Evaluation of Three Court-Mandated Family Violence Interventions: FVEP, EXPLORE, and EVOLVE



Stephen M. Cox, Ph.D. Professor

Pierre M. Rivolta, Ph.D. Assistant Professor

Institute for the Study of Crime and Justice Department of Criminology and Criminal Justice

Central Connecticut State University

June 2014

This project was funded in part through a contract from the Connecticut Judicial Branch. The Connecticut Judicial Branch nor any of its components are responsible for, or necessarily endorse, the views expressed in this report.

EXECUTIVE SUMMARY

The Connecticut Judicial Branch, through its Court Support Services Division (CSSD) funds three court-mandated program options for family violence offenders: the FVEP, EXPLORE, and EVOLVE. 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."

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. This report presents the outcomes of this evaluation.

Overview of the Court-Mandated Family Violence Programs

The FVEP is a 9-week pretrial program that meets once per week for 1.5 hours. Its purpose is to educate defendants (male or 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 court locations. EXPLORE is a 26-week 26 session post-conviction and post-plea program for male family violence offenders (1.5 hour sessions, once per week) based on a cognitive behavioral therapeutic framework. Its purpose is to foster behavioral change through developing awareness, building positive interpersonal skills, and promoting the understanding of the harmful effects family violence has on victims and children. EXPLORE was available in 13 court locations until 2012, when it was made available in all court locations. EVOLVE is a 26-week 52 session (2-hour sessions, twice a week) post-conviction program. It is an intensive cognitive behavioral intervention designed for high-risk family violence offenders (male only), which centers on victims and children, behavior change, interrelation and communication skill building, and responsible parenting/fatherhood. EVOLVE is currently available in four court locations (Bridgeport, New Haven, New London, and Waterbury).

Study Methodology and Research Questions

The evaluation employed a quasi-experimental research design with propensity-matched comparison groups. 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. The propensity matching process consisted of identifying similar offenders who were eligible for each of the three programs but did not attend. We believe the matching process was successful in creating comparison groups closely related to program participants.

The study had three research questions: (1) what were the completion rates for each program and were there statistically significant differences between program completers and non-completers; (2) was the one-year arrest rate for any new offense or family violence offense of offenders who participated in the program statistically significantly different from those offenders who did not participate in the program; and, (3) were there measureable program effect sizes?

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, higher risk, and had more extensive criminal histories.

To address the second research question, one year arrest rates for program participants were compared to their respective comparison groups. We found that program participants in all three programs had lower one year arrest rates. For the FVEP, 26% of program participants were arrested compared to 36% of the comparison group. For EXPLORE, 30% of participants were arrested compared to 51% of the comparison group. For EVOLVE, 35% of program participants were arrested compared to 55% of the comparison group. In looking at one year family violence arrests, all three programs produced lower arrest rates although these differences were only statistically significant for EXPLORE.

The third research question attempted to quantify the effects of the programs. Effect sizes were calculated by comparing the differences in one year arrest rates for program participants to the comparison groups. The effect size calculations for any new criminal arrest found a small effect for the FVEP at decreasing recidivism for program participants (-0.29), a moderate effect for EXPLORE participants (-0.54), and a moderate effect for EVOLVE participants (-0.50). The odds ratios allowed for a more straightforward interpretation of these effects, in that, offenders in the EXPLORE comparison group were 2.4 times more likely to be arrested than offenders participating in EXPLORE, offenders in the EVOLVE comparison group were 2.27 times more likely to be arrested than EVOLVE participants, and offenders in the FVEP comparison group were 1.61 times more likely to be arrested than FVEP participants. When looking at family violence arrests, significant effect sizes were only found for the EXPLORE program (-0.40). The odds ratio for this effect was 1.94. In other words, offenders in the EXPLORE comparison group were almost twice as likely to be arrested for another family violence offense than EXPLORE participants.

Overall, these findings are small to moderate but encouraging given the results of meta-analyses of domestic violence program evaluations. These meta-analyses generally have found that batterers' programs produce small effect sizes or have no overall effects. While the present evaluation accomplished its goal of calculating the effects of the FVEP, EXPLORE, and EVOLVE family violence programs, we recommend more in-depth and broad research to better understand why these programs as effective as well as their ability to positively affect the lives of family violence victims.

TABLE OF CONTENTS

Executive Summary	1
Table of Contents	3
Introduction and Background of the Project	5
Review of Relevant Literature	7
National and State Statistics Regarding Family Violence	
Standards Regarding Types of Batterers' Interventions Programs	
Effectiveness (or Lack Thereof) of Batterers' Interventions Programs	
	10
Family Violence Legislation, Process, and Interventions	
Legislation and Process	
Family Violence Education Program (FVEP)	
EXPLORE	
EVOLVE	13
Evaluation Methodology	17
Research Questions	
Data Collection Process	
Summary of 2010 Family Violence Arrests	
Evaluation Design	
Evaluation Outcome Measures	
Calculation of Effect Sizes	
Plan of Analysis	
Tun of Finalysis	
FVEP Outcome Findings	23
Matching Process for FVEP	
Comparison of FVEP Matched Study Groups	
Differences Between FVEP Program Completers and Non-Completers	
FVEP One Year Arrests	
Effect Size Calculations for FVEP	
EXPLORE Outcome Findings	21
Matching Process for EXPLORE	
Comparison of EXPLORE Matched Study Groups	
Differences Between EXPLORE Program Completers and Non-Completers	
EXPLORE One Year Arrests	
EXPLORE Effect Size Calculations	
EVOLVE Outcome Findings	
Matching Process for EVOLVE	
Comparison of EVOLVE Study Groups	43

Differences Between EVOLVE Program Completers and Non-Completers	45
EVOLVE One Year Arrests	46
EVOLVE Effect Size Calculations	
Summary and Conclusions	48
Summary of Findings	
Recommendations for Future Research	49
Legislative Recommendations	50
References	51
Appendix A: Overview of the FVEP Curriculum	54
Appendix B: Overview of the EXPLORE Curriculum	56
Appendix C: Overview of the EVOLVE Curriculum	61

INTRODUCTION AND BACKGROUND OF THE PROJECT

In Connecticut, family violence has been a concern for legislators since the late 1970s, and in 1977 several laws were passed to protect spouses in domestic disputes cases (e.g., via restraining orders). It was not until 1986, however, that the Connecticut General Assembly enacted legislation comprehensively addressing family violence (Public Act 86-337, *An Act Concerning Family Violence Prevention and Response*). The law, which followed the brutal stabbing of Tracey Thurman by her husband in Torrington, CT, redefined family violence, provided directions to law enforcement agencies and the courts regarding how family violence cases should be handled, and required the Judicial Branch to maintain family violence intervention units in each of its geographical areas. Since then, modifications to this law have been made almost every year.²

Over the past 20 years the number of family violence incidents occurring in Connecticut has remained steady, hovering between 19,000 and 21,000 per year, despite mandatory arrests and greater public awareness of this issue. In 2011, for instance, there were a total of 20,494 family violence incidents that led to an arrest. These incidents involved 18,132 victims and 16,644 offenders. The wide majority of cases (17,782 or about 87%) involved an arrest on a charge of assault, breach of peace or disorderly conduct. That year, family violence resulted in 18 homicides (an 18% decrease from the previous year). It is important to highlight that these statistics represent cases known to the police and represent only the "tip of the iceberg." According to the Connecticut Coalition Against Domestic Violence (CCADV), 56,178 victims received services through their 18 member agencies in 2011.

The Family Violence Prevention and Response Act of 1986 contained certain provisions to deal with perpetrators of family violence. For instance, it established the Family Violence Education Program (FVEP), a short-term pretrial diversionary program for low-risk offenders. In 1996, ten years following P.A. 86-337, the Judicial Branch established in Bridgeport the first domestic violence docket in the state, setting the tone for a statewide expansion of specialized court dockets to deal with family violence issues. Defendants in these dockets are typically referred to specific court-mandated interventions: EXPLORE and EVOLVE. The Judicial Branch's Court Support Services Division (CSSD) oversees these three programs.

As mentioned above, P.A. 86-337 has been amended quasi-annually since 1986. The 2011 amendment to the law (see P.A. 11-152, *An Act Concerning Domestic Violence*), required the Judicial Branch (and its Chief Court Administrator) to conduct two studies on the effectiveness of pretrial family violence programs and domestic violence dockets in the state

⁴ See http://www.ctcadv.org/information-about-domestic-violence/statistics/ for more information.

¹ It is important to note that the issue of the domestic violence, as a social problem affecting our nation, started garnering the attention of the public at large, legislators, and criminal justice practitioners alike, in the 1970s (see Barner & Mohr Carney, 2011).

² See OLR Report: Summary of Family Violence Laws, available at http://www.cga.ct.gov/2009/rpt/2009-R-0349.htm

³ See DESPP's 2011 *Family Violence Arrest Report*, available at http://www.dpsdata.ct.gov/dps/ucr/data/2011/2011%20Family%20Violence%20Arrest%20Report.pdf

(i.e., FVEP, EXPLORE, and EVOLVE), and to submit a report on those studies to the Judiciary Committee. 5 Specifically, the bill read:

Sec. 20. (a) The Chief Court Administrator shall conduct a study of the principles and effectiveness of the pretrial family violence education program established in section 46b-38c of the general statutes, as amended by this act, using a results-based accountability framework. The study shall include, but not be limited to, the identification of goals of the program, the identification of fundamental elements and critical components of the program, an assessment of short-term and long-term outcomes of the program, an assessment of the feasibility and cost of extending the pretrial family education program beyond the nine weeks currently provided, an assessment of the feasibility and cost of extending programs known as EVOLVE and EXPLORE to all regions of the state, and a comparison of the program to pretrial diversionary domestic violence programs used in other northeastern states.

(b) The Chief Court Administrator shall conduct a study of the principles and effectiveness of the domestic violence dockets in this state and related contracted programs using a results-based accountability framework. The study shall include, but not be limited to, the identification of the goals, fundamental elements and critical components of the dockets, and the identification of short-term and long-term outcomes of the dockets and related contracted programs.

In 2013, 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."

The current research was conducted pursuant to the legislative requirements outlined in these recent public acts. 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. This report summarizes our evaluation and is organized into sections describing (1) the literature relevant to this research project, (2) the nature of the three family violence interventions, (3) the research methodology and data used to conduct this evaluation, (4) the outcome analyses, and (5) the conclusions of the evaluation and recommendations for future programming.

-

⁵ This report is available at http://www.housedems.ct.gov/dv/pubs/020612/JB Report on FVEP and DV-Dockets.pdf

REVIEW OF RELEVANT LITERATURE

The following sections present a brief survey of the literature relevant to this evaluation. The review begins with an overview of family violence statistics (at the national and state levels) to situate the study in its context. This section is followed by a discussion of existing standards that frame family violence interventions. The review concludes with a summary of recent studies evaluating the effectiveness of family violence interventions.

National and State Statistics Regarding Family Violence

To this date, family violence remains a significant social problem in the United States. National statistics illustrate the gravity of this issue. According to the Bureau of Justice Statistics (BJS), between 1998 and 2002 roughly 3.5 million violent crimes (about 11% of all reported and unreported violence) were committed against family members (BJS, 2005). In 60% of these cases, the victim was either a spouse or an offspring of the perpetrator; approximately 75% of victims were female (BJS, 2005). More recent data from the National Crime Victimization Survey (NCVS) show that around 907,000 individuals (or 3.6 per 1,000) were victims of intimate partner violence in 2010; in 80% of cases, the victim was female (Catalano, 2012). Findings from the National Victimization Against Women Survey (NVAWS), conducted in 1995-1996, shows that almost 75% of the women who reported being raped or physically assaulted since the age of 18 were victims of a current or former husband, partner, boyfriend, or date, thus illustrating the intimate partner nature of violence against women (Tjaden & Thoennes, 2000). According to the BJS (2005), family violence cases were reported to the police in less than 66% of cases. Progress has been made, though, in reducing the prevalence of family and intimate partner violence over the years. For instance, NCVS data shows that the overall rate of intimate partner violence (age 12 and older) decreased 64% between 1994 and 2010, from 9.8 victimizations per 1,000 to 3.6 per 1,000 (Catalano, 2012).

As discussed earlier, the number of family violence incidents in Connecticut has remained stable over the past two decades, with about 19,000 to 21,000 incidents occurring each year. In 2011, 20,494 family violence incidents led to an arrest. In the wide majority of cases (17,782 or about 87%), the arrest involved a charge of assault, breach of peace or disorderly conduct. Eighteen of these cases were classified as homicides. These 20,494 incidents involved 42,982 individuals, including 18,132 victims, 16,644 arrested offenders, and 8,206 participants. Approximately 20% of all incidents included a dual arrest. Regarding the gender of involved parties, about 75% of victims (13,471) were female and 25% (4,661) were male. In contrast, slightly over 75% of offenders (12,785) were male and less than 25% (3,859) were female. Approximately 60% of all participants were between the ages of 21 and 44, and about 80% were under 45 years old. A weapon was involved in 74% of all incidents and a serious injury was inflicted in about 40% of cases. That year, Windham County had the highest prevalence of family violence crimes (744 incidents per 100,000 inhabitants) and Tolland County had the lowest prevalence (302 per 100,000 inhabitants). It is important to note that these statistics represent cases known to the police. The Connecticut Coalition Against Domestic Violence

7

⁶ See DESPP's 2011 *Family Violence Arrest Report*, available at http://www.dpsdata.ct.gov/dps/ucr/data/2011/2011%20Family%20Violence%20Arrest%20Report.pdf

(CCADV) reports that 56,178 victims received services through their 18 member agencies in 2011, ⁷ thus emphasizing that many victims chose not to report their victimization to law enforcement authorities.

Standards Regarding Types of Batterers' Interventions Programs

A wide range of criminal justice interventions exist that are designed to deal with perpetrators of family violence (i.e., "batterers"). The types of batterers' interventions vary based on the general theoretical perspective used to explain the etiology of family violence perpetration. Such perspectives include the feminist view, the intergenerational transmission of violence, and various psychological views (Corvo, Dutton, & Chen, 2008). Related interventions include feminist psycho-educational men's groups, cognitive-behavioral men's groups, anger management, and couples' therapy. One clear problem with these many interventions is that only a handful have been "subjected to rigorous empirical test" (see Babcock, Greene, & Robie, 2004, p.1025).

Forty-four states and territories have enacted statutory standards regarding the various interventions that can be used to deal with family violence perpetrators (Maiuro & Eberle, 2008). The scope and content of these standards tend to "vary according to the administrative bodies and the means of regulation" (Maiuro & Eberle, 2008, p. 135). Standards typically specify the various protocols used for screening and assessment; the content, modality, and length of programming; the training and education requisite to administer such programs; and whether sharing findings and performing evaluations are required (Maiuro & Eberle, 2008). The Washington State Institute for Public Policy (2013) followed this study and found that 44 states had legal guidelines for domestic violence treatment. Connecticut is one of those six states (along with Arkansas, Mississippi, New York, South Dakota, and Wyoming) that do not have statutory standards regarding their court-mandated interventions for perpetrators of family violence.

Some common trends can be discussed. For instance, according to the survey of state standards conducted by Maiuro & Eberle (2008), the primary theoretical and conceptual orientation of domestic violence treatment rests upon a combination of power and control and social psychological conceptualization of family violence. Regarding the length of treatment, the majority of the state standards require a minimum of 24 to 26 weeks (with a once a week session lasting 90 minutes). The primary choice of intervention is group therapy. Specifications of assessment requirements include some type of victim contact, a determination of formal risk or lethality, and a screening for substance abuse problems (including alcohol) (Maiuro & Eberle, 2008). In addition, the Washington State Institute for Public Policy (2013) survey found that 28 states require programs to center on power and control dynamics (this is commonly referred to as the "Duluth model" of domestic violence treatment), 12 states have broad curriculum mandates, and 4 states require intake and assessment of domestic violence cases but do not mandate specific types of treatment.

