Service Statistics Fact Sheet for year 2013 at: <http://www.ctcadv.org/files/2013/8253/5468/CTDVStatsFY132.pdf>
- ⁵ The Pew Foundation uses the Washington State Institute for Public Policy's minimum standards of research rigor (see Miller et al., 2013) consisting of three primary criteria. First, evaluations must have a comparison group similar to the treatment group. Second, all program participants must be included and not just those who completed the program. Third, rigorous studies should report effect sizes based on "intent to treat" (i.e., program participants—not just program completers).
- ⁶ The matching process used 14 variables: age at arrest, race/ethnicity, court, DVSI-R scores (total risk score, risk category, level of risk to victim, and dual arrest), number of prior arrests, number of prior family violence arrests, number of prior jail sentences, number of prior probation sentences, number of prior family violence jail sentences, and number of prior family violence probation sentences. In addition, the FVEP matching process also included gender.
- ⁷ The Domestic Violence Screening Instrument-Revised (DVSI-R) is a validated risk instrument used by the Judicial Branch's CSSD to screen all incoming family violence offenders prior to the judges issuing court orders. It is an 11-item tool addressing the behavioral history of the offender along with indicators of the offender's imminent risk of future violence. This tool was created for CSSD by Dr. Kirk Williams and its validity is well established.
- ⁸ See Thoemmes (2012) for a discussion of the advantages of using this type of propensity score matching.
- ⁹ The percentages for race/ethnicity do not total to 100% due to offenders whose race/ethnicity were unknown or were in a category other than the ones in the table.
- ¹⁰ In our report we presented one year arrest rates for program completers and non-completers combined since the goal of the study was to determine program effects for all offenders referred to each program. For this summary we split out the completers and non-completers to show the significant effects when offenders complete the entire program.