

Testing and Evaluation of the Use of Polygraphs to Combat Violence Against Women¹

Douglas B. Wilson², Kevin Batye³ and Roberto Riveros⁴

Abstract

This study examines the applicability of polygraphy to post-conviction management of high-risk domestic violence abusers and whether polygraphy provides information about risky behaviors that is predictive of near-term arrests of these probationers. To be efficacious in the management of these risks, polygraphy must reveal behaviors that the criminal justice system would not otherwise know and that if not moderated by interventions, would lead to additional crimes.

The DeKalb County State Court Probation Department identified 321 high-risk domestic violence probationers who had a mix of previous violent and nonviolent misdemeanor convictions. Probation allocated these men to a treatment family violence intervention site and 10 analogous control sites. The treatment site facilitator, at the end of one month of psycho-educational classes, asked the enrolled men if they would volunteer for a polygraph test, and if they continued their enrollment, asked them to take a second polygraph at the end of the fourth month of classes. The treatment and control group samples balanced the men's demographic and criminal characteristics in the treatment site and control sites across 11 demographic and criminal record variables. Forty-three of the 87 men assigned to the treatment site took at least one polygraph.

The study classified the information collected in the pre-polygraph interview procedure and the polygraph test into four risky behaviors: illegal drug use other than marijuana; possession or handling of firearms; involvement in additional physical abuse, regardless of gender; and the polygrapher's judgment of deception on the polygraph test. These behaviors were extra-marginal in that they were in addition to probationer's widespread use of alcohol and marijuana.

These extra-marginal risky behaviors predicted subsequent arrests within the study period. In this test, the grade for 0-1 risky behaviors is 1.0; the grade for 2-3 risky behaviors is 2.0; the grade for illegal drug consumption other than marijuana and, at the same time, gave answers that the polygrapher judged as deceptive is 3.0. A grade greater than 1.0 indicates an elevated likelihood of recidivism. The primary statistical measure used was the area under the Relative Operating Characteristic curve (ROC/AUC). The sensitivity of the test is 0.79. The specificity is 0.86. The accuracy of the test is 0.84. The empiric ROC/AUC is 0.85. This qualifies as a good test.

This small study suggests that polygraphy can assist probation departments to manage the risky behaviors of domestic violence probationers who have an elevated risk of repeated criminal behavior, and direct them to appropriate interventions to modify their risky behaviors. This suggests that an appropriate approach to high-risk domestic violence probationers is to interdict their criminogenic behaviors and go beyond the power and control curriculum of family violence programs.

¹ This project was supported by Grant No. 2005-WG-BX-0010 awarded by the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice. Points of view in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice. The complete NIJ report can be found at <http://www.ncjrs.gov/pdffiles1/nij/grants/222115.pdf>.

² BOTEK Analysis Corporation, 24 Crescent Street, Suite 102, Waltham, MA 02453-4360.

³ Chief Probation Officer, DeKalb County State Court Probation, Decatur, Georgia.

⁴ Director, Riveros Counseling Services, Decatur, Georgia.

Introduction

Researchers have concluded, with disappointment, that batterer intervention programs, as currently structured, have scant effect on the behavior of men convicted of domestic violence (Babcock, Green & Robie, 2003.) This is especially true for domestic violence perpetrators who have an elevated risk of repeat abuse. This study examines how the application of polygraphy could improve batterer habilitation. The study site is DeKalb County Georgia, an urban county east of Atlanta.

Polygraphy is currently used by many therapists in the treatment of sex offenders. They often use polygraphy in their attempts to obtain needed accurate information about the offender's sexual preferences. With this information, the therapist is better able to identify treatment needs and treatment effects.

Kim English, in a commentary on the utility of polygraph exams, writes that utilitarian polygraph exams often include sets of questions that target a general area. Most of the examinees will provide extremely important information during the course of the examination and the post-test interview. The value of the post-conviction polygraph is the collection of information about dangerous behavior that otherwise would remain unknown, and then acting on this information before a new sex crime is committed. (English, nd).

By analogy, the application of polygraphy to high-risk domestic violence probationers would similarly supply information that would otherwise remain unknown. Probation has very little knowledge whether domestic abuse or other proscribed behaviors are continuing while a man is on probation unless the victim reports it. Polygraphy could reduce the reporting burden on the victim, and increase the ability of the probation officer to make the probationer accountable for continued criminal behavior.

Courts are reluctant, however, to accept polygraph results in judicial proceedings to determine guilt or innocence. The information that polygraphy provides may assist court agencies, however, in the management of high-risk domestic violence offenders and in the triaging of these domestic violence probationers to appropriate interventions. In this application, polygraph data made available to intervention facilitators and the probation officer can assist in the broader task of managing high-risk domestic violence offenders.

Courts that order a domestic abuser to participate in an intervention usually limit their choice to a brief anger management program or a longer family violence program. This limited response fails to consider a probationer's dynamic,⁵ risky behaviors that often underlie domestic violence recidivism as well as a range of other misdemeanors and felonies. That is, family violence programs have placed on them the burden of coping with men for whom the programs are not a sufficient instrument. Such a one-size fits all approach nullifies the program's possible effectiveness.

Polygraphy may be an effective tool for the identification of behaviors that are predictive of criminal recidivism by high-risk domestic violence probationers. With this information, the monitoring of domestic violence probationers would improve and the courts and probation could target intervention programs that are responsive to the risky, criminogenic behaviors of these high-risk men.

This study focuses on an examination of whether information gained from a post-conviction polygraph is predictive of near-term subsequent offenses and is thus a useful risk management tool. Testing the likely risk management value of polygraphy is a significant first step in assessing polygraphy's usefulness in community corrections to

⁵ Dynamic criminal issues, include continued criminal thinking, abuse of substances, poor self-control, continued associations with criminal peers, poor education, and poor work skills and attitudes. If unaddressed, these behaviors increase the risk of additional criminal acts. Dynamic behaviors contrast with static ones that are immutable, such as childhood experiences and age. For additional discussion see Faye Taxman, *Assessment with a flair: Offender accountability in supervision plans*, *Federal Probation*, Vol. 70(2), 2006

habilitate high-risk domestic violence offenders. Specifically, the objective of the polygraph is to gather information that researchers consider predictive of subsequent criminality. Prior to this study, researchers did not know whether using polygraphy to assist in the risk management of domestic violence offenders was anymore efficacious than tossing a coin.

The Polygraph and its Interaction with Probation

Probation is essentially voluntary; its success depends on the cooperation of the offender. Compliance is often a sometimes thing. The enforcement capacity of probation departments is insufficient to apply uniformly penalties to deter opportunistic defections and absconding. Knowing that polygraphy can enhance the interventions with these high-risk men requires probation to organize its domestic violence response in a manner that provides the capacity to enforce the probationer's compliance with court orders and to follow the habilitative regimens aimed at deterring their risky behaviors.

Probation should support polygraphy targeted at high-risk abusers with a concentration of its limited domestic violence enforcement capacity on abusive men who present the greatest public safety problem. If the domestic violence criminal justice system fails to organize so that it can profit from the polygraph information and enhanced monitoring, then it simply signals to the offenders that they can continue to pursue their risky behaviors with impunity. If the courts and probation leave these behaviors unattended, the result will be continued recidivism by these men, despite the investment in polygraphy. Targeted enforcement efforts and increased information about probationer offending are essential to effective probation administration. Targeted enforcement, such as strict enforcement of violations by high-risk domestic violence probationers focuses probation's limited enforcement capacity, and if monitoring and subsequent enforcement are effective, the increased compliance will allow the enforcement capacity to be managed over a larger number of probationers.