While there are definite advantages to having such standards, Maiuro and Eberle (2008, p. 148) point out that the wide majority of these standards "were composed without authoritative

⁷ See http://www.ctcadv.org/information-about-domestic-violence/statistics/ for more information.

references or, on occasion, [based on] very dated sources." Other researchers also lament the lack of empirical grounding of such standards. For instance, Corvo and colleagues (2008, p. 111) argue that policies and practices regulating interventions with domestic violence offenders "have enjoyed immunity from the external, empirical accountability" that can now be found in evidence-based practices (EPBs).

Effectiveness (or Lack Thereof) of Batterers' Interventions Programs

Court-mandated domestic violence programs began appearing in the early 1980s. Soon thereafter, evaluation studies measuring their effectiveness followed (see Feder & Wilson, 2005). This early evaluation research showed positive results and indicated that programs were successful in reducing recidivism (i.e., acts of subsequent domestic violence) among the treated population. However, these results may have been overly optimistic given that studies comprising this early wave of evaluation research suffered from several methodological flaws (e.g., small sample sizes, focus on program completers instead of intent-to-treat population; lack of appropriate comparison groups; unreliable outcome measures) (see discussion in Davis & Taylor, 1999, and Feder & Wilson, 2005). The next wave of research (i.e., since mid-1990s) provided a different picture of the impact—or lack thereof—of batterers' interventions programs (Corvo et al., 2008; Feder & Wilson, 2005; Rosenfeld, 1992).

A review of the recent literature reveals a preponderance of evidence against the effectiveness of batterers' intervention programs. To date, very little support exists for the notion that court-mandated programs help reduce future incidence of domestic abuse; at best, meta-analyses of methodologically sound studies reveal a minimal impact of batterers' intervention and small overall effect sizes (Arias, Arce, & Vilarino, 2013; Babcock et al., 2004; Feder & Wilson, 2005; Miller, Drake, & Nafziger, 2013; Davis & Taylor, 1999). In addition, research also shows "an inverse relationship between design rigor and likelihood of finding program effectiveness" (Feder & Wilson, 2005, p.243). In other words, the more rigorous the design the lesser the likelihood of finding program success.

Davis & Taylor (1999) conducted the first extensive synthesis of the literature on this subject. Their review painted a somewhat optimistic picture of the effectiveness of batterer intervention programs. Overall, the authors concluded the effect of treatment was substantial (h = 0.41) when focusing on six methodologically rigorous studies only (i.e., two true experiments and four quasi-experiments). Interestingly, Davis and Taylor found the average effect size of the two true experiments was almost identical to that of the four quasi-experiments. In addition, the authors did not find any difference in program effectiveness related to treatment modality or length of treatment intervention (Davis & Taylor, 1999).

Babcock and colleagues' (2004) meta-analytic review included 22 studies—5 true experiments, and 17 quasi-experiments. These studies reported on the effect of a wide range of group-treatment modalities (Duluth model and CBT, among others) for male perpetrators of domestic violence. The review included research design and treatment type as main moderators. The authors reported an overall small effect size of the batterer intervention on subsequent domestic violence reoffending. No differences in effect sizes were observed across treatment modalities—in other words, no one treatment type worked better than the other (specifically when comparing Duluth model vs. CBT interventions). Similarly, no difference in effect size

was observed when comparing recidivism outcomes (i.e., police records vs. victim reports). Studies following a quasi-experimental design showed greater effect sizes than those following a true experimental design, although the differences in effect sizes were not significant. Overall results from this analysis pointed to a minimal impact of current group-based batterers' interventions.

Feder & Wilson (2005, p.239) performed a meta-analysis to determine whether "courts can affect abusers' behavior" through legally mandated interventions. Their review of evaluations purported to identify and assess "the most rigorous research on court-mandated batterer intervention programs" (p.242). As such, only studies utilizing an experimental or rigorous quasi-experimental design—that is, those studies that established baseline equivalence between the treatment and comparison groups—were included in the meta-analysis. This yielded 10 studies. It is worthy to note that evaluations also had to focus on a post-arrest court-mandated intervention specifically targeting domestic violence offenders; pre-trial diversion interventions were included as well. The authors provided effect sizes as a function of outcome type and of design types; overall, the results were mixed. Experimental studies showed a modest effect size when using official reports as the outcome measure, but no statistically significant effect when using victim reported outcomes. Quasi-experimental studies with a no-treatment comparison group showed an overall deleterious effect of treatment on outcomes, while quasi-experimental studies that used a dropout comparison group showed an overall positive effect of treatment (Feder and Wilson, 2005). These findings highlight the inverse relationship between the likelihood of treatment outcomes and stringency of research methodology previously discussed.

Miller et al. (2013, p.1) conducted a meta-analysis of group-based domestic violence interventions that included "11 rigorous evaluations" in an attempt to determine whether these treatment interventions had an effect on domestic violence or any type of recidivism. Six of these interventions followed the Duluth model of treatment; the remaining five comprised an eclectic group of non-Duluth group-treatment modalities. When taken together, the average effect size for these 11 studies was not statistically different from zero, which would indicate that groupbased domestic violence treatment does not affect recidivism for domestic violence offenses, and is therefore ineffective. Only three of the 11 studies included any type of recidivism with only one finding statistically significant positive results (all three did find positive effects sizes). However, the results changed when separating the treatment modalities based on type of treatment. While the six studies representing the Duluth-type of treatment showed no effect on recidivism, the five studies representing other group-based treatment showed, combined, "a 33% reduction in domestic violence recidivism" (Miller et al., 2013, p.6). These results show that some group-based treatments for domestic violence offenders do reduce recidivism. However, Miller and colleagues warned that the disparity in these treatment approaches did not allow for the determination of which particular intervention was most effective (2013).

Along with that of Miller et al. (2013), the most recent systematic review of batterer treatment programs is that of Arias and colleagues (2013), which included 19 evaluations—13 quasi-experiments and 6 true experiments. The authors considered two types of recidivism measures (official records and couple reports) and various moderators of intervention (e.g., duration of follow-up and type of intervention). Overall, the findings showed that "the treatment

of batterers is not efficacious" (p.159), although some programs showed some success in reducing recidivism.

In trying to explain the lack of success of many batterer treatment interventions, most of which rely on some policy framework, Corvo and colleagues (2008) surmised that it is due to "systematic and institutional proscriptions against using evaluation findings and other pertinent data to develop program innovations" (p.113). Another possible explanation is the favoring of a "one-size-fits-all" approach, when we know that not all family violence offenders are similar in profile (Corvo et al., 2008). Another issue that plagues family violence interventions—and may contribute to their lack of effectiveness—is the relatively high rate of participant dropouts (Chang & Saunders, 2002; Corvo et al., 2008). Indeed, attrition has been characterized as the "bête noire" of family violence interventions (Corvo et al., 2008, p.124).

FAMILY VIOLENCE LEGISLATION, PROCESS, AND INTERVENTIONS

The Connecticut Judicial Branch, through its Court Support Services Division (CSSD) funds three court-mandate program options for family violence offenders: FVEP, EXPLORE, and EVOLVE. 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. This poses a challenge, as no data source to date contains this information.

In addition, and as discussed above, Connecticut is one of six states that do not have standards regarding the treatment of family violence perpetrators. However, it should be emphasized that the Judicial Branch, through its Requests for Proposals (RFPs) maintains requirements (e.g., class details, class policies, agencies, facilitators credentials...) that providers of contracted services must meet when delivering these treatment modalities. These requirements are based on current family violence literature.

Legislation and Process

Family violence is defined under Conn. Gen. Stat. § 46b-38a(1) (2013) and refers to "an incident resulting in physical harm, bodily injury or assault, or an act of threatened violence that constitutes fear of imminent physical harm, bodily injury or assault, including, but not limited to, stalking or a pattern of threatening, between family or household members. Verbal abuse or argument shall not constitute family violence unless there is present danger and the likelihood that physical violence will occur." The following describes the process by which a family violence offender is referred to a particular program following arrest for a family violence incident.

Upon making an arrest the arresting police officer determines if this is a family violence case depending on the offender's relationship with the victim. Per state statute, offenders in family violence cases must be arraigned within 24 hours of the arrest. At arraignment, the case is referred to CSSD's Family Services where a Family Relations Counselor identifies risk, recommends services for the offender, and determines the need for a protective order. The Family Relations Counselor makes these recommendations to the Court based on: a criminal background check of the offender, a firearms screen to determine whether the offender has access to firearms, and an offender risk assessment using the Domestic Violence Screening Instrument (DVSI-R)⁸.

The Family Relations Counselor then recommends to the Court one of three options: (1) continuance of the case for a full assessment (typically 4 to 6 weeks), (2) pretrial supervision for the offender by Family Services (that typically includes participation in the Family Violence Education Program), or (3) to forward the case to the States' Attorney for prosecution. If this occurs, the State's Attorney can: prosecute the case based on the charges at arraignment, nolle

⁸ The DVSI-R is a validated risk instrument used by CSSD to screen all incoming family violence offenders prior to 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 has been validated on several occasions (see Stansfield and Williams, 2014; Williams, 2011; Williams and Grant, 2006).

the family violence charges and prosecute on other charges, nolle all of the charges including the family violence case, or dismiss some or all charges.

Offenders completing pretrial supervision will likely have their family violence cases nolled or dismissed. Male offenders pleading guilty or convicted of family violence offenses involving an intimate partner may be referred to the EXPLORE or EVOLVE program from judges' court orders or ordered by probation officers as part of the offender's probation requirements.

Family Violence Education Program (FVEP)

The FVEP is a 9-week pretrial program that meets once per week for 1.5 hours. The purpose is to educate defendants (male or 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 Connecticut court locations.

The broad parameters of the FVEP are stipulated in Conn. Gen. Stat. Sec 46b-38c(h), which reads:

- (h) (1) There shall be a pretrial family violence education program for persons who are charged with family violence crimes. At a minimum, such program shall inform participants of the basic elements of family violence law and applicable penalties. The court may, in its discretion, invoke such program on motion of the defendant when it finds: (A) That the defendant has not previously been convicted of a family violence crime which occurred on or after October 1, 1986; (B) the defendant has not had a previous case assigned to the family violence education program; (C) the defendant has not previously invoked or accepted accelerated rehabilitation under section 54-56e for a family violence crime which occurred on or after October 1, 1986; and (D) that the defendant is not charged with a class A, class B or class C felony, or an unclassified felony carrying a term of imprisonment of more than ten years, or unless good cause is shown, a class D felony, an unclassified offense carrying a term of imprisonment of more than five years or an offense that involved the infliction of serious physical injury, as defined in section 53a-3. Participation by any person in the accelerated pretrial rehabilitation program under section 54-56e prior to October 1, 1986, shall not prohibit eligibility of such person for the pretrial family violence education program under this section. The court may require that the defendant answer such questions under oath, in open court or before any person designated by the clerk and duly authorized to administer oaths, under the penalties of perjury as will assist the court in making these findings.
- (2) The court, on such motion, may refer the defendant to the family violence intervention unit, and may continue the defendant's case pending the submission of the report of the unit to the court. The court shall also give notice to the victim or victims that the defendant has requested assignment to the family violence education program, and, where possible, give the victim or victims opportunity to be heard. Any defendant who accepts placement in the family violence education program shall agree to the tolling of any statute of limitations with respect to the crime or crimes with which the defendant is charged, and to a waiver of the defendant's right to a speedy trial. Any such defendant shall appear in court and shall be released to the custody of the family violence

intervention unit for such period, not exceeding two years, and under such conditions as the court shall order. If the defendant refuses to accept, or, having accepted, violates such conditions, the defendant's case shall be brought to trial. If the defendant satisfactorily completes the family violence education program and complies with the conditions imposed for the period set by the court, the defendant may apply for dismissal of the charges against the defendant and the court, on finding satisfactory compliance, shall dismiss such charges.

(3) Upon dismissal of charges under this subsection, all records of such charges shall be erased pursuant to section 54-142a.

The overall emphasis of the FVEP is to start the process of change by educating participants about the common issues that personal relationships can face. The program does not take a hardline approach that participants are deeply flawed individuals or criminals. Rather, most of the education phase of the program attempts to help participants recognize the challenges they are facing and to understand they are not alone in their struggles.

Once the program discusses how unhealthy relationships can lead to various types of emotional and physical abuse and have detrimental effects on children, participants are encouraged to accept responsibility for their behavior and begin the process of change. It is only then that cognitive-behavioral therapy (CBT) is introduced. In this context, CBT emphasizes identifying the cognitive distortions that led to participants' abusive behavior and provide ways to transform these distortions into healthy, rational, pro-social responses.

In the later sessions of the program, participants are encouraged to develop a plan to correct their behavior and are taught how to put this change into action to achieve a mutually beneficial and healthy relationship with their partner.

A more detailed description of the FVEP program is provided in Appendix A.

EXPLORE

EXPLORE is a 26-week 26 session post-conviction and post-plea program for male family violence offenders (1.5 hour sessions, once per week) 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 of family violence on victims and children. EXPLORE was available in 13 court locations until 2012, when it was then placed in all court locations.

Each session starts with a check-in procedure consisting of welcoming newcomers to the group and then asking each member to report on their use of violence, controls, and/or abuse. Check-in also provides participants with the opportunity to talk about their daily struggles (e.g., stress, relationships, drug/alcohol usage) and how they are applying the knowledge and skills acquired since the last group session. During check-in, group members are also encouraged to challenge each other when using minimization, denial, justification, or externalization of blame for their actions. As such, the intervention relies upon participants' honesty to share personal information about their personal life.

Initial sessions lay the framework for the most essential tenets of the program. Legal definitions of family violence and applicable laws are reviewed first. The participants are then broadly educated about the harmfulness and progression of abusive behavior and its various forms. Immediate and simple coping mechanisms are emphasized as ways to break the cycle of violence and take a time-out so that anger does not lead to aggressive behavior.

The next set of sessions focus on cognitive restructuring. In order to initiate behavioral change in participants, cognitive distortions that may have led these individuals to commit domestic violence against their intimate female partner are targeted. The objectives of these sessions are to rebuild trust and establish personal accountability. Once participants accept their responsibility, topics are introduced that inhibit changes in behavior such as utilizing positive self-talk to combat negative thoughts and feelings.

The core of the program curriculum focuses on socialization, in which the significance of cultural influences, gender roles, familial influences, and relationship roles as well as the effect of other institutions in shaping patterns of behavior are highlighted. Through role-play and fictional scenario illustrations, a variety of topics and related skills are covered. For instance, a series of sessions examine the effects of domestic violence on the victim and participants are taught skills such as developing empathy, compassion, and equality for their partner. Parenting skills are also incorporated into the lesson plans to help participants understand the harmful effects that domestic violence may have caused on their children.

The last component of EXPLORE is teaching communication skills to foster a more positive and non-violent atmosphere in the home. In addition, the program curriculum seeks to prepare participants for the possibility their intimate relationship/marriage may be over. In cases where children are involved, participants are strongly encouraged to craft a positive relationship with their former spouse/partner. Skills such as active listening, non-coercive, assertive communication, and implementing a cost-benefit analysis before acting are taught through more role-play and scenario dialogues. Lastly, stress management is discussed and a number of healthy relaxation techniques are presented. The program concludes with an overview of the cycle of violence and a discussion of how these negative concepts can be cognitively transformed into healthy, pro-social behaviors.

A more detailed description of the EXPLORE program is provided in Appendix B.

EVOLVE

EVOLVE is a 26-week 52 session (2-hour sessions, twice a week) post-conviction program. It is an intensive cognitive behavioral intervention designed for high-risk family violence offenders (male only), which centers on victims and children, behavior change, interrelation and communication skill building, and responsible parenting/fatherhood. There is an option to extend the program for an additional 26 weeks with one session a week, at the discretion of the court. EVOLVE is currently available in four court locations (Bridgeport, New Haven, New London, and Waterbury).

This classroom-based educational program begins with orientation sessions (first 3 weeks, 1.5 hours a week), to establish group rules, gain familiarity with each other, and teach

fundamentals of non-violent, non-abusive behaviors, and promote acceptance of responsibility. The purpose of the orientation is to lay the framework necessary for successful program outcomes. The remaining 23 weeks of the program include two conjoint modules: ongoing education and change group.

The ongoing education module provides men with the building blocks needed to live a non-violent and non-abusive life in their current and future intimate relationships. Topics include: what kind of man do I want to be; managing my feelings; the effects of violence on victims; communication and listening skills; fatherhood and domestic violence; sexuality, violence and aggression; aggressiveness, passiveness, and assertiveness; hot topics and money; compromising about difficult issues. Sessions are devoted to core curriculum activities: brief lessons, exercises, discussions, role-plays, and short videos.

In the change group module, participants practice their newly acquired skills intensely and discuss how what they learned can be applied to their daily lives. Each lesson in the ongoing education module is paralleled with a lesson in the change group module in which the men review homework assigned in the ongoing education sessions.

In sum, EVOLVE utilizes a cognitive-behavioral therapeutic framework which conditions program participants during the "ongoing education" component and then initiates behavioral changes during the "change group." Topics are presented using a variety of techniques, most notably, role-play and scenario usage. The role-plays and scenarios illustrate the most harmful and detrimental effects of domestic violence and emphasize healthy ways to resolve issues that may have otherwise resulted in domestic violence for this group of offenders.

A more detailed description of the EVOLVE program is provided in Appendix C.

EVALUATION METHODOLOGY

This study evaluated the effects of the Judicial Branch's court-mandated family violence interventions (FVEP, EXPLORE, and EVOLVE). More specifically, the legislative mandate outlined in Public Act 13-247 section 53(a), requested that an evaluation be conducted to "...assess the effectiveness of programs maintained by [CCSD] with respect to family violence..." 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." The following sections describe the research methodology used for this evaluation.

Research Questions

The principle aim of the study was to assess each program's effectiveness in reducing recidivism and to calculate an "effect size" to be used in the Results First Initiative. Since the focus of the study was on program outcomes we did not seek to determine the extent to which the three programs were implemented. The research questions used to study each program were:

- What were the completion rates for each program and were there statistically significant differences between program completers and non-completers?
- Was the one-year arrest rate for any new offense and family violence offenses of offenders who participated in each program statistically significantly different from those offenders who did not participate in the programs?
- Were there measureable program effect sizes?

Data Collection Process

The evaluation of the family violence programs utilized official records with all data being collected from the Judicial Branch-CSSD's Case Management Information System (CMIS) and Contractor Data Collection System (CDCS) along with the Connecticut Criminal History database.

The first step in the data collection process was to identify all family violence arrest cases from 2010 with accompanying charges. We initially selected the 2010 calendar year so that we would have an 18 to 24 month follow-up period and because the Judicial Branch's CDCS became fully operational in 2010. Any data collected prior to 2010 would likely be missing a substantial amount of family violence program information. From CMIS, we collected:

- Docket Number;
- Demographic information (date of birth, gender, and race/ethnicity);
- Family violence risk assessment scores from the Domestic Violence Screening Instrument (DVSI-R);
- Victim-offender relationship;
- CSSD's Family Services recommendation to the Court:
- Court Orders.

Next, we matched these family violence cases to the Connecticut Criminal History database (CCH) to collect accompanying charges and criminal history. CCH data consisted of:

- Arrest date and offenses;
- Arraignment date and offenses;
- Disposition date;
- Type of disposition;
- Sentence (incarceration days, probation days).

Third, we collected family violence program data from CDCS for all offenders arrested for a family violence offense in 2010. Program data were collected for all referrals to family violence programs. These data consisted of:

- Date of referral;
- Program start date;
- Program discharge date;
- Reason for program discharge (successful completion, unsuccessful completion for violating program rules, unsuccessful completion for non-program reasons such as death, relocation, need for different type of program).

Summary of 2010 Family Violence Arrests

Data were collected on all arrests and subsequent charges for family violence offenses occurring in the calendar year 2010 (n=31,052). Following the collection of arrest records, we used program records to determine which offenders had been court-ordered and attended EVOLVE, EXPLORE, or the FVEP. We also used these data to draw our comparison groups.

Table 1 provides a summary of 2010 family violence arrests by race/ethnicity and age. It is important to point out that these are arrest incidents and not individual offenders, in that, some offenders were arrested multiple times for family violence offenses throughout the year.

7D 11 1	2010	T '1 '	7 1	A , 1	D	Ethnicity and	α 1
Table I	- 70110	Hamily	Violence	Arrecte hu	K ace	Hthnicity and	Liender
Taine I.	. 4010	1 ammy	V IOICHCC	α	Tracc/	Lumberty and	CICHUCI

	Females*	Males*	Total**
White	4,746 (32%)	10,105 (68%)	14,851 (48%)
African-American	2,287 (27%)	6,040 (73%)	8,327 (27%)
Hispanic	1,721 (26%)	4,826 (74%)	6,547 (21%)
Native American	16 (47%)	18 (53%)	34 (.1%)
Asian	90 (32%)	188 (68%)	278 (1%)
Unknown	472 (47%)	543 (53%)	1,015 (3.3%)
Total	9,332 (30%)	21,720 (70%)	31,052 (100%)

^{*}These are row percentages. **These percentages are column percentages.

For race/ethnicity, the majority of family violence offenders were White (48%), followed by African-American (27%) and Hispanic (21%). For gender, male offenders comprised the majority of family violence arrests (70%). Close to 70% of offenders were males across Whites (68%), African-Americans (73%), Hispanics (74%), and Asians (68%).

Table 2 summarizes family violence arrests by offenders' age and gender. The average age of male offenders was 32 compared to 34 years old for females. Offenders between the ages of 21 and 30 years old comprised 35% of all family violence arrests followed by offenders 31 to 40 years old (23%), offenders 41 to 50 years old (20%), offenders under 21 years old (13%), and offenders over 50 years old (9%).

Table 2. 2010 Famil	y Violence Arrests	s by Age and Gender
---------------------	--------------------	---------------------

Years Old	Females*	Males*	Total**
Under 21	1,538 (38%)	2,549 (62%)	4,087 (13%)
21-30	3,281 (30%)	7,469 (70%)	10,750 (35%)
31-40	2,034 (28%)	5,105 (72%)	7,139 (23%)
41-50	1,793 (29%)	4,473 (71%)	6,266 (20%)
Over 50	686 (24%)	2,124 (76%)	2,810 (9%)
Total	9,332 (30%)	21,720 (70%)	31,052 (100%)

^{*}These are row percentages. **These percentages are column percentages.

Evaluation Design

The gold standard in applied evaluation research is the multi-site randomized controlled clinical trial. However, the utilization of true experimental designs in social science research is hindered by several barriers—legal, ethical, and practical among others (see Singleton & Straits, 2005). Less rigorous methods include quasi-experiments (with or without comparison groups) and non-experiments. Because the current evaluation was performed *ex-post facto* and did not allow for random assignment of subjects to either treatment or control groups, we employed a quasi-experimental design with matched comparison groups. In this design, the treatment group (i.e., those individuals who participated in the program) was compared to a matched comparison group (i.e., eligible individuals who did not participate in the program).

This study was also designed using the Washington State Institute for Public Policy's (2013) minimum standards of research rigor. These standards increase our confidence that outcomes caused by interventions were not due to unknown factors and can be attributed to the actual intervention. These standards consist of three primary criteria. First, evaluations must have a comparison group similar to the treatment group. Second, it had to include all program participants and not just those who completed the program. Studies that do not include program drop-outs can be biased since program drop-outs tend to be less motivated to succeed and are at a higher risk for recidivism. Third, rigorous studies should report effect sizes based on "intent to treat" (i.e., program participants).

To strengthen the quasi-experimental design, propensity score matching (PSM) was used to match comparison groups to the treatment groups. 9 PSM is designed to control for selection

_

⁹ In a true experiment, random assignment would be used to assign all eligible offenders to either the intervention under study or the traditional criminal justice option. This way, each offender would actually start with the same chance of success, and positive outcomes could be attributed to the program effectiveness, thereby preventing any

bias when assigning subjects to study groups in situations where random assignment prior to treatment is not available (see Stuart & Rubin, 2008; Thoemmes, 2012). PSM utilizes logistic regression of observed data and creates a measure—the propensity score—of the likelihood that a person would have received the treatment under consideration given the observed covariates (Stuart & Rubin, 2008). In contrast to traditional matching procedures that typically attempt to closely match treatment subjects to a comparison subjects' pool on all covariates, ¹⁰ "propensity score matching matches on the scalar propensity score, which is the most important scalar summary of the covariates" (Stuart & Rubin, 2008, p. 159). 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).

The propensity score matching procedure utilized in this evaluation is outlined and explained in detail in each program outcome section. When successfully performed, PSM helps control for the influence of specified confounding variables.

Evaluation Outcome Measures

Two outcome recidivism measures were used to calculate effect sizes for all three family violence programs. These were (1) any new criminal arrest and (2) any new family violence arrest within 12 months of discharge from a family violence program. For the comparison groups, these recidivism measures were collected for the 12-month period following their 2010 initial arrest.

Time Frame. We planned on having an 18 to 24 month follow-up time frame for program participants based on the assumption that most family violence offenders would be processed and referred to one of the three programs within one year of their initial arrest. Unfortunately, this assumption proved to be incorrect and we were forced to adjust our follow-up period to 12 months in order to have sufficient data for the evaluation. The actual processing of family violence cases and referrals to the programs took longer than we expected and were delayed in a large percentage of the cases for numerous reasons. A few of the possible explanations were: court continuances of the case, program no-shows causing additional referrals (program noshows could have occurred for several reasons and does not necessarily mean offenders simply refused to attend the programs), and court processing delays due to referrals for more extensive assessments prior to disposition.

Use of Arrests. There is no consensus among criminal justice and criminology scholars regarding the most accurate measure of recidivism. Program evaluation research in criminal justice typically uses new arrests, new convictions, or new incarceration sentences to measure recidivism or program success. We chose to use new arrests because we feel this measure best represents offender behavior, in that, an offender acted in some manner as to invoke a police response, although not every person who is arrested actually committed a crime. By contrast, the use of new convictions would likely underestimate offender recidivism given that over 80% of

selection bias. However, because eligible individuals may be denied participation in the program when assigned to the control group(s), this method violates ethical standards, which makes it hard to implement and unpopular. ¹⁰ Also note: because the traditional method of matching utilizes only a few specific variables for matching, it tends to lead to biased estimates of treatment effect as differences between groups may still exist on other variables not used for matching.

Connecticut family violence charges receive a nolle or are dismissed prior to court arraignment (Connecticut Statistical Analysis Center, 2007). We acknowledge that neither measure is perfect but believe that operationalizing recidivism using police arrests is more accurate in this context.

Calculation of Effect Sizes

The overarching goal of this study was to calculate effect sizes for use in a cost-benefit analysis model for family violence 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, in that, they allow for the comparison of effects across multiple programs to determine whether some programs are more or less effective than others.

While there are many types of effect sizes, we present two of these in this study: d-cox transformations and odds ratios. We used d-cox transformations since they have been found to be the most appropriate for evaluative studies where the outcomes are dichotomous (i.e., have only two possible outcomes such as re-arrested or not re-arrested) (see Sánchez-Meca, Chacón-Moscoso, and Marin-Martínez, 2003). The d-cox effect sizes approximate the average differences between the two study groups.

The D-cox transformation is an estimated effect size derived by dividing the natural logarithm of the odds ratio by the constant of 1.65 (P_e represents the percentage of family violence program completers who were not rearrested, and P_c represents the percentage of family violence offenders who did not attend the program) (see Drake, Aos, & Miller, 2009; Sánchez-Meca et al., 2003; Washington State Institute for Public Policy, 2013; Washington State Institute for Public Policy, 2009).

$$d_{\text{cox}} = \ln \left(\frac{P_e(1 - P_c)}{P_c(1 - P_e)} \right) / 1.65$$

The standard error (SE) of the effect size was calculated using the following formula:

$$SE_{dcox} = \sqrt{0.367 \left[\frac{1}{o_{1E}} + \frac{1}{o_{2E}} + \frac{1}{o_{1C}} + \frac{1}{o_{2C}} \right]}$$

In the above equation, O_{1E} and O_{1C} represent the number of offenders who were not rearrested in the treatment and comparison groups while O_{2E} and O_{2C} represent the number of offenders who were rearrested.

We also reported odds ratios along with the d-cox effect sizes because they provide a more meaningful measure for explaining the magnitude of effects. Odds ratios show the odds of comparison group offenders who were rearrested in proportion to the program participants who were rearrested and have a straightforward interpretation (Ferguson, 2009). For example, an odds

ratio of 2.50 signifies that offenders in the comparison group are 2.5 times more likely to be rearrested than offenders completing a family violence program.

Plan of Analysis

The next sections describe the procedures employed to conduct the research and presents the results of the analyses. Specifically, we present three distinct results sections, one for each of the three programs (i.e., FVEP, EXPLORE, and EVOLVE). Each section was divided into five subsections. The first subsection described the procedure employed to match the treatment and comparison samples. The second subsection presented a comparison of the matched sample on a series of covariates. The third subsection shows the comparison of offenders who completed the programs to those that dropped out. The fourth subsection presented the program outcomes. The fourth subsection provided the three types of effect sizes described above.

FVEP OUTCOME FINDINGS

The Family Violence Education Program is a 9-week pretrial program that meets once per week for 1.5 hours. The purpose is to educate defendants (male or female) on how violence affects relationships and to provide them with basic interpersonal skills to have violence-free relationships.

Matching Process for FVEP

We began our analysis of the FVEP by identifying all family violence offenders from 2010 who were referred to the FVEP or who were eligible to attend the FVEP but did not. We first removed defendants who had their cases disposed during the follow-up period and were sentenced to prison since they would have had no opportunity to be rearrested. This step resulted in a data file consisting of 5,030 offenders (3,981 FVEP participants and 1,049 offenders who were recommended to attend the FVEP by CSSD's Family Services Division based on the DVSI-R assessment and/or were court-ordered to attend the FVEP by the presiding judge but did not attend. There are several reasons why offenders may be referred and court-ordered to the FVEP but not attend. For instance, a defense attorney may negotiate with the States Attorney (i.e., prosecutor) to not require program attendance in exchange for a plea bargain of reduced charges, reduced sentences, or some other type of treatment program such as counseling, anger management, or individualized therapy. In other cases a pretrial defendant may fulfill other court-ordered conditions and the presiding judge will not require FVEP program attendance. Unfortunately, these details of the pretrial process are not recorded in a systematic manner so we were unable to determine how often these situations occur.

The FVEP participants group and the no-FVEP comparison groups were merged to create one large data set, hereafter referred to as the FVEP merged sample. This merged sample consisted of 5,030 cases: the 3,981 FVEP participants and the 1,049 no-FVEP cases. Data in each group were then checked for missing values. A total of 101 cases had missing court or DVSI-R information and were from the data set. After deleting these cases, the data set was reduced to 3,891 FVEP participants and 1,038 non-program comparison cases (total N = 4,929).

Following the sampling procedure detailed above, propensity score matching (PSM) was employed to minimize selection bias and ensure the subjects in the comparison group were similar to treated subjects on nine covariates (i.e., age at arrest, gender, racial/ethnic group membership, court, DVSI-R total score, DVSI-R risk level, DVSI-R risk to victim, DVSI-R dual arrest, number of prior arrests, and number of prior family violence arrests).

It is important to note that the number of individuals in the FVEP participants' group (i.e., treatment group) was much larger than the number of individuals in the no-FVEP group (i.e., comparison group), with a ratio of approximately 3:1. In such situations, the matching procedure can be performed "with replacement, in which a single unit in the control group can be reused to be matched to more than one unit in the treatment group." One advantage of this method is that it "reduces the overall imbalance between the two groups, because the closest possible unit in the control group can be used for matching, even if this unit also has been used for a different match" (Thoemmes, 2012, p.8). A disadvantage, however, is that sometimes

only a small number of units can be repeatedly matched to units in the treatment group. As a result, the estimate of effects of treatment will become reliant on these repeatedly used units.