If polygraphy is to be useful as a risk management tool, integrated into probation department processes, then the criminal justice system must respond in a broad, complementary manner. The kinds of changes needed to complement the use of polygraphy in high-risk domestic violence require a description of the current domestic violence response in DeKalb County. This is a study of one county, but the county's response to domestic violence is easily recognizable to criminal justice researchers and domestic violence personnel. The problems and opportunities for the application of polygraphy to high-risk domestic violence probationers in DeKalb County are general.

The High-Risk Probationer Study Cohort

To conduct this study, the DeKalb County State Court Probation Department identified 321 high-risk domestic violence probationers who had a mix of previous violent and nonviolent misdemeanor convictions. Probation allocated these men to a treatment family violence intervention site and 10 analogous control sites in DeKalb County. The treatment site facilitator, at the end of one month of psycho-educational classes, asked the enrolled men if they would volunteer for a polygraph test, and if they continued their enrollment, asked them again to take a second polygraph at the end of the fourth month of classes. The treatment and control group samples balanced the demographic and criminal characteristics of the men in the treatment site and control sites across 11 demographic and criminal record variables. Forty-three of the 85 men assigned to the treatment site took at least one polygraph.

The Organization of the Study Text

The remainder of the study is divided into four chapters:

- A description of the several public and quasi-public agencies engaged in the domestic violence criminal justice system in DeKalb County, Georgia.
- A description of the study cohort and its probation behavior.

- An analysis of the probation cohort behavior, the development of the predictive test of recidivism, and a comparison of the polygraph test with previous efforts to develop similar tests.
- Finally, a discussion of the study conclusions.

Domestic Violence in DeKalb County and the Criminal Justice Response

The agencies central to the County’s response to domestic violence are the DeKalb County Police Department, the Office of the Solicitor, the local Magistrate’s Court, the State Court, the State Court Probation Department, the several Family Violence Intervention Programs (FVIP), and the Victim Liaisons who contract with the family violence

programs. The following describes DeKalb County and the basic domestic violence processes of these agencies.

The Place

Dekalb County is a suburban county east of Atlanta, Georgia. Its population is 723,602 with a population density of 2484.6 per square mile. The population is 55.6 percent African-American, 38.9 percent White, and 9.0 percent are Hispanic. The median income is \$44,965. Thirty-six percent have education to the Bachelor’s level or beyond. Table 1 compares the County with Georgia. The majority of Dekalb’s population is African-American, although Georgia’s population is not. The median household income is slightly higher than the State’s, which may reflect the higher percentage of the DeKalb population who have a BA degree or better.

Table 1. The Place: Georgia and DeKalb County Demographics

| Item | DeKalb County | Georgia |
|-------------------------|----------------------|----------------|
| Population | 723,602 | 9,363,941 |
| Density | 2484.6 | 141.4 |
| Median household income | \$44,965 | \$42,679 |
| Percent education BA+ | 36.3 | 24.3 |
| Percent Black | 55.6 | 29.8 |
| Percent White | 38.9 | 66.1 |
| Percent Hispanic | 9.0 | 7.1 |

Source: U. S. Census State and County Quick Facts

The Police

The cohort of high-risk domestically violent men in this study is the precipitate of a local social process. It is a police-Solicitor-State Court generated sample. It is unlikely that a community-based sample of high-risk domestic abusers would result in the same cohort. The men the police arrested, the Solicitor prosecuted, and the Court convicted are predominately African-American. Although 56 percent of the County’s population is African-American, they are 94

percent of the men in the high-risk domestic violence probationer cohort.

A 911 call to the police is the usual beginning for the involvement of the criminal justice system in a domestic violence incident. Police service calls concerning domestic disputes are the single largest source of calls in the County after false alarms and car accidents. The police receive about 500 domestic violence calls per week of which about 26 percent result in arrests and a police incident report, (n ≈ 130).⁶ This is a

⁶ Several officials confirm these numbers as the number of local domestic violence service calls and arrests.

significantly lower rate than the nationally reported arrest rate of 36.4 percent ($p=0.01$) (Durose, et al., 2005).

Police incident reports are a primary evidence document. For this study, reports were available for 40 percent of the men in the cohort. The DeKalb County police reports contain a narrative about the incident based on the statements of the parties involved and witnesses. A second sheet of the report contains a series of check-off boxes on the relationship of the primary aggressor and the victim, injuries, use of substances, child witnessing, the manner in which the officer identified the primary aggressor, the number of previous complaints, the existence of court orders, and the action that the police took. The narrative and the check-off boxes provide the officer's view of the incident.

The police report narrative provides information on the level of severity of the violence. A severe incident involves biting, kicking, punching with a fist, using a gun or a knife, using a household article as a weapon, choking, burning, or a combination of these actions. The primary study author, using the Conflict Tactics Scale (CTS), estimated that seventy-four percent of the assaults in which the police made an arrest were severe. These incidents involved actions such as battering the victim by dragging her by her hair, multiple punches in the face with a closed fist, throwing the victim down and kicking her, pushing the victim down a flight of stairs or over a porch railing, choking the victim, and terroristic threats to kill the victim.

The police reports indicate that the police observed injuries on 62 percent of the victims, although a large proportion declined emergency treatment. Only 25 percent of the women in the study's victim survey accepted medical care. Sixty-two percent of the victims indicated they had made from one to five previous domestic violence service calls to the police.

The Courts and the Solicitor

DeKalb County has three levels of courts: the Magistrate's Court, which issues protective orders and will issue warrants to victims on a probable cause basis, the State Court, which processes misdemeanor

domestic violence cases, and the Superior Court, which processes felony cases. There is no domestic violence court, although two judges have recently started a WATCH program (Weighing Accountability Through Compliance Hearings), with a structure similar to a drug court, to review a small number of cases each month. The judges are elected.

The Solicitor, also elected, with a staff of appointed assistant solicitors dedicated to domestic violence cases is the engine that drives the domestic violence court process and misdemeanor cases in general. Arraignment of the arrestees starts with posting a bond in Magistrate's Court of about \$2500.00, about \$250.00 cash. For those who post bond, the Court attaches conditions and releases the men in two or three hours. The Court schedules the arraignments of these men for about three months in the future. If a man cannot afford bail, he remains in custody for about 10 days or less until arraignment on the "rocket" docket. The "rocket" docket is an effort by the State Court to inject efficiency and Constitutional protections into the arraignment process.

At arraignment, the court, on the advice of the Solicitor, may dismiss the case because of a lack of evidence to support the allegations. In cases that the Solicitor wishes to pursue, the perpetrator can plead guilty, waive certain rights, and meet to negotiate with an Assistant Solicitor, or plead not guilty and request a public defender. He may also, though infrequently, seek a private attorney. The arraignment proceedings are brief and many cases are disposed at arraignment or shortly after the defendant meets with an Assistant Solicitor. The bases of the Solicitor's case are 911 calls, the police report, recorded signs of struggle, emergency medical service reports, adult witnesses, and child witnesses, evidence of drug or alcohol involvement, or previous assault convictions. The record of previous assaults and alcohol and drug involvement affects the level of the Court's sanction and recommendations for treatment.

The median length of time from arrest to conviction is 83 days (2.75 months). The length of time to case disposition is relatively brief because the defendant and the Solicitor

often settle the case at arraignment or shortly thereafter.⁷ This time to disposition may reflect the relatively modest resources available to the bulk of domestic violence defendants.