An alternative matching method in this situation would consist of doing a n:1 match, in which n units in one group are matched to one unit in the other group. This is what we did for the FVEP. The process began by aggregating the groups using a custom SPSS plug-in (see Thoemmes, 2012). The program used logistic regression as an estimation algorithm to calculate the propensity score for each of the subjects in the dataset using the nine covariates specified above. And then, using the nearest neighbor matching algorithm, the program matched three subjects in the treatment group (i.e., FVEP participants) to one subject in the comparison pool (i.e., no-FVEP) to which the propensity score most closely matched the treatment subject's propensity score (i.e., 3:1 nearest neighbor matching), without replacement. We chose this method so that we could include as many FVEP participants as possible. A 1:1 match would have eliminated 2,842 FVEP participants (71% of all FVEP participants) and would have greatly limited the generalizability of the study.

During the propensity score matching procedure, cases in the FVEP participant group that were not matched to a no-program comparison group subject (n=777) were removed from the data set. As a result, there were 1,038 no-program comparison subjects matched to 3,114 FVEP participants. Following the matching procedure, the balance of all observed covariates as well as interaction among all covariates were examined. No covariates exhibited a large imbalance (|d| > .25). The relative multivariate imbalance measure L_1 was larger in the unmatched sample (0.951) than in the matched sample (0.950). These measures indicate that the matching procedure successfully improved balance between groups. In addition, diagnostic plots were produced and show that covariate balance was greatly improved in the matched sample. A selection of plots is presented hereafter.

Figure 1 shows the distribution of propensity scores of FVEP participants ("treated") and the no-FVEP comparison group subjects ("control") before and after matching with overlaid kernel density estimate.

-

¹¹ In the description of outcomes (see next section), a comparison between the 3,114 matched FVEP participants and the 777 FVEP participants prior to matching will be presented.

¹² Note: The overall balance test can only be implemented for 1:1 matching without replacement.

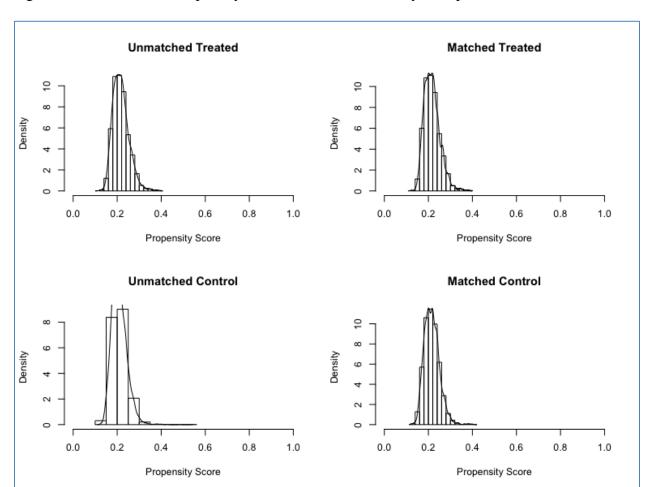


Figure 1. Distribution of Propensity Scores for the FVEP Study Groups

Figure 2 below shows the line plot of standardized differences before and after matching.

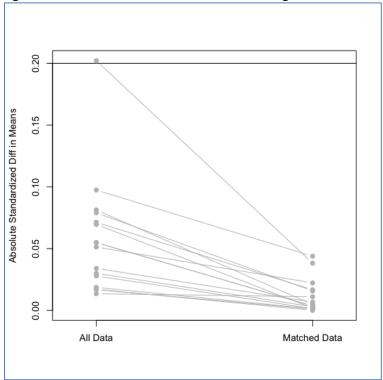


Figure 2. Line Plot of Standardized Matching Differences

Figure 3 below shows histograms with overlaid kernel density estimates of standardized differences before and after matching.

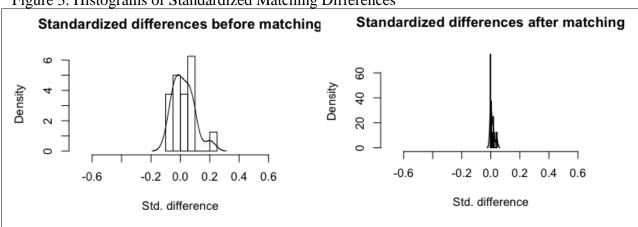


Figure 3. Histograms of Standardized Matching Differences

Comparison of FVEP Matched Study Groups

Following the matching procedures it was necessary to determine differences between the two study groups for race/ethnicity, gender, DVSI-R scores, age, and criminal history. Table 3 assesses study group differences by race/ethnicity and gender. Both study groups were made up

of approximately 46% whites, 28% African-Americans, and 25% Hispanics. In addition, 71% of both study groups were males. The chi-square test shows there were no statistically significant differences between the FVEP comparison and the FVEP treatment groups for race/ethnicity or gender.

Table 3. FVEP Study Group Comparison by Race/Ethnicity and Gender

		FVEP	FVEP	
		Comparison	Treatment	Total
Race/Ethnicity*	White	464 (45%)	1,434 (46%)	1,989 (46%)
	African-American	293 (28%)	857 (28%)	1,150 (28%)
	Hispanic	254 (25%)	753 (24%)	1,007 (24%)
	Other/Unknown	27 (3%)	70 (2%)	97 (2%)
Total		1,038	3,114	4,152
Gender**	Female	299 (29%)	892 (29%)	1,191 (29%)
	Male	739 (71%)	2,222 (71%)	2,961 (71%)
Total		1,038	3,114	4,152

^{*}Chi Square=0.893, df=3, p=0.827, **Chi Square=0.010, df=1, p=0.921

Table 4 presents the DVSI-R comparison between the two study groups. For this analysis, we looked at differences in the DVSI-R risk level categories (a low risk category indicates these offenders are at a low risk of reoffending) and the assessment item that identifies whether the offender poses an immediate risk to the victim. Again, the chi-square test shows there were no statistically significant DVSI-R differences between the two study groups.

Table 4. FVEP Study Group Comparison by DVSI-R Risk Levels.

	FVEP	FVEP	Total
		Treatment	Total
Low	243 (23%)	732 (24%)	975 (24%)
Moderate	490 (47%)	1,470 (47%)	1,960 (47%)
High	260 (25%)	784 (25%)	1,044 (25%)
Very High	45 (4%)	128 (4%)	173 (4%)
	1,038	3,114	4,152
Low	256 (25%)	764 (25%)	1,020 (25%)
Medium	498 (48%)	1,496 (48%)	1,994 (48%)
High	284 (27%)	854 (27%)	1,138 (27%)
	1,038	3,114	4,152
	Moderate High Very High Low Medium	Low243 (23%)Moderate490 (47%)High260 (25%)Very High45 (4%)Low256 (25%)Medium498 (48%)High284 (27%)	Comparison Treatment Low 243 (23%) 732 (24%) Moderate 490 (47%) 1,470 (47%) High 260 (25%) 784 (25%) Very High 45 (4%) 128 (4%) 1,038 3,114 Low 256 (25%) 764 (25%) Medium 498 (48%) 1,496 (48%) High 284 (27%) 854 (27%)

^{*}Chi Square=.0.103, df=3, p=0.992, **Chi Square=0.007, df=2, p=0.996

The final test between the study groups assessed average differences between them for age at their 2010 family violence arrest, their DVSI-R total risk score (the higher the score the riskier the offender), number of arrests prior to their 2010 family violence arrest, and number of family violence arrests prior to their 2010 family violence arrest. The average age for both study

groups was 33 years old, their DVSI-R total risk score was 8.10, both groups had an average of three prior arrests and less than one prior family violence arrests. The t-test analyses show there were no statistically significant differences between these two groups.

Table 5. Means and Standard Deviations for the FVEP Comparison and FVEP Treatment Groups

	FVEP	FVEP	4	n volvo
	Comparison	Treatment	ι	p. value
Age at Arrest	32.87 (11.70)	32.82 (11.18)	0.520	0.959
DVSI-R Total	8.11 (4.45)	8.11 (4.41)	0.030	0.976
Prior Arrests	3.01 (4.22)	2.83 (3.58)	1.270	0.205
Prior Family Viol Arrests	0.44 (1.48)	0.29 (1.09)	0.461	0.645

Differences Between FVEP Program Completers and Non-Completers

This section explores differences between family violence offenders in the FVEP participants' study group who successfully completed the FVEP to those participants who do not complete it. Of the offenders referred to the FVEP, 84% (2,624) completed the program and 16% (490) did not. The completion rate was consistent with internal Judicial Branch-CSSD FVEP reports. Table 6 presents the race/ethnicity and gender of the completers and non-completers. White offenders had higher FVEP completion rates (87%) than Hispanic (83%) and African-American offenders (80%). Race/ethnicity was statistically related to FVEP completion. There was not a statistical relationship between gender and program completion with a slightly higher percentage of males completing the FVEP compared to females (85% to 83%).

Table 6. FVEP Study Group Comparison by Race/Ethnicity and Gender

		FVEP	FVEP	
		Completers	Non-Completers	Total
Race/Ethnicity*	White	1,240 (87%)	194 (13%)	1,434
	African-American	689 (80%)	168 (20%)	856
	Hispanic	628 (83%)	125 (17%)	753
	Other	67 (96%)	3 (4%)	70
	Total	2,624 (84%)	490 (16%)	3,114
Gender**	Female	743 (83%)	149 (17%)	892
	Male	1,881 (85%)	341 (15%)	2,222
	Total	2,624 (84%)	490 (16%)	3,114

^{*}Chi Square=22.28, df=3, p=0.000. **Chi Square=0.885 df=1, p=0.347

Table 7 shows there was a statistical relationship between FVEP completion and the level of family violence risk scores. There were slight differences in the completion rates for low risk family violence offenders (87%), moderate risk (84%), and high risk (83%) offenders. Very high risk offenders had the lowest completion rate (75%). There was not a statistical relationship between the immediate risk to the victim and FVEP completion.

Table 7. FVEP Completers and Non-Completers by DVS	VSI-R Scores.
--	---------------

		FVEP	FVEP	Total
		Completers	Non-Completers	
	Low	638 (87%)	94 (13%)	732
Risk	Moderate	1,239 (84%)	231 (16%)	1,470
Categories*	High	651 (83%)	133 (17%)	784
	Very High	96 (75%)	32 (25%)	128
	Total	2,624 (84%)	490 (16%)	3,114
D:-1-4-	Low	655 (86%)	109 (14%)	764
Risk to Victim**	Medium	1,267 (85%)	229 (15%)	1,496
	High	702 (82%)	152 (18%)	854
	Total	2,624 (84%)	490 (16%)	3,114

^{*}Chi Square=13.80, df=3, p=0.003, **Chi Square=4.19, df=2, p=0.123

The final analysis looked at average differences between FVEP completers and non-completers for offenders' age at the time of arrest, total DVSI-R risk score, and the number of arrests and family violence arrests prior to offenders' family violence arrests in 2010 (Table 8). There were statistically significant differences for all four of these characteristics. Offenders completing the FVEP were older (33.6 years old compared to 28.6 years old), had lower risk scores (7.97 to 8.82), had fewer prior arrests (2.6 compared to 4.1) and fewer prior family violence arrests (0.48 to 0.72).

Table 8. Means and Standard Deviations for FVEP Completers and Non-Completers

	FVEP Completers	FVEP Non-Completers	Т	p. value
Age at Arrest	33.64 (11.27)	28.58 (9.56)	10.443	0.000
DVSI-R Total	7.97 (4.37)	8.82 (4.52)	-3.901	0.000
Prior Arrests	2.58 (3.39)	4.14 (4.25)	-7.666	0.000
Prior Family Viol Arrests	0.48 (0.79)	0.72 (1.03)	-4.758	0.000

FVEP One Year Arrests

The primary outcome analysis compared one year arrest rates¹³ between the two study groups (Table 9). Of the FVEP participants, 26% were arrested within one year of program discharge while 36% of offenders in the FVEP comparison group were arrested within one year of their initial arrest. These differences were statistically significant.

13

¹³ Since this was a pretrial program it was possible for defendants to have their cases disposed prior to the end of the one year follow-up period. To control for this, we did not count case disposition as an arrest in our follow-up analysis and only looked at new arrests.

Table 9. One Year Arrest Rates for the FVEP Study Groups

	No Arrest	New Arrest	Total
FVEP Comparison	668 (64%)	370 (36%)	1,038
FVEP Treatment	2,317 (74%)	797 (26%)	3,114

Chi Square=38.92, df=1, p=0.000

For new arrests for family violence incidents, 16% of the FVEP participants were arrested compared to 18% of the FVEP comparison group (Table 10). These differences were not statistically significant.

Table 10. One Year Family Violence Arrest Rates for the FVEP Study Groups

	No Arrest	New Arrest	Total
FVEP Comparison	848 (82%)	190 (18%)	1,038
FVEP Treatment	2,622 (84%)	492 (16%)	3,114

Chi Square=3.56, df=1, p=0.059

The next step was to look at the arrest rate of the 777 offenders who participated in the FVEP but were not included in our matched study group (Table 11). We conducted this analysis to address concerns that we biased the results by omitting this group from the comparison. The FVEP treatment-unmatched group actually had a significantly lower arrest rate (21%) than the FVEP treatment group (26%). This finding demonstrates that our matching procedures did not artificially inflate the effects of the FVEP on one-year recidivism rates.

Table 11. One Year Arrest Rates for the FVEP Unmatched Treatment Group

_	No Arrest	New Arrest	Total
FVEP Treatment-Unmatched	611 (79%)	193 (21%)	777
FVEP Treatment	2,317 (74%)	797 (26%)	3,114

Chi Square=5.97, df=1, p=0.015

We conducted the same analysis for new family violence arrests (Table 12). Similar to any criminal arrest, offenders in the FVEP treatment group had a statistically significantly higher arrest rate than offenders who attended the FVEP but were not included in the study (16% to 11%).

Table 12. One Year Family Violence Arrest Rates for the FVEP Unmatched Treatment Group

	No Arrest	New Arrest	Total
FVEP Treatment-Unmatched	695 (89%)	82 (11%)	777
FVEP Treatment	2,622 (84%)	492 (16%)	3,114

Chi Square=13.61, df=1, p=0.000

Effect Size Calculations for FVEP

Effect size statistics were calculated by comparing the differences in one year arrest rates for any criminal arrest and family violence arrests for the FVEP treatment group and the FVEP comparison group.

Table 12 presents the two effect size measures we used for this study. The d_{cox} effect size for any new arrest was small to moderate and statistically significant, indicating that the FVEP did have an effect on reducing arrests for the treatment group. However, the effect size for new family violence arrests was small and not statistically significant, indicating that FVEP participants did not have a lower arrest rate than the FVEP comparison group. Further, when interpreting the effect size it is important to keep in mind the greater the negative effect size, the greater the effect at reducing recidivism. For example, the effect size of -0.29 indicates the FVEP produced a greater reduction of any type of arrests than for family violence arrests, since the effect size for this was -0.09.

Table 13. Effect Size Statistics for FVEP

		Effect Size	Standard Error	95% Confidence Interval
Any Arrest		~		
	d_{cox}	-0.29	0.05	-0.39 to -0.19
	Odds Ratio	1.61		1.30 to 1.87
Family Violer	nce Arrest			
	d_{cox}	-0.09	0.06	-0.20 to 0.03
	Odds Ratio	1.15		0.99 to 1.44

We use the odds ratios to put the effects into perspective. Offenders who never attended the FVEP were 1.61 times more likely to be arrested within one year than FVEP participants. Likewise, offenders who never attended the FVEP were 1.15 times more likely to be arrested for a family violence offense within one year than FVEP participants.

EXPLORE OUTCOME FINDINGS

EXPLORE is a 26-week 26 session post-conviction and post-plea program for male family violence offenders (1.5 hour sessions, once per week) based on a cognitive behavioral therapeutic framework. Its purpose is to foster behavioral change through developing awareness, building positive interpersonal skills, and understanding the harmful effects of family violence on victims and children.