In the Solicitor's view, many of the men are chronically criminal. The police may have arrested them numerous times before the Solicitor is able to obtain a conviction. Despite the Solicitor's prosecutorial powers, an Assistant Solicitor may hold a weak hand because the collected evidence is deficient or the victim recants out of fear or financial need, or expressed remorse.⁸ In these cases, the Solicitor asks the court to divert the case, dispose of it with a consent hold, or drops the prosecution. To strengthen her hand the Solicitor may choose to treat the case concurrently with other open domestic violence cases against the perpetrator. The victim may agree to treat multiple cases concurrently for reasons of safety. Concurrency may facilitate plea bargaining and more punishment or avoid a difficult jury trial. In the court's view, the need to clear the backlog is an important criterion.

The Solicitor may try to enhance, or threaten to enhance, a case to a felony. Enhancing the case to a felony transfers the case to the District Attorney and removes it from the Solicitor's caseload. A previous conviction for Family Violence Battery (FVB) justifies a felony charge. Violation of a temporary protection order may be aggravated stalking—a felony. Substantial injury will make a domestic violence incident an aggravated assault felony. The Solicitor may consider a charge of aggravated assault as attempted murder.

It is the Solicitor's policy decision as to whether domestic violence is a prosecutorial priority. The Solicitor, who was in office until the November 2006 election, single-mindedly prosecuted domestic violence cases. The Solicitor was defeated for re-election and replaced by a Solicitor, who announced an intention to divert a larger number of domestic violence cases. The court can still mandate men in a diversion program to attend a family violence program, but the diversion disposition does not count as a conviction.⁹ This extends the time until a recidivist batterer's abusive behavior is eligible for enhancement to a felony. A second effect is to reduce the large domestic violence caseload of the State Court Probation Department.

If a State Court judge convicts a man of domestic abuse, the usual sentence is 12 months of probation and attendance at a 24-week (36 hours) Family Violence Intervention Program (FVIP). If the perpetrator completes the FVIP, the Court specifies that he will graduate to non-reporting probation status. It is infrequent that the court incarcerates a man or requires him to attend treatment for substance abuse or parenting classes. The Court's concern is that jail or the cost of additional treatment, which the defendant shoulders, will complicate matters. The judges consider that many of the defendants, marginally attached to society and the economy, are unable to afford the costs of treatment beyond the FVIP, and they will violate these probation conditions, requiring further review by the Court. Some judges project that incarcerating a defendant will result in unemployment and further economic hardship with no expected gain.¹⁰ State Court judges consider that attendance at a FVIP is the appropriate direct response to domestic violence.

⁷ In a study of a Massachusetts district court the median length of time from arraignment to the initial disposition was 196 days. Douglas Wilson and Andrew Klein, *op. cit.*, p.23.

⁸ One interviewed Assistant Solicitor indicated that a standard defense practice was to ask the Court for extensions to give the defendant time to persuade the victim to express remorse and recant. She equated this to witness tampering.

⁹ The Project did not interview the new Solicitor. As a result, the Project did not explore the motivation for this change. At the time of this writing, the criteria for diverting a case remained undecided.

¹⁰ Interview with Chief Probation Officer State Court Probation.

State Court Probation Department

A second agent of the State Court is the State Court Probation Department. The Probation Department supervises misdemeanants placed on probation by the State Court. The Department has four probation officers who supervise only domestic violence probationers. Probationers are required to report to their probation officers once a month for a meeting that lasts about 10 minutes. The probation caseloads are large. Each officer has an active caseload of about 250 men. The heavy caseload and a manual record system forces a narrowing of the probation officer's activities. Loose-leaf binders are the repository for the records. The County has issued a solicitation for the development of a computerized record system, but until it is developed and implemented, Probation has no computer-based administrative record system. The Officers do have access to a computerized criminal history system, although they do not normally review a probationer's criminal history.

The State, unfortunately does not systematically audit the criminal history file and there is a significant error rate insofar as a court clerk may not enter an arrest or the disposition of a case. The criminal history file failed to contain records of some of the convictions for which men were on probation in DeKalb County. In the study's polygraph tests, men admitted to arrests that were not in the criminal history. Crimes committed in other counties may appear in the history only after considerable delay. When probation officers ask men on probation if they have been arrested since their last meeting, the probationer is unlikely to report truthfully. These delays, errors, and lack of truthful reporting reduce the officer's ability to enforce accountability.

Probation officers do not undertake a formal risk assessment, or routinely require drug tests. None of the probation officers has attended a FVIP session, and a separate field staff makes out-of-office visits. There is no Georgia law that prohibits a man convicted of domestic violence from owning a gun, although it is a federal violation. There is no uniform procedure for probationers to turn in a gun to avoid violation of federal law,

although police place weapons seized at an incident site in the police evidence locker.

Probation expects that new probationers will meet with their probation officer within 10 days of their sentencing. Among the topics discussed with the probationer at the initial meeting are the probation officer's expectations about the probationer's behavior, the man's current employment and income, the consequences of trespassing on his conditions of probation, assignment to a FVIP and the monthly fees assessed for probation services and the weekly FVIP charges. The probation officer directs the probationer to contact the agreed upon FVIP for an evaluation and a program orientation. Following evaluation and orientation, the probationer begins his 24 weeks of attendance.

The median time to FVIP enrollment from the initial meeting with the probation officer is 80 days. If the probationer follows a regimen of contacting his probation officer and promptly enrolling in a FVIP, he can graduate to non-reporting probation status in about 7 months. Unfortunately, a minority of the high-risk men are able to negotiate this path. The men's anti-social behavior makes the process more complicated. Nearly half of the 321 men (n=147; 46 percent) did not report to either probation or enroll in their assigned FVIP program. Given that FVIP assignments follow closely on their initial meetings with their probation officer, it is reasonable to state that nearly one-half of the probationers reject the Court's sentence.

Probation requests an arrest warrant from State Court for men the Department is unable to engage in the probation process. The median additional time from the violation of an order to meet with probation or failure to enroll in a FVIP and the issuance of a warrant is 150 days (5 months). The DeKalb County Sheriff is responsible for serving the warrant and making the arrest. The police also make arrests based on the discovery of an outstanding warrant during a traffic stop or subsequent arrest. During the study period, the Sheriff or police arrested 34 percent of the men for whom the court had issued a warrant.

Fifty-four percent (n=174) of the men reported to their probation officer and enrolled

in a FVIP. Seventy-two percent of the men who enroll in a FVIP completed the program. The cohort's completion rate for the family violence program is about 39 percent. Although 72 percent of the men who enrolled in a FVIP completed, the outcome was a modest 39 percent completion rate for the high-risk men, ($0.54 \times 0.72 = 0.39$), because only 54 percent of the men had enrolled. These operational results are common, given that participation in probation is essentially voluntary and the likelihood of rapid re-arrest and a jail sentence is modest.

The Family Violence Intervention Program

The Family Violence Intervention Program (FVIP) is the major instrument the State Court uses to attempt batterer habilitation. The Georgia Commission on Family Violence regulates the structure of the FVIPs with regard to facilitator qualifications, curriculum, program length, class size, record keeping, and the appropriate conduct of the probationer during class. In general, the programs follow the Duluth power and control model.

FVIPs do intake evaluations of the probationers to review his history of family violence, family dysfunction, and criminal activity. Formal screening for drug use, mental illness, and a review of the police report are not usual. It is the view of the local domestic violence leadership and victim advocates that drug and alcohol use does not excuse domestic violence. Mental illness is also not an excuse for domestic violence. The focus of the FVIP sessions is on the issues of power and control in relationships with intimates. Facilitators spend little or no time on emotional illness or substance abuse either in the intake process or in the FVIP sessions themselves. Although many of the facilitators have experience in selected aspects of emotional illness and substances abuse, it is not part of the curriculum. Addressing these conditions, which many clinicians consider an illness, conflicts with the view held by many domestic violence professionals that domestic violence is learned and volitional. The Georgia Commission on Family Violence, as a policy, does not consider that emotional illness and substance abuse are causes of domestic violence.