Matching Process for EXPLORE

The first step in the EXPLORE analysis was to create a comparison group by identifying all offenders who may have been eligible for EXPLORE but were not referred. Since EXPLORE is a post-plea program, the initial list of eligible EXPLORE offenders was comprised of those individuals arrested in 2010 for family violence offenses who were convicted and sentenced to probation but not referred to EXPLORE. Even though convicted offenders may be eligible for EXPLORE their referral and participation can be affected by a number of reasons, many of which occur during the pretrial plea bargaining process. For example, a defendant may agree to plead guilty to a family violence offense or an accompanying charge if the sentence consists of probation supervision without the court-imposed condition of attending EXPLORE. Another way, similar to the FVEP, is that a probationer may be ordered to attend EXPLORE but will be permitted by the judge to substitute non-Judicial programming such as private counseling, couple's therapy, or anger management. Another possible explanation is that a probationer may be ordered to attend EXPLORE only after attending a different program such as substance abuse or mental health. If the probationer does not complete the initial program the judge may change the order and not require the probationer to attend EXPLORE. Unfortunately, data are not collected that would allow us to know the exact reasons why eligible probationers do not attend EXPLORE¹⁴. We were able to identify 2,116 probationers convicted of a family violence offense who were not referred to a family violence program. These offenders were the basis for the noprogram comparison group.

The EXPLORE treatment study group and the no-program comparison group were then merged to create one large dataset, hereafter referred to as the EXPLORE merged sample. This merged sample consisted of a total of 2,904 cases: 788 EXPLORE participants and 2,116 no-program comparison cases. Data in each group were then checked for missing values. A total of 164 cases had missing court or DVSI-R information and were removed from the data set. After deleting these cases the data set was reduced to 788 EXPLORE participants and 1,952 no-program comparison cases (total N = 2,740).

Following the sampling procedure detailed above, propensity score matching (PSM) was employed to minimize selection bias and ensure the subjects in the comparison group were similar to treated subjects on 14 covariates (i.e., age at arrest, racial/ethnic group membership, court, DVSI-R total score, DVSI-R risk level, DVSI-R risk to victim, DVSI-R dual arrest,

_

¹⁴ During and prior to 2010 probation officers rarely added probation conditions for EXPLORE attendance. Since 2010, Judicial Branch-CSSD policy has been revised to encourage probation officers to refer eligible probationers to EXPLORE without a court-ordered condition.

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).¹⁵

The process began by aggregating the groups using a custom SPSS plug-in (see Thoemmes, 2012). The program used logistic regression as an estimation algorithm to calculate the propensity score for each of the subjects in the dataset using the 14 covariates specified above. And then, using the nearest neighbor matching algorithm, the program matched one subject in the treatment group (i.e., EXPLORE participants) to one subject in the comparison pool (i.e., no-program) to which the propensity score most closely matched the treatment subject's propensity score (i.e., 1:1 nearest neighbor matching), without replacement. The program repeated the process until each treatment subject was matched to a comparison subject.

During the propensity score matching procedure, cases in the no-program comparison group that were not matched to EXPLORE participants (n=1,164) were removed from the data set. As a result, there were 788 no-program comparison subjects matched to 788 EXPLORE participants. Following the matching procedure, the balance of all observed covariates as well as interaction among all covariates were examined. No covariates exhibited a large imbalance (|d| > .25). The overall balance test was also not significant (chi-square = 6.327, df = 18, p=0.995), and the relative multivariate imbalance measure L_1 was larger in the unmatched sample (0.993) than in the matched sample (0.964). These measures indicate the matching procedure successfully improved balance between groups. In addition, diagnostic plots were produced and show that covariate balance was greatly improved in the matched sample. A selection of plots is presented hereafter.

Figure 4 shows the distribution of propensity scores of EXPLORE participants ("treated") and no-program cases ("control") before and after matching with overlaid kernel density estimate.

_

¹⁵ Note: the EXPLORE program is designed for male batterers only. As such, there was no need to match on gender since all program participants were male.

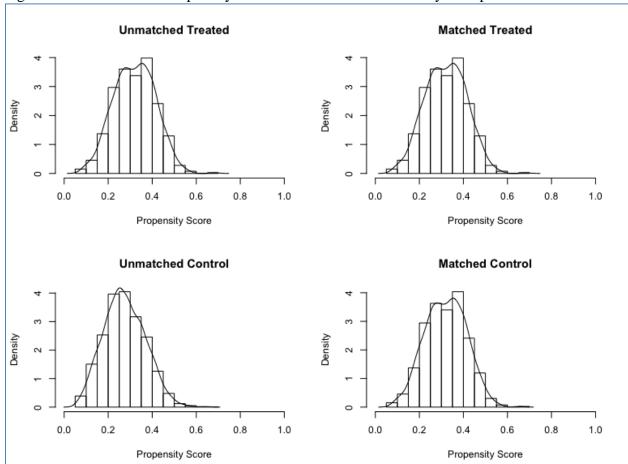


Figure 4. Distribution of Propensity Scores for the EXPLORE Study Groups

Figure 5 below shows the line plot of standardized differences before and after matching.

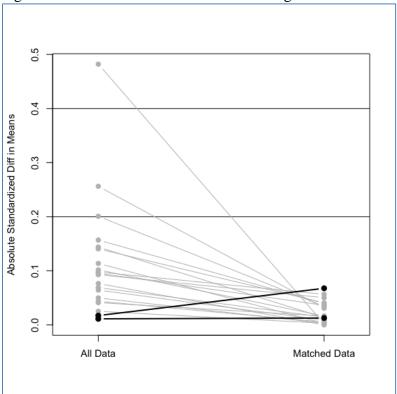


Figure 5. Line Plot of Standardized Matching Differences

Figure 6 below shows histograms with overlaid kernel density estimates of standardized differences before and after matching.

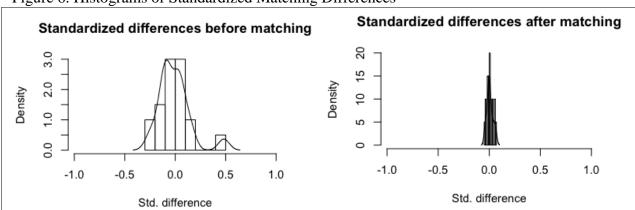


Figure 6. Histograms of Standardized Matching Differences

Comparison of EXPLORE Matched Study Groups

Following the matching process we conducted several comparative tests to assure the EXPLORE treatment group was similar to the EXPLORE comparison group. Table 14 shows this analysis for race/ethnicity. White offenders made up the highest percentage of the

EXPLORE study group (40%) followed by Hispanics (29%) and African-Americans (29%). While there were some small differences in these percentages they were not statistically significant and indicate the study groups were similar in terms of race/ethnicity

Table 14. EXPLORE Study Group Comparison by Race/Ethnicity

	EXPLORE	EXPLORE	Total
	Comparison	Treatment	Total
White	311 (40%)	325 (41%)	636 (40%)
African-American	229 (29%)	230 (29%)	459 (29%)
Hispanic	239 (30%)	225 (29%)	464 (29%)
Other/Unknown	9 (1%)	8 (1%)	17 (1%)
Total	788	788	1,576

Chi Square=0.792, df=3, p=0.851

Table 15 presents the results of a similar analysis but looking at DVSI-R risk levels (risk categories and the immediate risk to the victim). The majority of EXPLORE participants were high risk (43%) or very high risk (25%) and posed a high risk to victims (72%). Again, while there were some differences in these percentages between the two study groups, these differences were not statistically significant and we conclude the groups were similar in terms of the DVSI-R assessment.

Table 15. EXPLORE Study Group Comparison by DVSI-R Risk Levels.

		EXPLORE Comparison	EXPLORE Treatment	Total
	Low	28 (4%)	30 (4%)	58 (4%)
Risk	Moderate	221 (28%)	216 (27%)	437 (28%)
Categories*	High	340 (43%)	342 (43%)	682 (43%)
	Very High	199 (25%)	200 (25%)	399 (25%)
Total		788	788	1,576
D:-1- 4-	Low	17 (2%)	21 (3%)	38 (2%)
Risk to Victim**	Medium	203 (26%)	202 (26%)	405 (26%)
Victim	High	568 (72%)	565 (72%)	1,133 (72%)
Total		788	788	1,576

^{*}Chi Square=0.135, df=3, p=0.987, **Chi Square=0.431, df=2, p=0.806

The final comparative set of analyses assessed average differences for offenders' age at arrest, DVSI-R total risk score, number of prior arrests, and number of prior family violence arrests (Table 16). The average age for both study groups was 34 years old, their DVSI-R total risk score was 13.11, both groups had an average of seven prior arrests and close to two prior family violence arrests. There were no statistically significant differences between the two study groups as evidenced by the t-test statistics.

Table 16. Means and Standard Deviations for EXPLORE Treatment and Comparison Groups

	EXPLORE Comparison	EXPLORE Treatment	t	p. value
Age at Arrest	33.85 (11.17)	33.49 (10.54)	0.656	0.512
DVSI-R Total	13.11 (4.93)	13.11 (4.73)	0.000	1.000
Prior Arrests	7.05 (7.20)	7.40 (7.02)	-0.981	0.327
Prior Family Viol Arrests	1.60 (1.73)	1.63 (1.64)	-0.314	-0.754

<u>Differences Between EXPLORE Program Completers and Non-Completers</u>

The first set of outcome analyses for the EXPLORE study groups consisted of comparing program completers to non-completers. Overall, the EXPLORE program had a 68% completion rate. In looking at differences, we found a statistically significant relationship between race/ethnicity and program completion (Table 17). White EXPLORE participants were more likely to complete the program (a 73% completion rate) than African-American participants (70%) and Hispanic participants (59%). These findings differ from FVEP program completion, in that, Hispanic FVEP participants had a higher completer than African-American participants (83% to 80%).

Table 17. EXPLORE Completers and Non-Completers by Race/Ethnicity

	EXPLORE	EXPLORE	Total
	Completers	Non-Completers	Total
White	237 (73%)	88 (27%)	325
African-American	160 (70%)	70 (30%)	230
Hispanic	133 (59%)	92 (41%)	225
Other	7 (88%)	1 (12%)	8
Total	537 (68%)	251 (32%)	788

Chi Square=13.47, df=3, p=0.004

Table 18 presents the comparison of EXPLORE completers to non-completers for DVSI-R assessment scores. While higher risk offenders had lower completion rates than lower risk offenders, these differences were not statistically significant.

Table 10. Liki Loke Stady Group Companison by Dysi-K Sco	Table 18.	. EXPLORE	Study Gro	up Comparison	n by DVSI-R Scores.
--	-----------	-----------	-----------	---------------	---------------------

		EXPLORE Completers	EXPLORE Non-Completers	Total
	Low	21 (70%)	9 (30%)	30
Risk	Moderate	153 (71%)	63 (29%)	216
Categories*	High	232 (68%)	110 (32%)	342
	Very High	131 (66%)	69 (34%)	200
Total		537 (68%)	251 (32%)	788
D:-1-4-	Low	11 (52%)	10 (48%)	21
Risk to Victim**	Medium	138 (68%)	64 (32%)	202
Victilii	High	388 (69%)	177 (31%)	565
Total		537 (68%)	251 (32%)	788

^{*}Chi Square=1.43, df=3, p=0.699, **Chi Square=2.48, df=2, p=0.289

We did find statistically significant differences between EXPLORE completers and non-completers when looking at age at the time of their family violence arrest and prior arrests (Table 19). EXPLORE completers were significantly older (35 years old compared to 31 years old). Whereas, EXPLORE non-completers had a more extensive criminal history with more average prior arrests (9 to 7) and slightly more prior family violence arrests (1.85 vs. 1.52).

Table 19. Means and Standard Deviations for EXPLORE Completers and Non-Completers

	EXPLORE Completers	EXPLORE Non-Completers	t	p. value
Age at Arrest	34.72 (10.47)	30.87 (10.24)	4.839	0.000
DVSI-R Total	12.94 (4.66)	13.47 (4.88)	-1.470	0.142
Prior Arrests	6.67 (6.56)	8.96 (7.71)	4075	0.000
Prior Family Viol Arrests	1.52 (1.52)	1.85 (1.85)	-2.470	0.014

EXPLORE One Year Arrests

The one year arrest rates following program discharge or initial arrest were compared between the EXPLORE treatment and the EXPLORE comparison groups (Table 20). The EXPLORE treatment group had a significantly lower arrest rate than the comparison group (30% to 51%).

Table 20. One Year Arrest Rates for the EXPLORE Study Groups

	No Arrest	New Arrest	Total
EXPLORE Comparison	389 (49%)	399 (51%)	788
EXPLORE Treatment	552 (70%)	236 (30%)	788

Chi Square=70.08, df=1, p= 0.000

The findings were similar when looking at family violence arrests (Table 21). The EXPLORE treatment group had a much lower one year arrest rate (16%) for family violence offenses than the EXPLORE comparison group (27%). These differences were statistically significant.

Table 21. One Year Family Violence Arrest Rates for the EXPLORE Study Groups

	No Arrest	New Arrest	Total
EXPLORE Comparison	574 (73%)	214 (27%)	788
EXPLORE Treatment	663 (84%)	125 (16%)	788

Chi Square=29.77, df=1, p= 0.000

EXPLORE Effect Size Calculations

The above analyses found that EXPLORE participants were more successful than eligible offenders who did not attend it. We next present the effects sizes to provide context as to the magnitude of these program effects (Table 22).

Table 22. Effect Size Statistics for EXPLORE

		Effect Size	Standard Error	95% Confidence Interval
Any Arrest		SIZC	Enoi	micrvar
Ally Allest				
	d_{cox}	-0.54	0.06	-0.66 to -0.41
	Odds Ratio	2.42		2.09 to 2.77
Family Violen	ce Arrest			
	d_{cox}	-0.40	0.08	-0.55 to -0.25
	Odds Ratio	1.94		1.55 to 2.34

The d_{cox} effect sizes for both any arrests and family violence arrests demonstrate that EXPLORE produces moderate effects (-.54 and -.40). Again, the more negative the effect sizes the more impact EXPLORE had in reducing offenders' recidivism. Similar to the FVEP effect sizes, the 95% confidence intervals provides evidence these effects are statistically significant and can be generalized to all EXPLORE participants. The odds ratios provide context for these effects, in that, offenders who did not attend EXPLORE were more than twice as likely to be arrested as offenders who completed EXPLORE. This likelihood was slightly lower for family violence arrests. Eligible offenders who did not attend EXPLORE were 1.94 times more likely to be arrested for a family violence offense than EXPLORE participants.

EVOLVE OUTCOME FINDINGS

EVOLVE is a 26-week 52 session (2-hour sessions, twice a week) post-conviction and post-plea program. It is an intensive cognitive behavioral intervention designed for high-risk family violence offenders (males only). It centers on victims and children, behavior change, interrelation and communication skill building, and responsible parenting/fatherhood.

Matching Process for EVOLVE

Similar to assessing outcomes for the FVEP and EXPLORE, the first step in this process was to create a comparison group of similar offenders to those who participated in EVOLVE. In creating an EVOLVE comparison group we first identified offenders eligible for EVOLVE but not referred. Similar to EXPLORE, EVOLVE is a post-plea program so we first constructed an initial list of eligible EVOLVE offenders comprised of those individuals convicted of a family violence offense in 2010 and sentenced to probation. This list consisted of 1,609 offenders (i.e., no-program comparison group). The referral and selection process for EVOLVE is similar to EXPLORE and eligible offenders may not be referred to EVOLVE due to the same types of pretrial activities that affect EXPLORE referrals. For instance, eligible defendants may accept a plea agreement that does not include a court-ordered probation condition requiring EVOLVE participation; probationers may be ordered to attend EVOLVE but are allowed to substitute non-Judicial programming such as private counseling or therapy; and, probationers may be ordered to attend EVOLVE but have their court-ordered conditions changed following disposition. Unfortunately, data are not available that would allow us to know the exact reasons why eligible probationers do not attend EVOLVE¹⁶.