The Abusers

The typical high-risk domestic violence probationer in DeKalb County – the focus of this study – is a young, unmarried, marginally employed, African-American, with a high school education, and is the father of one or more children. The median age of the probated men is 34, 68 percent are unmarried, separated or divorced, 25 percent are unemployed or employed part-time, 94 percent are African-American, 79 percent have a GED or high school education, and 71 percent have at least one child. Some have reasonable attachment to the community; i.e. they are married, have children, are employed, and have a better than high school education.

Others have been to jail several times, have serious untreated substance abuse problems, and have themselves suffered serious and continued abuse. The criminal records of the men are extensive with multiple arrests. The average length of their criminal activity, up to the date of their index arrest for domestic violence, is 12.6 years (the median length is 12.1 years).

The study divided the men's criminal history into eight categories (assault, domestic assault, sexual assault, property crimes, substance abuse, larceny, major motor vehicle, and miscellaneous misdemeanors.) Eighty-five percent had a criminal record in two or more categories. Fifty-five percent had a previous arrest for substance abuse (alcohol or illegal drugs). Seventy-nine percent had more than one previous arrest for domestic violence.

The men's conversations during FVIP group sessions did not give any hint of their extensive criminal records. During these sessions, the men characteristically were civil, polite, and engaged in the discussion; they minimized their abusive behavior. They managed their image. Typically, at "check-in" many of them said the "week went fine, no problems, or we had one little argument but we sat down and talked it out." None ever said that the week went poorly. The men do not consider verbal taunting, threats or destroying property or hitting back in self-defense as abusive – initiating the hitting of an intimate partner is.

Many of the men are themselves victims of abuse or live in an edgy world of anger and confrontation. They minimize any abuse that has happened to them. It is never an excuse. Difficulties with alcohol and drug abuse are never excuses, an ironic point of agreement with many domestic violence professionals. Their relationships provide little reciprocity. Often the men said that they had been on their own from an early age and they did not expect help from anyone. They viewed this as appropriate self-reliance. They viewed violence as an acceptable way to respond to a perceived insult from either a man or a woman. Thirty-four percent of the men had non-domestic assault arrests. To buttress their point they often related stories of witnessing violence as children, which they interpreted as an acceptable parental response. "If my momma or daddy was that angry then something must have been done to them to make them do that thing." Translation: the victim's behavior caused the anger, and the victim received a deserved punishment.¹¹ Those who are near completion of the program often claim that they will miss the group and that the sessions have reformed them. As noted, 79 percent of the cohort had more than one domestic violence conviction. They will likely return.

The Victims

Part of the regulatory response to domestic violence incidents in DeKalb County is a victim telephone interview conducted by a Victim Liaison who contracts with the family violence intervention program sites for this purpose. The victim survey (See Appendix A: The Victim Survey) queries victims about their history of abuse with the convicted man in the study cohort. The survey covers the period of

the abuse and its frequency, the types of emotional or physical abuse, whether the abuser is chronically intoxicated, his ownership of guns, child abuse, child witnessing, and the abuser's controlling behaviors.

After the abuser enrolls in the FVIP, the FVIP facilitator provides victim contact information to the Liaison. After interviewing the victim about the abuse she sustained, the Liaison provides contact information for social services, and discusses safety planning. The Liaison makes a repeat contact with the victim if a FVIP facilitator interprets comments by a probationer to indicate imminent victim danger or when the legal status of the abuser changes, such as when he completes the FVIP, or the FVIP terminates him from the program. All of the Liaison's conversations with the victim are confidential.

The only change in this process, during the project, was a codification of the telephone questionnaire that the Liaison administered to collect data about the victim's abuse history with the perpetrator. Although the Victim Liaison intends her interview to be a faithful history of the perpetrator's abuse, the respondents are likely to manage their images and in addition suffer lapses in recall.¹²

The current Victim Liaison interview process limited the opportunity for the Liaison to contact the victim and provide support. The FVIP facilitator initiates contact with the Liaison when the probationer enrolls and supplies the facilitator with background information and victim contact information.¹³ Because approximately fifty percent of the men reject their sentence and do not enroll in a FVIP, the Liaison never contacts these

¹¹ The acceptance of violence as an appropriate response to a perceived insult differs among regions of the country. Frequently researchers measure the southern and western regions of the United States as more violent than other regions. For example, see Richard E. Nisbett, *Violence and U.S. Regional Culture*, *American Psychologist*, April 1993, p.441-449.

¹² The Victim Liaison, an experienced domestic violence professional, commented, during a review of her interviewing experience, that she suspected image management in the victim's responses.

¹³ This information is also available from the Solicitor much earlier in the process. Contracting with the Solicitor rather than the FVIP would lead to considerable improvement in the process. It would shorten the time to victim contact by the Victim Liaison, reduce the perpetrator's control of the information and improve the quality and quantity of victim contact information.

victims. The lives of high-risk abusers (and their partners) are often unstable and contact information is often out-of-date before the perpetrator enrolls in a FVIP. The result is that victim safety planning is long delayed or never delivered. Finally, the Liaison is dependent on the FVIP facilitator for notification and naming of the batterer. The

facilitator may neglect this step if the man enrolls but fails to attend class or fails to pay his evaluation fee. The resulting operational response rate is low. (See Table 2) The Liaison’s operational contact rate is less than 20 percent while the formally measured survey response rate is 66 percent; this is reasonable for a vulnerable population.

Table 2. Survey Response Rate and Victim Liaison Operations Contact Rate

| Item | Survey Response (N)=321 | Liaison Operations Contact (N)=321 |
|---|-------------------------|------------------------------------|
| Completes | 51 | 51 |
| Refusals | 10 | 10 |
| Not qualified/screened out (failure to enroll in FVIP, or family abuse not IPV) | 161 | 161 |
| Deficient contact information (no FVIP referral or inadequate referral information) | 99 | 99 |
| Response rates (%) | 66* | 19** |

*Survey response rate = completes/[(completes)+(not contacted + refused) x (completes/(completes + not qualified))]

** Liaison operations contact rate = completes+ refused/ (completes + refused + not qualified + deficient contact information)

The Victim Survey (Table 3) tabulates the abusive actions that are the precipitates of the behaviors discussed by the men in the FVIPs. The survey provides a sketch of the victim’s abuse or the threat of abuse, which is a constant in her life. These responses are from victims who carried the criminal process to conclusion, some of them multiple times. Given that nationally only about 3.5 percent of physical assaults reported to police result in a conviction, (Durose, et al., 2005) response of these victims may be different from the responses of a community-based sample of abused women.

The respondents indicate high levels of emotional abuse, in addition to their physical abuse. Sixty-five percent of the victims stated that the abuser tried to justify his violence, 75 percent blamed her for the violence, and 76 percent accused the victims of having sexual affairs. Verbal criticism, (64 percent), control over who they can see (56 percent) routinely

occurred. Forty-five percent of the abusers have threatened or attempted murder or suicide. The children have often witnessed violence (60 percent), and the abuser is often intoxicated (51 percent).