The EVOLVE participation' group (i.e., EVOLVE treatment group) and the no-program comparison group were merged to create one large dataset, hereafter referred to as the EVOLVE merged sample. This merged sample consisted of a total of 1,794 cases: 185 EVOLVE participant cases and 1,609 no-program comparison cases. Data in each group were then checked for missing values and 167 cases were removed for missing court or DVSI-R information. After deleting these cases, the data set was reduced to 185 EVOLVE participants and 1,442 no-program comparison cases (total N = 1,627).

Following the sampling procedure detailed above, propensity score matching (PSM) was employed to minimize selection bias and ensure the subjects in the comparison group were similar to treated subjects on 14 covariates (i.e., age at arrest, racial group membership, court¹⁷, DVSI-R total score, DVSI-R risk level, DVSI-R risk to victim, DVSI-R dual arrest, number of prior arrests, number of prior family violence arrests, number of prior jail sentences, number of

¹⁷ Note: Recall that EVOLVE is only available in the following four court locations: Bridgeport, New Haven, New

London, and Waterbury.

¹⁶ During and prior to 2010 probation officers rarely added probation conditions for EVOLVE attendance. Since 2010, CSSD policy has been revised to encourage probation officers to refer eligible probationers to EVOLVE without a court-ordered condition.

prior probation sentences, number of prior family violence jail sentences, and number of prior family violence probation sentences). ¹⁸

The process began by aggregating the groups using a custom SPSS plug-in (see Thoemmes, 2012). The program used logistic regression as an estimation algorithm to calculate the propensity score for each subject in the dataset using the 14 covariates specified above. And then, using the nearest neighbor matching algorithm, the program matched one subject in the treatment group (i.e., EVOLVE participants) to one subject in the comparison pool (i.e., noprogram) where the propensity score most closely matched the treatment subject's propensity score (i.e., 1:1 nearest neighbor matching), without replacement. The program repeated the process until each treatment subject was matched to a comparison subject.

During the propensity score matching procedure, cases in the no-program comparison group that were not matched to EVOLVE participants (n=1,257) were removed from the data set. The propensity scores matching procedure resulted in 185 no-program comparison subjects matched to the 185 EVOLVE participants. Following the matching procedure, the balance of all observed covariates as well as interaction among all covariates were examined. No covariates exhibited a large imbalance (|d| > .25). The overall balance test was also not significant (chi-square = 16.402, df = 28, p=0.96), and the relative multivariate imbalance measure L₁ was larger in the unmatched sample (.998) than in the matched sample (.995). These measures indicate the matching procedure successfully improved balance between groups. In addition, diagnostic plots were produced and show that covariate balance was greatly improved in the matched sample. A selection of plots is presented hereafter.

Figure 7 below shows the actual propensity score distributions of both groups before and after matching overlaid with a kernel density estimate.

_

¹⁸ Note: the EVOLVE program is designed for male batterers only (as is EXPLORE). As such, there was no need to match on gender since all program participants were male.

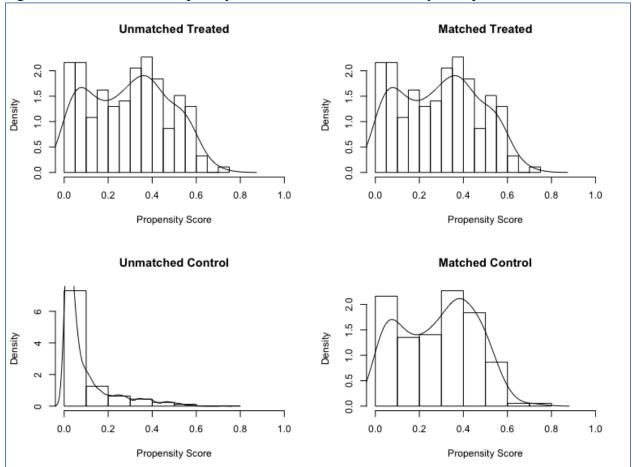


Figure 7. Distribution of Propensity Scores for the EVOLVE Study Groups

Figure 8 below shows a line plot of standardized differences before and after matching.

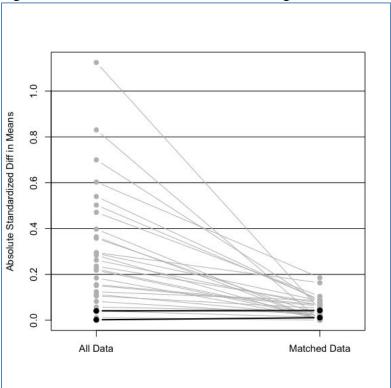


Figure 8. Line Plot of Standardized Matching Differences

Figure 9 below shows histograms with overlaid kernel density estimates of standardized differences before and after matching.

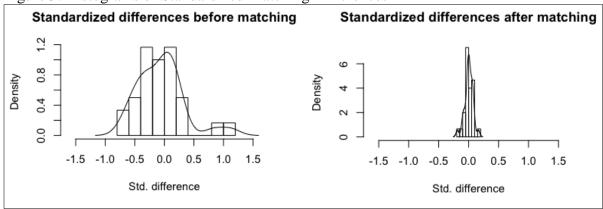


Figure 9. Histograms of Standardized Matching Differences

Comparison of EVOLVE Study Groups

Following the matching process it was necessary to assure the two study groups were equal in terms of race/ethnicity, DVSI-R assessment scores, age, and criminal history. There were minimal percentage differences in the racial/ethnic make-up of the two study groups and

these differences were not statistically significant (Table 23). African-Americans comprised the highest percentage of EVOLVE participants (37%) compared to Hispanics (32%) and whites (29%).

Table 23. EVOLVE Study Group Comparison by Race/Ethnicity

	EVOLVE	EVOLVE	Total
	Comparison	Treatment	Total
White	55 (30%)	53 (29%)	108 (29%)
African-American	67 (36%)	69 (37%)	136 (37%)
Hispanic	59 (32%)	60 (32%)	119 (32%)
Other	4 (2%)	3 (2%)	7 (2%)
Total	185	185	370

Chi Square=0.22, df=3, p=0.975

Table 24 presents the comparison of DVSI-R assessment scores between the two study groups with no statistically significant differences. For the DVSI-R risk score categories, offenders in the EVOLVE treatment group and the EVOLVE comparison group were mostly high risk (41% and 40% respectfully) or very high risk (33% for the treatment group and 34% for the comparison group). The majority of offenders in both groups had posed a high risk to the victim (77% for the EVOLVE comparison group and 74% for the EVOLVE treatment group).

Table 24. EVOLVE Study Group Comparison by DVSI-R Scores.

		EVOLVE Comparison	EVOLVE Treatment	Total
	Low	5 (3%)	5 (3%)	10 (3%)
Risk	Moderate	44 (24%)	43 (23%)	87 (24%)
Categories*	High	75 (41%)	74 (40%)	149 (40%)
	Very High	61 (33%)	63 (34%)	124 (34%)
Total		185	185	370
Dialy 40	Low	3 (2%)	7 (4%)	10 (3%)
Risk to Victim**	Medium	39 (21%)	42 (23%)	81 (22%)
Victilii	High	143 (77%)	136 (74%)	279 (75%)
Total		185	185	370

^{*}Chi Square=0.05, df=3, p=0.997, **Chi Square=1.89, df=2, p=0.389

The final comparative analyses explored average differences in offenders' age at the time of arrest, their DVSI-R total risk scores, number of prior arrests, and number of prior family violence arrests (Table 25). There were no statistically significant differences between the two study groups for any of these factors. The average age for both study groups was 31 years old, their DVSI-R total risk score was 14, and both groups had an average of eight prior arrests and about two prior family violence arrests.

Table 25. Average Differences between the EVOLVE Comparison and Completion Groups

	EVOLVE Comparison	EVOLVE Treatment	t	p. value
Age at Arrest	31.41 (9.50)	30.55 (9.58)	0.866	0.387
DVSI-R Total	13.59 (4.76)	13.85 (4.90)	0506	0.613
Prior Arrests	7.98 (7.79)	7.72 (7.40)	0.328	0.743
Prior Family Viol Arrests	1.91 (1.81)	2.03 (1.85)	0625	0.532

<u>Differences Between EVOLVE Program Completers and Non-Completers</u>

The EVOLVE program had a completion rate of 65% (120 out of 185 participants were successfully discharged). In looking at the completion rate by race/ethnicity, Hispanic participants had the highest completion rate (78%) followed by white (68%) and African-Americans participants (51%)(Table 26). These percentages were much different than for EXPLORE. The EXPLORE completion rates were 51% of Hispanic and 70% of African-American participants.

Table 26. EVOLVE Treatment Group Completion Rate by Race/Ethnicity

	EVOLVE	EVOLVE	Total
	Completers	Non-Completers	
White	36 (68%)	17 (32%)	53
African-American	35 (51%)	34 (49%)	69
Hispanic	47 (78%)	13 (22%)	60
Other	2 (67%)	1 (33%)	3
Total	120 (65%)	65 (35%)	185

Chi Square=11.05, df=3, p=0.011

There were also statistically significant differences across DVSI-R risk categories for EVOLVE completers and non-completers (Table 27). Very high risk offenders were much less likely to complete EVOLVE (52%) than low risk (80%), moderate risk (63%), or high risk offenders (76%). There were no differences in the risk to victim measures, however, this was likely due to the low number of EVOLVE participants in the medium risk (42) and low risk (7) categories.

Table 27. EVOLVE Study Group Comparison by DVSI-R Scores.

		EVOLVE Completers	EVOLVE Non-Completers	Total
	Low	4 (80%)	1 (20%)	5
Risk	Moderate	27 (63%)	16 (37%)	43
Categories*	High	56 (76%)	18 (24%)	74
	Very High	33 (52%)	30 (48%)	63
Total		120 (65%)	65 (35%)	185
D:-1-4-	Low	6 (86%)	1 (14%)	7
Risk to Victim**	Medium	30 (71%)	12 (29%)	42
Victim	High	84 (62%)	52 (38%)	136
Total		120 (65%)	65 (35%)	185

^{*}Chi Square=8.69, df=3, p=0.034, **Chi Square=2.70, df=2, p=0.259

Table 28 shows there were no statistically significant differences between EVOLVE completers and non-completers for age, DVSI-R total risk score, prior number of arrests, and prior number of family violence arrests.

Table 28. Means and Standard Deviations for EVOLVE Completers and Non-Completers

	EVOLVE Completers	EVOLVE Non-Completer	t	p. value
Age at Arrest	31.53 (9.43)	28.75 (9.67)	1.891	0.060
DVSI-R Total	13.40 (4.85)	14.68 (4.93)	-1.700	0.091
Prior Arrests	7.03 (6.77)	9.02 (8.33)	-1.758	0.080
Prior Family Viol Arrests	2.00 (1.79)	2.08 (1.98)	-0.269	0.079

EVOLVE One Year Arrests

The following tables present the follow-up outcome analyses of one year arrest rates for any new arrest and for new family violence arrests. For any new arrest, the EVOLVE treatment group had a much lower one year arrest rate (35%) than the EVOLVE comparison group (55%)(Table 29). These differences were statistically significant.

Table 29. One Year Arrest Rates for the Study Groups

	No Arrest	New Arrest	Total
EVOLVE Comparison	83 (45%)	102 (55%)	185
EVOLVE Treatment	120 (65%)	65 (35%)	185
Total	203 (55%)	167 (45%)	370

^{*}Chi Square=14.94, df=1, p=0.0001

While the EVOLVE treatment group was less likely to be arrested than the EVOLVE comparison group for new arrests, these differences were not present for new family violence arrests (Table 30). The EVOLVE treatment group did have a lower one year arrest rate (22%) than the EVOLVE comparison group (29%), however, these differences were not statistically significant. 19

Table 30. One Year Family Violence Arrest Rates for the Study Groups

	No Arrest	New Arrest	Total
EVOLVE Comparison	132 (71%)	53 (29%)	185
EVOLVE Treatment	145 (79%)	40 (22%)	185
Total	277 (75%)	93 (25%)	370

Chi Square=2.43, df=1, p.=0.119

EVOLVE Effect Size Calculations

The effect size statistics for EVOLVE are presented in Table 31. The effects are moderate for any new arrest (-0.50) and small but not statistically significant for new family violence arrests (-0.22). Similar to the other effect sizes, the lower the effect size the more effect EVOLVE had in lowering the recidivism of program participants. The odds ratio demonstrates the magnitude of the effects, in that, offenders who were eligible for EVOLVE but did not participate were 2.27 times more likely to be arrested for any new offense than EVOLVE participants.

Table 31. Effect Size Statistics for EVOLVE

		Effect Size	Standard Error	95% Confidence Interval
Any Arrest				
	d_{cox}	-0.50	0.13	-0.76 to -0.24
	Odds Ratio	2.27		1.77 to 2.77
Family Violen	ce Arrest			
	d_{cox}	-0.22	0.15	-0.52 to 0.06
	Odds Ratio	1.45		0.91 to 1.99

¹⁹ Note: It is quite possible that the small sample size for the EVOLVE study group can be a factor explaining the lack of significance for these differences.

SUMMARY AND CONCLUSIONS

The study assessed the effects of three-court mandated family violence programs overseen by the Judicial Branch's Court Support Services Division. One of these programs, the Family Violence Education Program (FVEP), is a 9-session pre-trial program for male and female family violence offenders. The other two programs, EXPLORE and EVOLVE, are postplea programs specifically targeting male batterers. EXPLORE is a 26-session program (groups meet once a week for 90 minutes) while EVOLVE is more intensive and meets for 52 sessions (groups meet for 2 hours twice a week for 26 weeks).

This study was mandated by Connecticut Public Act 13-247 *An Act Implementing Provisions of the State Budget* to provide effect sizes for each program to be used in the development of criminal justice cost-benefit analysis models as part of the General Assembly's Results First Initiative. As such, this study centered on the effects each program had on subsequent criminal behavior.

The evaluation was conducted using a quasi-experimental research design with propensity-matched comparison groups. While ideally programs should be evaluated by studying people who are randomly assigned to participate in a treatment program or assigned to a non-treatment control group, such a design was not practical given the time constraints of the study and the legal and ethical concerns associated with denying treatment to serious and potentially violent offenders. The matching process consisted of identifying similar offenders who were eligible for each program but did not attend. We believe the matching process was successful in creating comparison groups closely related to offenders in each program.

Summary of Findings

The study had three research questions: (1) what were the completion rates for each program and were there statistically significant differences between program completers and non-completers; (2) was the one-year arrest rates for new offenses or family violence offenses of offenders who participated in the program statistically significantly different from those offenders who did not participate in the program; and, (3) were there measureable program effect sizes?

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 the FVEP completion rate was 84%, 68% for EXPLORE, and 65% for EVOLVE. The EXPLORE and EVOLVE completion rates were the same 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, Jewel and Wormith's meta-analysis of 30 studies found that completion rates ranged from 22% to 78%. The non-completers across all three programs were generally younger, higher risk, and had more extensive criminal histories. Two additional findings were that African-Americans had the lowest completion rates for the FVEP (80%) and EVOLVE (51%) while Hispanic participants had the lowest completion rate for EXPLORE (59%).

To address the second research question we compared one year arrest rates for program participants to their respective comparison groups. We found program participants in all three programs had lower one year arrest rates. For the FVEP, 26% of program participants were arrested compared to 36% of the comparison group. For EXPLORE, 30% of participants were arrested compared to 51% of the comparison group. For EVOLVE, 35% of program participants were arrested compared to 55% of the comparison group. In looking a one year family violence arrests, all three programs produced lower arrest rates although these differences were only statistically significant for EXPLORE.

The third research question attempted to quantify the effects of the programs. Effect sizes were calculated by comparing the differences in one year arrest rates for program participants to the comparison groups. The effect size calculations for any new criminal arrest found a small effect for the FVEP at decreasing recidivism for program participants (-0.29), a moderate effect for EXPLORE participants (-0.54), and a moderate effect for EVOLVE participants (-0.50). The odds ratios allowed for a more straightforward interpretation of these effects, in that, offenders in the EXPLORE comparison group were 2.4 times more likely to be arrested than offenders participating in EXPLORE, offenders in the EVOLVE comparison group were 2.27 times more likely to be arrested than EVOLVE participants, and offenders in the FVEP comparison group were 1.61 times more likely to be arrested than FVEP participants. When looking at family violence arrests, significant effect sizes were only found for the EXPLORE program (-0.40). The odds ratio for this effect was 1.94. In other words, offenders in the EXPLORE comparison group were almost twice as likely to be arrested for another family violence offense than EXPLORE participants.

These findings range across programs but are encouraging given the results of meta-analyses of domestic violence program evaluations. These meta-analyses have generally found small effect sizes for batterers' programs (Babcock et al., 2004; Feder & Wilson, 2005) or no overall effects (Arias et al., 2013; Miller et al., 2013).

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 make three recommendations for more in-depth and broad research of these programs to provide detailed feedback for program improvement.

First, we were unable to conduct process evaluations of the 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, or their psychosocial profiles. 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 variety of sources. We suggest undertaking additional research on these programs to better understand what makes them effective.

Second, we initially planned to have an 18 to 24 month follow-up period to measure longer term effects of the 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 all of 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 returning 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. 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). Because of this, 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 (such as individual counseling, couple's therapy, anger management, substance abuse treatment, counseling, etc.). Although we cannot determine exactly why offenders in the comparison groups did not attend a court-mandated program, we believe that 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 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.

REFERENCES

- Arias, E., Arce, R. & Vilarino, M. (2013). Batterer intervention programmes: A meta-analytic review of effectiveness. *Psychosocial Intervention*, 22, 153-160. doi: 10.5093/in2013a18
- Barner, J.R., & Mohr Carney, M. (2011). Interventions for intimate partner violence: A historical review. *Journal of Family Violence*, 26, 235-244. doi: 10.1007/s10896-011-9359-3.
- Babcock, J.C., Green, C.E., & Robie, C. (2004). Does batterers' treatment work? A metaanalytic review of domestic violence treatment. *Clinical Psychology Review*, 23, 1023– 1053. doi:10.1016/j.cpr.2002.07.001
- Bureau of Justice Statistics (2005). Family violence statistics including statistics on strangers and acquaintances. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. NCJ 207846. Retrieved from: http://www.bjs.gov/content/pub/pdf/fvs.pdf
- Catalano, S. (2012). *Intimate partner violence*, 1993–2010. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. NCJ 239203. Retrieved from: http://www.bjs.gov/content/pub/pdf/ipv9310.pdf
- Connecticut Statistical Analysis Center (2007). *State of Connecticut family violence case flow analysis*. Hartford, CT: Connecticut Judicial Branch.
- Corvo, K., Dutton, D., & Chen, W.-Y. (2008). Toward Evidence-Based Practice with Domestic Violence Perpetrators. *Journal of Aggression, Maltreatment & Trauma, 16*(2), 111-130. doi: 10.1080/10926770801921246
- Davis, R.C., & Taylor, B.G. (1999). Does batterer treatment reduce violence? A synthesis of the literature. *Women & Criminal Justice*, 10(2), 69-93.
- Drake, E.K., Aos, S., & Miller, M.G. (2009). Evidence-based public policy options to reduce crime and criminal justice costs: Implications in Washington State. *Victims and Offenders*, *4*, 170-209. doi: 10.1080/15564880802612615.
- Feder, L., & Wilson, D.B. (2005). A meta-analytic review of court-mandated batterer intervention programs: Can courts affect abusers' behavior? *Journal of Experimental Criminology*, 1, 239–262.
- Ferguson, C.J. (2009). An effect size primer: A guide for clinicians and researchers. *Professional Psychology*, 40, 532-538. doi: 10.1037/a0015808.
- Herman, K., Rotunda, R., Williamson, G., & Vodanovich, S. (2014). Outcomes from a Duluth Model batterer intervention program at completion and long term follow-up. *Journal of Offender Rehabilitation*, *53*, 1-18. Doi: 10.1080/10509674.2013.861316.

- Jewell, L.M., & Wormith, J.S. (2010). Variables associated with attrition from domestic violence treatment programs targeting male batterers: A meta-analysis. *Criminal Justice and Behavior*, *37*, 1086-1113. doi: 10.1177/0093854810376815,
- Maiuro, R. D., & Eberle, J. A. (2008). State Standards for Domestic Violence Perpetrator Treatment: Current Status, Trends, and Recommendations. *Violence and Victims*, 23(2), 133-155. doi: 10.1891/0886-6708.23.2.133
- Miller, M., Drake, E., & Nafziger, M. (2013). What works to reduce recidivism by domestic violence offenders? Olympia, WA: Washington State Institute for Public Policy.
- Mills, L., Barocas, B., Ariel, B. (2013). The next generation of court-mandated domestic violence treatment: a comparison study of batterer intervention and restorative justice programs. *Journal of Experimental Criminology*, *9*, 65-90. Doi: 10.1007/s11292-012-9164-x.
- Rosenbaum, P. R., & Rubin, D. B. (1983). The central role of the propensity score in observational studies for causal effects. *Biometrika*, 70(1), 41-55. doi: 10.1093/biomet/70.1.41
- Rosenfeld, B.D. (1992). Court-ordered treatment of spouse abuse. *Clinical Psychology Review*, 12, 205-226.
- Sánchez-Meca, J., Chacón-Moscoso, S., & Marin-Martínez, F. (2003). Effect-size indices for dichotomized outcomes in meta-analysis. *Psychological Methods*, 8, 448-467. doi: 10.1037/1082-989X.8.4.448.
- Stanfield, R., & Williams, K.R. (2014). Predicting family violence recidivism using the DVSI-R: Integrating survival analysis and perpetrator characteristics. Criminal Justice and Behavior, 41, 163-180. doi: 10.1177/0093854813500776.
- Singleton, R. A., & Straits, B. C. (2005). *Approaches to social research* (4th ed.). New York, NY: Oxford University Press.
- Stuart, E. A., & Rubin, D. B. (2008). Best practices in quasi–experimental designs: Matching methods for causal inference. In J. Osborne (Ed.), *Best practices in quantitative methods* (pp. 155-176). Thousand Oaks, CA: SAGE Publications.
- Thoemmes, F. (2012). *Propensity score matching in SPSS*. Cornell University Library. Retrieved from: http://arxiv.org/pdf/1201.6385v1.pdf
- Tjaden, P., & Thoennes, N. (2000). Full report of the prevalence, incidence, and consequences of violence against women: Findings from the National Violence Against Women Survey. Research Report. Washington, DC: U.S. Department of Justice, Office of Justice Programs, National Institute of Justice. NCJ 183781. Retrieved from: https://www.ncjrs.gov/pdffiles1/nij/183781.pdf

- Washington State Institute for Public Policy. (January 2013). What works to reduce recidivism by domestic violence offenders? Olympia, WA: Washington State Institute for Public Policy. Retrieved from: http://www.wsipp.wa.gov/ReportFile/1119/Wsipp_What-Worksto-Reduce-Recidivism-by-Domestic-Violence-Offenders_Full-Report.pdf
- Washington State Institute for Public Policy. (June 2009). What works? Targeted truancy and dropout programs in middle and high school. Olympia, WA: Washington State Institute for Public Policy. Retrieved from: http://www.wsipp.wa.gov/ReportFile/1045/Wsipp
 _What-Works-Targeted-Truancy-and-Dropout-Programs-in-Middle-and-High-School_Full-Report.pdf
- Williams, K.R., & Grant, S.R. (2006). Empirically examining the risk of intimate partner violence: The revised Domestic Violence Screening Instrument-revised (DVSI-R). *Public Health Reports*, 121, 400-408.
- Williams, K.R. (2011). Family violence risk assessments: A predictive cross-validation study of the Domestic Violence Screening Instrument-revised (DVSI-R). *Law and Human Behavior*, *36*(2):120-129. doi: 10.1007/s10979-011-9272-6.

APPENDIX A: OVERVIEW OF THE FVEP CURRICULUM

<u>Session 1: Rules; Equality vs. Power and Control</u> – Emphasizes a group dynamic by identifying the power and control aspects of harmful relationships, participants may begin to realize the negative impact of their behavior and then after seeing the equality wheel may start to picture changing. The central point is letting go of control and accepting powerlessness over other people's actions

<u>Session 2: Effects of Violence on Others</u> - Discussion about how relationship violence impacts partner, children, other people, and yourself. Emphasis on the impact of family violence on children; this awareness can tremendously increase one's motivation to change.

<u>Session 3: Accountability and Time Out</u> – Stages of change are discussed. Emphasis on acceptance of personal responsibility for the action and learning to take a time out when a situation escalates.

<u>Session 4: Anger and Cognitive Restructuring</u> – Examining thoughts and feelings in depth to understand how they relate to behaviors. Identifying cognitive distortions that lead to anger. Managing emotions effectively and emphasizing positive self-talk.

<u>Session 5: Socialization and Stereotypes</u> – Societal and cultural differences are examined as a way of understanding how violence is learned. Where and how people learn about violence. This session uses the group dynamic to show how people are socialized differently and how violence can be learned from a number of different sources.

<u>Session 6: Substance Use/Gambling and the Change Process</u> – Learning the connection between substance use and family violence. Use/abuse/dependence. Positive and negative emotional triggers leading to substance use. Comorbidity of substance use and family violence.

<u>Session 7: Communication Skills and Problem Solving</u> – Aggressive, passive, and assertive communication. Assertive communication = win-win.

<u>Session 8: Maintaining Healthy Relationships</u> – Normalizing the stress and struggles that participants face. Increase the healthiness of difficult relationships and applying these skills. Healthy ways to manage stress and take care of oneself.

<u>Session 9: Developing an Action Plan</u> – Review of skills that have been taught and healthy coping mechanisms. Self-identification of their current stage of change. Action plan includes identifying risky situations – skills that "help me" – and what "I will do."

<u>Summary of Program</u> – The overall emphasis of FVEP is to start the process of change by educating participants about the common issues that personal relationships can face. The program does not take a hardline approach that participants are deeply flawed individuals or criminals, rather most of the education phase of the program enlightens participants about the challenges that they are facing and that they are not alone in their struggles. Once participants have been shown how unhealthy relationships can encompass different types of emotional and

physical abuse and have detrimental effects on their children, participants are encouraged to accept responsibility for their transgressions and begin the process of change. Cognitive-behavioral therapy is then introduced. In this context, CBT emphasizes identifying the cognitive distortions leading to the detrimental abusive behavior that led to legal interdiction and changing these distortions into healthy, rational, pro-social responses. Participants are encouraged to develop a plan for their future that puts this change into action and helps them to achieve a mutually beneficial, healthy relationship with their partner.

APPENDIX B: OVERVIEW OF THE EXPLORE CURRICULUM

A 26 week program for male batterers of female intimate partners. There are 26 90-minute group sessions, once per week, each starting with check-in period.

<u>Check-in</u> consists of welcoming new members to the group and then asking each member to report on use of violence, control, and/or abuse. Stressful situations/close calls and how they handled themselves. Relationship updates, new arrests, drug/alcohol usage, skills used since last group or how they used what they have learned.

Sessions (key concepts and techniques utilized will be summarized)

1) Defining "intimate violence" and identifying how domestic violence laws apply when you have hit, hurt, or seriously threatened violence against family members, member of household, former spouse, person with whom you have recently lived, person with whom you have a child, a person with whom you are in or have recently been in a dating relationship with.

Dividing domestic violence into physical violence, emotional abuse, threats, intimidation, isolation, sexual abuse, use of children, economic abuse, and use of male privilege.

Participants conceptualize different types of violence and abuse and clinician writes responses on board while informing the group of topics not identified. The main point of session one is to educate group about the harmfulness and progression of abusive behavior and to show what behavior is illegal.

2) Review of "control log" which had members identify specific acts about how they have used control against their partner and their specific intent behind the act. Pointing out to the group that these behaviors and beliefs can be changed. Explore the feelings/emotions before and during the incident.

Power and Control wheel: participants will provide examples of specific behaviors for each category of the wheel. Intimidation, emotional abuse, isolation, minimization, denial, blaming, using children, male privilege, economic abuse, coercion and threats.

Cycle of violence: honeymoon period > tension building period > violent/abusive > incident > honeymoon period.

Participants will generate opinions for other means of handling the situation and their feelings. Emphasis on time-out as a way to initially get enough space to gain perspective. Breaking the cycle.

3) Anger cues – Anger and underlying feelings. Emphasis on avoiding situations that are likely to lead to violence/abuse and when they cannot be predicted to take a time-out. Have group identify bodily responses to anger and behaviors that result when they are angry.

Emphasis is on identifying the feelings that underlie the anger and anger being a secondary emotion. Pointing out that anger is an emotion that can result from vulnerable feelings and that the expression of this anger is what may have led to their arrest. Anger does not have to lead to aggression.

Idea of sharing "vulnerable feelings" with partner and taking responsibility to teach her what he needs and wants when sharing these feelings with her.

- 4) Time-out process: eliminate violence and abuse by avoiding situations likely to lead to it. Time-out is a way of rebuilding trust a little bit at a time. Not driving, not drinking/drugging, leaving the building for a set period of time that is agreed upon with partner. It is a way of rebuilding trust and facilitating effective communication not to be used as another way to control their partner.
- 5) Excuses/Justifications Accountability/Personal Responsibility. Group will identify reasons/excuses that explain their violence and abuse. Transitioning thought process from excuses to personal accountability i.e. without verbally minimizing the extent or externalizing the blame.
- 6) Accountability letters Review of homework which was designed to have members accept responsibility for abusive, violent, and controlling behavior and the impact it had on the victim rather than justifying/blaming others.
- 7) Jealousy, thoughts, feelings, behaviors, positive self-talk. Cognitive restructuring exercise: situation > thoughts > feelings > behaviors (identified by group) and then present alternatives that apply topics which were previously reviewed including behaviors and thoughts. Positive self-talk can be used as a way of influencing the entire chain.
- 8) Substance abuse/domestic violence connection. Focus on the detrimental effects on children and the family dynamics. Importance of addressing substance abuse issues independently from the domestic violence issues.
- 9) Socialization of violence Emphasis on different socialization processes and cultural impact. Identifying a group consensus of the causes of violence (genetic/learned) how group believes violence can be learned. Places, family, culture, media, church, courts, sports, religion, military learning that violence is accepted or expected.
- 10) Gender socialization –Identifying what men believe their role is in society, how it differs between cultures and their roles in relationships. Differing between socialization messages and healthy messages
- 11) Socialization role plays Group members perform role play scenarios illustrating domestic violence and controlling behavior. Once role play is completed, group members are asked "what kind of man do you want to be?" The purpose is to illustrate the negative behaviors exhibited and call for change which acknowledges women's rights.