Few respondents, however, reported forced sex. Only 15 percent of the victims responded positively to the statement that their intimate partner “ever forced or pressured you to have sex or perform sexual acts.” The victim generally denied that the abuser harmed or abused the children or threatened to take the children. The reader must keep in mind that the responses to these questions depended on the victim’s interpretation of the questions. Only 12 percent indicated that the abuser ever harmed or abused the children. This low level of reported abuse may be due to the victim’s definition of child abuse. Police reports, study polygraph reports on men with children and comments in FVIP sessions by these men

Table 3. Victim Survey Responses

| Question Number | Question | Percent "Yes" Response | Number of "Yes" Responses | Total Responses |
|-----------------|--|------------------------|---------------------------|-----------------|
| | Physical Violence | | | |
| 5 | Did you contact police when first abused? | 41 | 21 | 51 |
| 6 | Did you contact police when abused again? | 52 | 23 | 44 |
| 7 | Did you need medical care? | 25 | 13 | 51 |
| 8 | Did you leave to find somewhere safe? | 56 | 28 | 50 |
| 9 | Did your partner try to justify his violence? | 65 | 33 | 51 |
| 10 | Did he blame you for the violence? | 75 | 38 | 51 |
| 11 | Are there ways that he thought he was the victim? | 75 | 38 | 51 |
| 12 | Has the violence gotten worse? | 51 | 26 | 51 |
| 13 | Does he have any guns? | 12 | 6 | 49 |
| 14 | Has he used weapons to abuse you? | 24 | 12 | 51 |
| 15 | Has he threatened you or attempted suicide or murder? | 45 | 23 | 51 |
| 16 | Do you have a restraining order? | 22 | 11 | 49 |
| | Emotional Violence | | | |
| 17 | Does he criticize or put you down? | 64 | 32 | 50 |
| 18 | Does he call you names? | 75 | 38 | 51 |
| 19 | Does he control the money? | 29 | 15 | 51 |
| 20 | Does he control who you can see or have as friends? | 56 | 29 | 51 |
| 21 | Does he act jealous or accuse you of affairs? | 76 | 39 | 51 |
| 22 | Is he often intoxicated? | 51 | 26 | 51 |
| 23 | Has he had an affair or affairs? | 49 | 21 | 43 |
| 24 | Have you had forced sex? | 16 | 8 | 51 |
| 25 | Does he use the children to manipulate or spy on you? | 39 | 9 | 23 |
| 26 | Have the children witnessed violence? | 60 | 15 | 25 |
| 27 | Has he threatened to take the children away? | 27 | 6 | 22 |
| 28 | Does he tell you are a bad parent? | 37 | 8 | 25 |
| 29 | Has he threatened to harm them? | 4 | 1 | 25 |
| 30 | Has he ever harmed or abused them? | 12 | 3 | 25 |
| 31 | Was the Department of Family and Social Services involved? | 8 | 2 | 25 |
| 32 | Have you reason to suspect he sexually abused children? | 0 | 0 | 24 |
| 33 | If you have separated, does he use visitation to threaten or manipulate you? | 7 | 1 | 15 |
| 34 | Does he pass messages to you through the children? | 6 | 1 | 16 |
| 35 | If you are separated or divorced does he pay child support as ordered? | 14 | 2 | 14 |
| 36 | Has he ever admitted to having a drinking or drug problem? | 31 | 14 | 45 |
| 36a | Has he ever been in treatment? | 23 | 10 | 44 |
| 37 | Have you and he ever been to couples counseling? | 16 | 8 | 51 |

often noted corporal punishment of the children. Researchers have documented the coexistence of child abuse and domestic abuse. Anne Appel and George Holden (1998), using a conservative definition found a median co-occurrence rate of 40 percent.

Comparison of Victim Responses and Police Report Information

The quality of the information produced by the domestic violence criminal justice process, as illustrated by DeKalb County, is cautionary. Comparison of information from the victim survey and the police report show a distinct lack of consistency or agreement. There are thirty-five incident reports for which there are also victim responses. There was high disagreement between reports to the Victim Liaison about police service calls and their statements to the police about previous service calls; the lack of agreement between the responses as measured by the kappa value was 0.17. Several victims indicated to the police officer that their intimate partner had abused them previously, but she had not called the police. There was also low agreement about the existence of a prior court order; the kappa was 0.17. Although 51 percent of the victims stated that their abuser is often intoxicated, the police reported, generally in the narrative, that 21 percent of the men were intoxicated at the time of their arrest. Again, there is little agreement between responses to the victim survey about the chronic intoxication of their abusers and police reports that the abuser was intoxicated at the time of arrest; the kappa was 0.15. Because the police made only casual observations about sobriety and did not administer any tests, it is likely that the police seriously underreported substance involvement, even though intoxication during the incident is evidence in which the Solicitor is interested. Child witnessing, a concern to the Solicitor, is an offense indicated on the police report and asked in the victim survey. Sixty percent of the victims reported child witnessing to the Victim Liaison; the police reports included charges of cruelty to children (witnessing) in 39 percent of the reports; the agreement is a weak 0.10. In 45 percent of the cases in which the police charged cruelty to children, the victim failed to report to the Victim Liaison that there had been child witnessing. The reader must keep in mind

that the Liaison queried the victim after the incident. The telephone survey is a follow-up to the incident.

The low levels of agreement between the police reports and the follow-up victim interview responses with regard to earlier assaults, intimate partner intoxication, the existence of court orders, and child witnessing inject a serious note of caution about the reliability of victim reports or police reports as a source of ground truth for the criminal justice system (Heckert & Gondorf, 2004). Some of the difficulties in determining ground truth are because the police report describes an incident and the victim interview purports to be a follow-up history. There may also be differences in the victims' understanding of a question or her motivation when answering a police officer's question during a difficult incident in contrast to a nearly identical question asked by a sympathetic Liaison. Police reports and victim surveys, while they may contribute to the understanding of an incident are deficient sources to determine habilitation interventions or judge the likelihood of recidivism. The low levels of agreement between the responses to a police officer's questions and those of the Victim Liaison strongly suggest the difficulty of determining the nature of events embedded in social contexts and narrated to listeners to satisfy the respondent's current needs. As the study will demonstrate, responses obtained in polygraph tests are less likely to have the social distortions that are present in responses to police officers and victim liaisons.

The Study

In the 18-month period from December 2005 to May 2007, the DeKalb County State Court Probation Department identified 321 high-risk domestic violence probationers. Examination of men's criminal histories is a standard method for identifying men with an elevated risk of repeat criminal activity. Based on earlier research, high-risk domestic violence perpetrators were men previously convicted multiple times for domestic assault and other assaults, substance abuse crimes, property crimes, larceny, major motor vehicle crimes, as well as other crimes (Wilson et al., 2006).

Although domestic violence was the crime for which the court had recently convicted them, the criminal records of high-risk domestic violence probationers in DeKalb County contained a mix of earlier crimes including assaults, on men or women or both, substance abuse, property crimes, major motor vehicle crimes, larceny, and other crimes. The median length of their adult criminal career, at the time they entered the study, was 12.1 years. Ninety-four percent of the men were African-Americans, all living in DeKalb County, Georgia. The court sentenced all of the men to probation, usually a year, and mandated that they attend a 24-week family violence program.

Each of the four domestic violence probation officers, under the supervision of the Chief Probation Officer, was responsible for identifying eligible high-risk men in her caseload. The Chief Probation Officer designated one probation officer to record the criminal history of the high-risk men. In addition, he audited the high-risk selections throughout the study. Probation drew these men from the flow of high-risk domestic violence probationers assigned to domestic violence probation officers by the first letter of the probationer's surname, and who met with their probation officer, as well as the high-risk men who had been court ordered to report to probation, but did not.

Probation assigned the identified men either to the treatment site family violence program or to one of 10 family violence program control sites within DeKalb County. The programs met state regulations designed to provide uniform psycho-educational programs across all the sites. After attending four psycho-educational classes, the facilitator asked each probationer enrolled in the treatment site if he wanted to volunteer to take a polygraph as part of an NIJ study. Volunteers understood that no consequences would stem from their responses. Men who completed one polygraph received a tuition reimbursement of \$50.00. The facilitators in

the control sites did not ask the attending probationers to participate. After attending four months of psycho-educational classes, the facilitator asked those probationers who were still attending and who had taken one polygraph, if they wanted to volunteer for a second polygraph. Men who completed a second polygraph received a tuition reimbursement of \$75 dollars. Forty-nine percent of the men who enrolled in the in the treatment site agreed to volunteer and completed at least one polygraph (n=43). Twenty-three completed two polygraphs and 20 completed one polygraph. Men did not complete two polygraphs because either they failed to continue in the FVIP, or the study ended.

The outcome of the allocation of men to the treatment site and the control sites is balanced. Logistic regressions could not distinguish among probationers whom Probation assigned to the treatment site or the control sites. Eleven independent demographic and criminal history variables had insignificant relationships ($p>0.05$) to the dependent treatment-control assignment variable.¹⁴ In addition, these same variables did not discriminate between men who completed at least one polygraph test and treatment site men who refused to volunteer, skipped the polygraph appointment, or enrolled in a control site FVIP and were eligible to volunteer for a polygraph test if the site had made it available.

The use of the polygraph in the study demonstration is different from the usual purposes of a polygraph examination. The usual purposes of polygraph exams are to assess a person's guilt or innocence in a specific crime, the participation by a person in an unauthorized disclosure (a leak or espionage) or past participation by a person in proscribed behaviors that would bar their employment in a particular job (Office of Technology Assessment, 1983).

The polygraph examination in this project asked questions about several of the

¹⁴ The variables are probationer's relationship to victim, employment status, education level, children in the household, ethnicity, age at index DV arrest, years of adult criminal record, a criminal record of violent assault(s), drug and alcohol arrest(s), property crime arrest(s), and at least one larceny arrest.

purpose of the examination was to elicit from the probationer information about recent behaviors proscribed by his probationary sentence or behaviors that are illegal at any time. That is, the purpose of the examination was to elicit information about technical violations of probation and possible new crimes.

The examination had three parts:

- a series of factual pretest questions: provide a description of the assault, whether he was continuing to have contact with the victim, his employment, court orders about restricted contact with the victim, stalking behavior either by cell phone or physical presence, alcohol and drug usage, recent law enforcement contacts, ownership or handling of firearms, additional assaults, threats, or abusive contacts with others.
- the polygraph test, which measured autonomic responses of the probationer to three or four questions about illegal drug use, alcohol consumption, abuse, and gun possession; and
- a post-test inquiry in which the probationer was asked if he wanted to change any of his answers.

The polygraph test, which recorded autonomic responses, focused on recent assaults, firearms possession or handling, and substance use. The polygrapher then interpreted the responses to the specific polygraph test questions on alcohol consumption, drug use, gun ownership and handling, and physical abuse. If the polygrapher's interpretation of the autonomic responses is that the probationer has physiologically significant responses, then the polygrapher asks if the probationer would like to reconsider any of his responses. The procedure took about 90 minutes (Office of Technology Assessment, 1983).

In this study of the utility of the polygraph exam with regard to domestic violence and recidivism, the pre-test part of the polygraph examination is most important because it provides the broadest range of

information about the probationer's continuing abuse and other proscribed behaviors. The probationer anticipates and is led to believe that the polygraph test provides a check on the veracity of his pre-exam responses. If the probationer admits in the preliminary questioning that he is continuing his abusive behavior or he is consuming illegal drugs, the autonomic responses will likely indicate that he is not being deceptive. The important information is that the probationer is continuing to abuse or consume drugs. If in the preliminary interview, the probationer denies further abuse, and the polygrapher interprets the autonomic response to exam questions as deceptive, then the polygrapher, when he confronts the probationer, expects him to admit this possible fabrication.

In this study, with financial inducements, as well as assurances that no judicial proceedings would result from their responses, 49 percent (n=43) of the treatment men volunteered for the polygraph and completed it. The responses revealed important information about proscribed probationer behavior, and as discussed later in this study, may offer an effective test of the likelihood that a probationer will recidivate.

The purpose of the polygraph is to determine if the probationers are continuing to participate in proscribed or illegal behaviors. The purpose is broader than the detection of deception; it also elicits information about risky behaviors that may be technical violations of probation or prodromal indicators of a future crime. Because the validity of the polygraph to determine deception correctly is uncertain (Office of Technology Assessment, 1983), it is best to consider that a polygrapher's assessment of deceptive behavior indicates the likelihood that the probationer has understated his risky or illegal behaviors. Similarly, the interpretation of a failure to measure deception, because of uncertainty, does not eliminate the likelihood that the probationer has understated his risky or illegal behaviors. The study previously noted that that police reports and victim reports are deficient. The offender wants to respond in the least damaging way, while the victim wants to respond in the most damaging way. As noted earlier, there is low correspondence between the views.

The root rationale for employing polygraphy is the belief by probation officers, facilitators in family violence programs, and other domestic violence professionals that abusers continually deny their behavior or minimize its harm. Brief face-to-face interviews are a weak tool for discerning the truth about a probationer's behavior. From the perspective of the abuser, he understands that probation officers, facilitators, and others do not consider that domestic abuse is socially acceptable. In their wish to be socially accepted (and to avoid punishment), they minimize and deny their behavior in an effort to mask their actual behavior. The probationer responds to the context of the interview.

Under these conditions, the polygraph may achieve useful results based on what psychologists call the "bogus pipeline" effect. Neal J. Roese and David Jamieson (1993) write that lines from Alfred, Lord Tennyson's poem, *In Memoriam*, inspired the term. Tennyson wrote:

*For words, like Nature, half reveal
And half conceal the Soul within*

Roese and Jamieson continue by writing, "Psychologists have long attempted to accurately measure individuals' attitudes and opinions. Ideally, researchers desire a direct pipeline to the soul, a method that somehow pierces strategic facades and bypasses the concealing words of which Tennyson wrote. Such a direct pipeline is clearly not possible but in their pioneering 1971 article, Edward Jones and Harold Sigall described a "bogus pipeline (BPL) to the soul" (Jones & Sigall, 1971). Writing in the *Psychological Bulletin* they describe the bogus pipeline procedure. The procedure elicits significantly more truthful attitudes in situations where social desirability about attitudes and effects (i.e., subjects' desire to express socially acceptable opinions) may mask actual behaviors.

In psychological experiments, the procedure involves attaching subjects (via skin electrodes) to an ostensible physiological monitoring device and providing subjects with a "steering wheel" device to record their attitudes or behaviors. Psychologists tell the subjects in the experiment that the machine is a "lie detector." The measuring device is

actually "electrical junk" and the purpose of the procedure is simply to convince subjects that their actual attitudes and behaviors are detectable. Results from a number of investigations, which have used the bogus pipeline procedure (Quigley-Fernandez, et al., 1978; Sigall & Page, 1972) support the results of the experiment by Jones and Sigall (1971). Several additional studies indicate that when subjects believe that their attitudes are detectable by a physiological measuring device, they more readily express their actual attitudes. That is, the bogus pipeline procedure yields more socially undesirable responses than when it is not used. For example, in Sigall and Page's initial experiment, they found that subjects in the bogus pipeline condition would admit to negative attitudes about "Negroes." Importantly, control subjects in non-bogus pipeline conditions using paper-and-pencil tests did not reveal such attitudes. Later research has shown that this finding holds for attitudes toward handicapped individuals and for "confessing" to having prior knowledge about how to score well on a psychological experiment.

Roese and Jamieson in their meta-analytic review of 31 studies found a significant mean BPL versus control condition effect across these studies, indicating that the BPL engendered real effects consistent with a reduction in socially desirable responding.