- 12) Sexuality and Violence/Sexual Respect —"Unit Overview" Facilitates understanding of healthy sexual habits in relationships. Identifies several different scenarios and provides guidelines for better sexual communication and respect.
- 13) Effects on the victim: Developing empathy and understanding Illustrates the woman's perspective on violence from a first person account. Pointing out cognitive distortions (denial, minimization, and blame) to avoid taking responsibility and trying to turn these distortions into empathy.
- 14) Effects on the victim: Anger and trust Assist men in understanding the damaging effects of violence on their relationships, recognizing and respecting their partner's anger and mistrust, and developing strategies for improving. Multiple scenarios are reviewed preparing participants to let go of their partner and/or not force themselves upon their partner.
- 15) Effects on the victim: Recognizing your partner as separate and distinct from you. Recognizing partner's separateness and identifying and dealing with issues that arise when a partner chooses to end a relationship. More scenarios.
- 16) Effects on the victim: Separation, divorce, and letting go. Scenarios reviewed dealing with issues that arise when a partner chooses to end the relationship. Teaching participants that they need to employ tactics learned earlier in the program such as timeout and responsibility plans for avoiding violence.
- 17) Compassion and equality: Emphasis on showing compassion for partner and empathizing. Compassion vs. anger. Equality wheel = negotiation, non-threatening, respect, trust, honesty responsible parenting, shared responsibility, economic partnership.
- 18) Effects on the victim: Empathy letters Letter's written in which group members pretend to be the victim of the same abuse, violence, and/or control that they inflicted on their partner and describe their feelings as the victim.
- 19) Effects on the children: Informing group about the reality of children being very aware of domestic violence occurring even if the children may have been sleeping at the time. Long list of detrimental effects on children are listed.
- 20) Non-violent parenting Abuse of children wheel is explained to contrast good parenting as intimidation, using institutions, emotional abuse, economic abuse, threats, using adult privilege. Nurturing children wheel is trust and respect, promoting emotional security, providing physical security, consistent discipline, give time, encouragement, affection and, care for yourself.
- 21) Co-parenting How men can create a more positive relationship with their children's mother that respects her needs and fears. Crafting a positive relationship over time with your child's mother that respects the law, her needs, and her fears. Respect court orders

and understand how their violence has been a contributor to relationship problems between their children and their children's mother.

- 22) Assertive, non-coercive communication Defining the differences between aggressive, assertive, and passive communication. Uses different vocabulary to illustrate different types of speech. Uses CBT to show how ineffective communication does not achieve the desired result and then shows the benefits of assertive behavior and how to modify cognition to change the behavior.
- 23) Active listening the most important element of communication. Group members should be able to describe the situation and be able to paraphrase what the speaker has said.
- 24) Problem-solving Discussing how communication and active listening are the keys to the process of solving relationship problems. Scenario is described and different elements are dissected by the group. This shows how to implement problem solving through effective hypothetical communication. Evaluating the pros and cons and utilizing costbenefit analyses.
- 25) Stress Management & Relaxation Stress as an internal response within us to something we perceive as a threat, acute or chronic. Identifies coping skills, positive and negative and the adverse health effects. Breaking the stress cycle.
- 26) Common characteristics of people who are violent/abusive to their partner Dependency > jealousy > possessiveness > isolation. Aggressive > low self-esteem > passive. Provides basic summary of how each concept should be dealt with by transforming these feelings into pro-social thoughts and expressions.

<u>Summary:</u> Every session starts with the same check-in procedure which relies upon participant honesty to disclose personal information about their struggles. It also provides participants with the chance to talk about how their lives are and how they are applying the knowledge they acquire from group. Group members are encouraged to challenge each other when using minimization, denial, justification, or externalization of blame for their actions. Initial sessions lay the framework for the most essential tenets of the program. First and foremost are the legal definitions of domestic violence and intimate violence and the laws that must be abided by according to CT General Statutes. Broadly educating the group about the harmfulness and progression of abusive behavior and all of the different forms it can take are identified. Immediate, simple coping mechanisms are emphasized as ways to break the cycle of violence and take a time-out so that anger does not lead to aggressive behavior.

Cognitive restructuring is the next big component of EXPLORE. Before any real meaningful behavioral changes can be made, the emphasis is on targeting the cognitive distortions that may have led these individuals to commit domestic violence against their intimate female partner. Rebuilding trust and establishing personal accountability by understanding and taking ownership of the ways that their abusive, controlling, and violent behavior has impacted their partner are cornerstones to the program. Once the participant truly accepts responsibility, topics can be introduced that inhibit changes in behavior such as utilizing positive self-talk to combat negative

thoughts and feelings. Substance abuse is addressed for only one session which is far from adequate considering its overall influence as a comorbid issue to many of the concepts this program acknowledges.

Socialization is the next topic covered highlighting the significance of cultural influences, gender roles, familial influences, and relationship roles as well as the effect of other institutions that shape thinking patters and behaviors. At this point, the curriculum incorporates materials from the EVOLVE program in sessions ten through sixteen mostly for role play and fictional scenario illustration. In sessions thirteen through nineteen, the effects of domestic violence on the victim are examined. Skills such as developing empathy for the victim and understanding domestic violence from the woman's point of view are emphasized through role play and hypothetical scenarios to show a range of situations usually starting with the most detrimental and violent and working its way towards what a healthy relationship should embody. Developing compassion and equality for their partner is the cornerstone to these middle sessions. Next, parenting skills are incorporated into the lesson plan to help the group understand that the domestic violence that has been occurring in their homes may have caused a number of harmful effects on their children.

The last component to EXPLORE is teaching communication skills that will hopefully help to foster a more positive and non-violent atmosphere in the home. Additionally, the program does attempt to prepare individuals for the possibility that their intimate relationship/marriage may be over, therefore, crafting a positive relationship with their former spouse/partner in cases where children are involved are stressed very strongly. Skills such as active listening, non-coercive, assertive communication, as well as implementing a cost-benefit analysis before acting are taught through more role play and scenario dialogues. Lastly, healthy ways to handle stress management are discussed and a number of healthy relaxation techniques are presented. The program is concluded with an overview of the cycle of violence and how these negative concepts can be cognitively transformed into healthy, pro-social behaviors.

APPENDIX C: OVERVIEW OF THE EVOLVE CURRICULUM

A 26 week 52 session classroom based educational program for physical abusive men consisting of two weekly sessions over twenty six weeks with the option of an additional twenty six weeks of programming once per week if ordered by the court. Twenty three weeks of "ongoing education" courses and twenty three weeks of "change group" sessions. The ongoing education module includes sessions devoted to core curriculum activities: brief lessons, exercises, discussions, role plays, and short videos. In change group, the group will be able to practice new skills intensely and discuss how they are putting what they are learning into practice in their daily lives.

Ongoing education group topics include: what kind of man do you want to be, managing my feelings, effects of violence on victims, communication and listening skills, fatherhood, sexuality and violence, aggressiveness, passiveness, and assertiveness, hot topics and money, compromising about difficult issues. The ongoing education component provides men with the building blocks they will need to live a non-violent and non-abusive life in their current and future intimate relationships. Most ongoing education modules are illustrated using role-plays and scenarios. Each lesson is paralleled with change group in which the men will review homework assigned in the ongoing education segment. A discussion about implementation of the items discussed in each lesson will be facilitated by the clinician. Change group is about practical application. By taking topics discussed in the ongoing education component and bringing them into real life scenarios that the men may be dealing with at home, it keeps the seeds of change planted by continually reinforcing the benefits and acknowledging the challenges that each topic may produce.

Orientation sessions (first 3 weeks x 1.5 hours/week) are conducted establishing group rules, gaining familiarity with each other, and teaching fundamentals of non-violent, non-abusive behaviors, and promoting acceptance of responsibility. Orientation is very one sided, there is little open ended discussion. Focuses on the simple topics such as time out steps and using positive self-talk as well as a brief overview of CT laws. Orientation lays the framework and plants the seeds of change that will be necessary for successful program outcomes. Once orientation is completed they may enter an existing group.

Manhood and oppression: What kind of man do I want to be? (5 lessons)

Purpose: This unit provides a basic understanding of manhood and its connection to violence and coercive control that will be used throughout the program. Identify aspects of manhood within their race and culture which challenges men to adopt non-violent and respectful relationships which respect their partners' self-determination.

- 1) Help the men identify different styles of masculinity in their culture and to explore their choices and understandings about manhood in ways that are culturally sensitive.
- 2) Using role-plays to facilitate acknowledgement of women's rights.
- 3) Scenario's describing difficult situations and coping methods are provided.
- 4) Role-play confronting the scope of violent behavior, acknowledging the impact of their behavior on their partner, reviewing ways in which men are oppressive and abusive towards women.

5) Role-play which has men reflect further about the consequences of choosing to be violent or non-violent and to think about how different choices about using violent or non-violent behavior can have far-reaching impacts.

Managing my feelings (4 lessons)

Purpose: To help men develop more emotional self-awareness and to teach them to use this awareness to make more informed and responsible choices about their action in the face of intense and difficult feelings. Special attention will be given to jealousy since clinical experience suggests that many of the most severe batterers experience acute jealousy or persistent insecurity about a partner's fidelity or about whether she truly loves him.

- 1) Developing emotional self-awareness and identifying underlying belief systems and cue feelings that trigger abusive behavior.
- 2) Connecting body sensations and feelings and understanding danger zones. Establishing a connection between the danger zone and substance abuse.
- 3) Cue events > body sensations > feelings > core beliefs. Capacity to "step back" and change behavior.
- 4) Understanding the differences between aggressive, passive, and assertive behavior. Identify new and enhanced ways to interact with others that are neither aggressive nor passive, assertiveness is stressed. Shift from all or nothing thinking is one of the hardest concepts and skills for men to understand, most abusive men think in very concrete terms.

The effects of violence on victims (5 lessons)

Purpose: To assist men in recognizing the harm they are doing, aid them in developing respect and empathy for their partners and children, and to suggest strategies for interacting in less harmful ways. This unit emphasizes taking responsibility for one's own actions, and learning to make choices that are non-abusive, non-controlling, and respectful. If they can develop empathy for their families and loved ones, they are less likely to be violent or abusive to them in the future. Issues of separation and divorce are also discussed.

- 1) The men are presented with factual information about the impact of violence on women and children. The goal is assisting the men in confronting and owning their violence and taking responsibility for their behavior.
- 2) Developing empathy by placing themselves into the woman's shoes. Victim blaming is addressed to emphasize taking responsibility. Effects on children and assessing what the men believe women want are discussed.
- 3) Anger and trust. Understanding the damaging effects of violence on their relationships, recognizing and respecting their partner's anger and mistrust, and developing strategies for improving their relationships. Difficult issues of partners leaving and men not being able to control that are examined.
- 4) Separateness. Recognizing their partner's separateness and identifying and dealing with issues that arise when a partner chooses to end a relationship through separation or divorce. Acknowledging that each partner has the right to have separate activities and interests and this may be out of their control.
- 5) Assist men in recognizing their partner's separateness and in identifying and dealing with issues that arise when a partner chooses to end the relationship. Issues of jealousy, possessiveness, insecurity, and abandonment are likely to arise.

Communication and listening skills (5 lessons)

Purpose: Increasing their capacity to listen and communicate more effectively. Teaching listening skills to accurately identify and understand another person's thoughts and feelings and exploring very fundamental listening skills that men are likely to be uncomfortable using. Violent and abusive men tend to have the ability to say what they think but are unable to articulate how they or others feel. Emotions tend to be expressed as extreme happiness or anger. They must learn how to identify and apply various feelings non-destructively in their daily lives and increase their capacity to understand what their partner thinks and feels with an emphasis on increasing their levels of self-awareness and empathy for others.

- 1) Increasing capacity to be an effective listener by being able to accurately identify how other people seem to be thinking and feeling. Apply listening skills through reflection and paraphrasing role-play exercises.
- 2) Transferring ability to apply effective listening skills from characters in scenarios to a partner in the group. Describe situation > what they said > paraphrase > reflection.
- 3) Exploring how violent and abusive behaviors by men who have been violent to their partners create barriers to sharing, trust, and communication. Increasing the insight of the men who have been violent to their partners concerning why women that have been victimized may feel uncomfortable openly discussing their thoughts and feelings with them.
- 4) Increase individual group member's self-awareness about when he is being a barrier to open communication with his partner. Men who have been violent to their partners must develop the ability to listen to their partner and accurately understand her feelings, concerns, and aspirations. He must also challenge himself and his inappropriate behaviors.
- 5) Addresses situations where the other person has done something "wrong" that has really hurt the man. Expanding men's capacity to compromise or accept irreconcilable differences about difficult or intense issues, especially financial issues.

Fatherhood and domestic violence (6 lessons)

Purpose: Getting men to confront their violence based upon how their behavior affects their children and increasing awareness of possible harms caused. Children can learn abuse through from abusive fathers and male children learn to imitate male role models behavior as an adult. Contrasting the harms caused with examples of how some men who take responsibility for their violence and recognize the impact of their behavior have been able to affect their children ultimately in very positive ways. Crafting a plan to address his abuse with his children and be supportive, cooperative, and respectful of his partner or ex-partner regardless of their relationship status.

- 1) Examining the impact of fathers and father figures in their lives and considering how abuse has impacted their children and how they might reverse their having modeled abuse to their children. Illustrated through difficult to watch video clips.
- 2) Considering detrimental influence on their children and developing a reversal plan.
- 3) Understanding their influence on how a child develops opinions of intimate female relationships. They will be expected to enhance action steps and modify their responsibility plan to address the children in their lives.
- 4) Encourage men to consider how they influence the lives of their children through modeling, with an emphasis on modeling abusive behavior and how they can reverse the impact of their modeling abuse to children.

- 5) Develop collaborative relationship with children's mother and acknowledge the apprehensiveness of the mother. How to end manipulative behaviors towards both the mother and child. Develop authentic, positive behaviors in interacting with the other parent regardless of relationship status with the child's mother.
- 6) Substance abuse. Encourage the men to review the impact that substance use has had on their relationship with their children and partner. The men should determine how to assess their substance use and develop a plan on reversing the negative behaviors.

Sexuality and violence (4 lessons)

Purpose: Women who have experienced sexual violence suggest that it may be the most damaging of all forms of violence against women. The role of sex and sexuality in domestic violence situations is openly and honestly discussed and explored. The men will begin to recognize harmful sexual expectations, explore the links between sex and violence, and develop personal strategies for becoming sexually respectful men.

- 1) Expectations and communication about sex. Explore consequences of silence about sexuality and describe social and cultural expectations and how gender and cultural expectations affect intimate relationships. Double sexual standards described.
- 2) Sexual respect. Distinguishing between respectful and disrespectful behaviors.
- 3) Making the connections between sex and violence. Review of laws on marital and acquaintance rape as well as distinguishing between forced and consensual sex. Many scenarios are reviewed to illustrate and differentiate between each form.
- 4) Developing healthy ways of effectively communicating about sex with partner, managing intimacy, and becoming sexually responsible men.

Summary

The EVOLVE program essentially follows a cognitive-behavioral therapeutic approach by conditioning program participants during the "ongoing education" component and then initiating behavioral changes during the "change group." Each major component to the program contains a certain number of lessons that are outlined above. When a new component is introduced, it is explained in a very broad sense. Each subsequent lesson expands upon the topic by providing in-depth coverage through a variety of techniques, most notably, role-play and scenario usage. The role-play's and scenario's illustrate the most harmful and detrimental effects of domestic violence and then begin to transition towards emphasizing healthy ways to resolve issues that may have otherwise resulted in domestic violence for this group of offenders.

While EVOLVE does a relatively thorough job of touching on many of the topics that surround domestic violence offenders, like EXPLORE, this program does not devote enough attention to substance abuse issues. Substance use is clearly impermissible in the EVOLVE program as outlined during orientation, however, drug testing is not part of the program. "To increase the likelihood of success in the program, group members are expected not to use illegal drugs or alcohol. Facilitators who suspect that a group member has come to a session under the influence of drugs or alcohol will ask him to leave the session. Such sessions will be counted as absences and the facilitator will notify the probation officer or other referral agent of the situation" (Orientation, pp. 5-6). Expecting program participants not to use illegal drugs or alcohol based on trust may not be realistic, as such, so long as the facilitator does not know, participants are technically in compliance as long as they are not under the influence during group, therefore this may have some impact on program completion rates for both EVOLVE and EXPLORE.

Substance abuse is mentioned in only one lesson of EVOLVE, (detailed in lesson six of the "fatherhood and domestic violence" component). In this lesson, participants are merely encouraged to review the impact of their substance abuse on their relationship and to determine how to assess their substance use in developing a plan on reversing negative behaviors. For a program that challenges the ideals and beliefs of domestic violence offenders at every turn, this lesson rather passively challenges the issue of substance abuse. Because substance abuse can be considered to be a comorbid contributing factor associated with domestic violence, more attention should be devoted to it and more scrutiny applied to participants.