The Roese and Jamieson meta-analysis examined studies that tested for a BPL effect with regard to opinions. When applied to questions of fact, a larger BPL effect is the result, as is the case in polygraph examinations. Several studies cited by Roese and Jamieson employ a BPL technique when trying to ascertain proscribed or illegal behaviors such as substance use or child molesting. (Roese & Jamieson, et al., 1993) Kelly Damphousse and his colleagues found in their recent NIJ study of the application of computerized voice stress analysis (VSA) software, a significant BPL effect with regard to arrestee's admissions of recent drug use. (Damphousse, 2007) The authors write, "...the findings suggest strong support for the bogus pipeline effect of voice stress analysis programs on self-reports of criminal behavior. This finding is very important for law enforcement since it suggests that just using the VSA programs may be more likely to

encourage suspects to be more truthful.” The bogus pipeline effect is not limited to polygraphy technology.

Analysis and Outcome

This section concentrates on the utility of the polygraph testing outcomes with regard to the management of high-risk domestic violence criminals. The basis of the polygraph’s predictive value, the study hypothesizes, is the combined result of the polygraph’s bogus pipeline effect and the evidence in the criminal justice literature of the relationship between criminal dynamic behaviors and criminal recidivism.

The primary statistical measures used to examine the predictive value of the polygraph with regard to subsequent arrests are logistical analysis, the area under the Relative Operating Characteristic (ROC) curve (ROC/AUC), and the related measures of sensitivity, specificity, and the positive and negative predictive values. The discussion compares the polygraph data with the efforts to predict violent offender recidivism found in the criminal justice literature. The ROC/AUC and its related measures of sensitivity and specificity are useful statistical measures with which to compare the polygraph outcomes measured in this study with several other predictive tests of violent recidivism that criminal justice researchers have developed and applied ROC/AUC as their summary measure (See Table 7, p.178.)

A useful diagnostic test needs to distinguish between a test’s true positives and true negative results. Because of uncertainty, most tests will also produce false positive and false negative results. The Receiver Operating Characteristic or Relative Operating Characteristic (ROC) graph maps the degree to which a test distinguishes true positives and true negatives. The standard ROC measure is the Area Under the Curve (AUC). The ROC graph maps the tradeoff between true positives and false positives. An AUC of 0.50 indicates that the test is no better than a coin toss in distinguishing between true positive and false positive results. Unity (1.0) indicates perfect discrimination. The benefit of the ROC is that it provides an easily understandable measure of the strength of the test. (Fawcett, 2006; Swets, 1988) A rough

guide for classifying the worth of a test based on its AUC is the traditional academic grade-point system. Thomas Tape suggests that a measure of 60-70 is poor, 71-80 is fair, 81-90 is good, and 91-1.00 is excellent. (Tape, nd) The remaining discussion will use this scale in grading ROC/AUC outcomes.

The Results

As noted in the previous section, Probation made a balanced allocation of men to the treatment site and the control sites. The outcome of the probation process in terms of FVIP completion and failure rates and subsequent arrest rates are not statistically different between the treatment and control groups. The presence of the polygraph test did not have any outcome effects. This is an expected result given that neither the program facilitators nor probation applied the polygraph results to the habilitation of the men.

The FVIP completion rate for treatment and control site men in terms of the number of men probated (n=321) was 39 percent; the failure rate either because the men did not report to probation, did not report to a FVIP, or did not complete the FVIP was 61 percent. The FVIP completion and failure rates of the men enrolled in the treatment and control groups are not significantly different. (Chi-square $p=0.177$) In addition, the FVIP completion and failure rates for polygraph takers and polygraph non-takers were not significantly different. (Chi-square $p=0.41$). (See Chart 1. Flow of Probation Cohort through Treat and Control Sites)

The rate of post-index-DV arrest during the study period for the treatment and control men was 25 percent. There was no difference between the treatment and control groups, (chi-square = 0.31). Twenty-five percent was the arrest rate for men who enrolled in the FVIP and completed it as it was for those men who did not report to probation, did not report to a FVIP or failed the FVIP after they enrolled. In addition, there was no difference in the arrest rate between men enrolled in a FVIP who either completed the program or failed, (Chi-square=0.88) (See Chart 2: Flow of Probation Cohort to Next Arrest During the Study Period).

Chart 1. Flow of Probation Cohort through Treatment & Control Sites

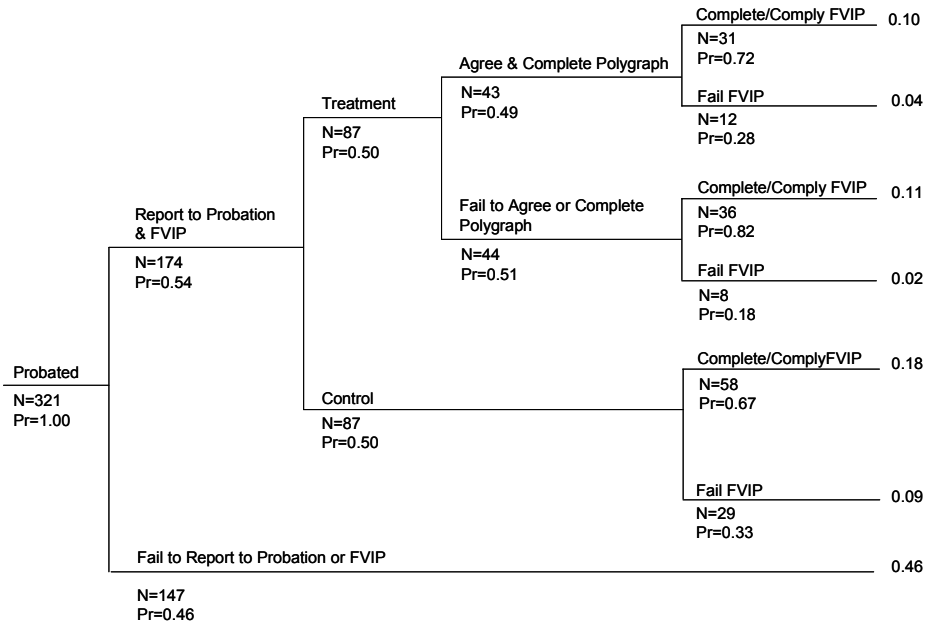
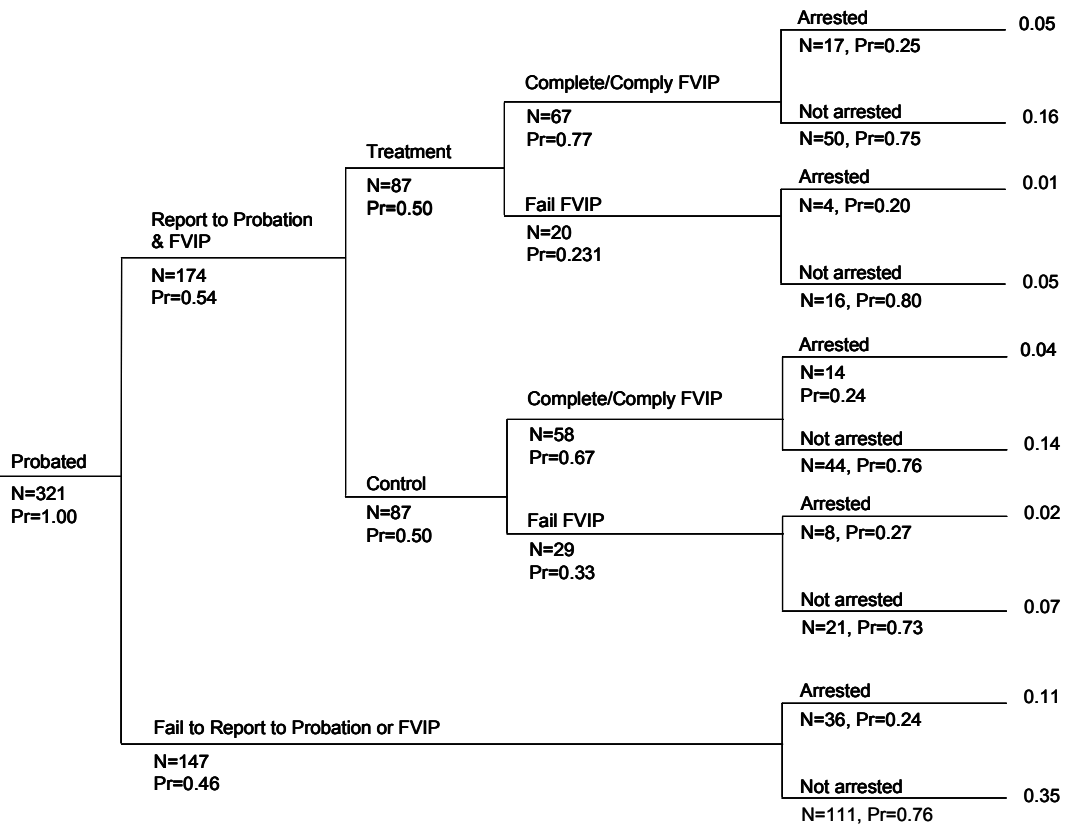


Chart 2. Flow of Probation Cohort to Next Arrest During the Study Period



These results support the view that the behavior of the cohort of high-risk domestic violence probationers is homogeneous. In addition, the results provide evidence that the enrolled high-risk men in the control group and the enrolled high-risk men who did not take the polygraph in the treatment group had a mix of risky behaviors analogous to those men who took the polygraph.

The family violence programs that enroll high-risk men appear to be ineffective with regard to reducing recidivism insofar as the arrest rate for men who did not report to probation or to a FVIP had the same arrest rate – 25 percent. This result also suggests that probation is unable to deter absconding uniformly given that the arrest rate for men not reporting to probation or their family violence program is not different from the arrest rate for men enrolled in a family violence program. The arrest rate for absconding men should be significantly higher than for men who are nominally complying with the terms of their probation.

It is clear that the criminal behavior of this cohort of high-risk probationers is undifferentiated by whether they failed to comply with their probation, or completed the family violence program. The pre-polygraph interview, on the other hand, provided useful information about the risk level presented by these high risk probationers.

The utility of the of the polygraph test is with regard to what the men revealed in the pre-test interview and less importantly on how the polygrapher judged the men’s deceptive behavior, as would be expected from the bogus pipeline effect. The accuracy of the polygrapher’s judgment is important insofar as the examined abuser knows that the polygrapher will render a judgment at the end of the test and a polygrapher’s judgment of deception contributed to the diagnostic value of the polygraph.

Probationers in the pre-polygraph interview admitted to engaging in a range of proscribed behaviors and probation violations. (See Table 4. Probation Violations.) Eighty-one percent, as determined by their polygraph pre-test responses, violated conditions of their probation. Specifically, 62 percent admitted that they recently used intoxicating drugs, 30 percent engaged in abusive behavior, 27 percent violated no contact orders, and 11 percent owned firearms. The court issued warrants for probation violations for 23 percent of the men. These warrants were primarily for process violation, such as absence from the FVIP program, failure to meet with their probation officer, and failure to pay the required fees. The study classified as risky three selected behaviors revealed by the probationers, as well as whether the polygrapher judged that the probationer was deceptive in his answers.

Table 4. Probation Violations Based On Pre-Polygraph Interview

| Reasons | Percent |
|--|----------------|
| Drug use | 62 |
| Abuse | 30 |
| Illegal contact | 27 |
| Firearm possession | 11 |
| Probation violations (determined by polygraph) | 81 |
| Court determined Probation violations | 23 |
| Additional arrests* | 33 |
| Polygraph results interpreted as deceptive | 37 |

*All arrests based on criminal record search and polygraph results.

That is, the probationer, in addition to his risky life style choices, chose to answer the polygrapher's questions in a risky manner. Specifically, these behaviors were:

- illegal drug use other than marijuana,
- the possession, or handling of firearms,
- involvement in additional physical abuse, or notable verbally abusive arguments with an intimate partner or other men, and
- responses to the pre-polygraph questions in a manner that the polygrapher judged to be deceptive.

These risky behaviors are extra-marginal insofar as the men who completed at least one polygraph consume intoxicating substances at a high rate. These risky behaviors of illegal drug use other than marijuana, the possession, or handling of firearms, involvement in additional physical abuse, and deceptive polygraph responses are in addition to their widespread use of intoxicants.

A review of the men's criminal history, the victim survey, the police reports, and the polygraph results indicated that 88 percent of the men had excessive rates of consumption. These men had one or more of the following

indications of excessive use. They had one or more arrests for intoxication or possession of illegal drugs. The victim reported to the Victim Liaison that her abuser was often intoxicated. The police report of the domestic violence incident indicated that the abuser was intoxicated. Finally, the probationer reported during the pre-polygraph interview that he consumed illegal drugs, or drank heavily, although qualifying it as within his control, or occasionally acknowledging, "He had a problem."

The pre-polygraph interview provided data about proscribed probationary behaviors, which were predictive with regard to men whom the police subsequently arrested. Each of the risky behaviors was significantly predictive of a subsequent arrest during the study period. (See Table 5. Risky Behaviors Indicated in Pretest polygraph Interview and the Polygrapher's Interpretation of the Probationer's Responses) The p-value for firearm possession and handling was 0.08. It was included because of its prominence in the fatality literature (Campbell et al., 2003) The other risky behaviors in bivariate logits were significant at a p-value of 0.05 or less. Overall, participation in any of these risky behaviors significantly increased a probationer's likelihood of arrest for a subsequent crime. The odds ratio for a subsequent arrest during the study period if the men engaged in any of the risky behaviors was 5.42, (p-value 0.024).

Table 5. Risky Behavior Indicated in Polygraph Pre-test Interview and the Polygrapher's Interpretation of the Probationer's Responses

| <i>Risky Behavior</i> | <i>Odds Ratio</i> | <i>Estimated probability of subsequent arrest</i> | <i>Significance level</i> |
|---------------------------------|--------------------------|--|----------------------------------|
| Drug use other than marijuana | 4.8 | 0.67 | 0.05 |
| Abusive contact | 4.5 | 0.64 | 0.04 |
| Firearms possession or handling | 3.4 | 0.58 | 0.08 |
| Deceptive responses | 5.8 | 0.63 | 0.01 |
| Any risky behavior | 5.4 | 0.52 | 0.02 |

In this study, engaging in fewer risky behaviors reduced the likelihood of a subsequent arrest. Only 11 percent of the men with 0-1 risky behaviors had a subsequent arrest, regardless of whether they were married, unmarried, separated, or divorced.

The extra-marginal risky behaviors predicted subsequent arrests within the study period. In this test, the grade for 0-1 risky behaviors is 1.0; the grade for 2-3 risky behaviors is 2.0; the grade for illegal drug consumption other than marijuana and, at the same time, giving answers that the polygrapher judged as deceptive is 3.0. A

grade greater than 1.0 indicates an elevated likelihood of recidivism.

Table 6 indicates the distribution of scores and the number of subsequent arrests. The arrest count includes those found in the men's criminal history, which were subsequent to their index DV arrest, and additional subsequent arrests the men admitted in the pre-polygraph interview. Their subsequent arrest rate within the study period is 33 percent including those additional arrests while they were on probation, admitted to during the pre-test interview, but not recorded in the Georgia criminal history.

Table 6. Risky Behavior Thresholds and Subsequent Arrests

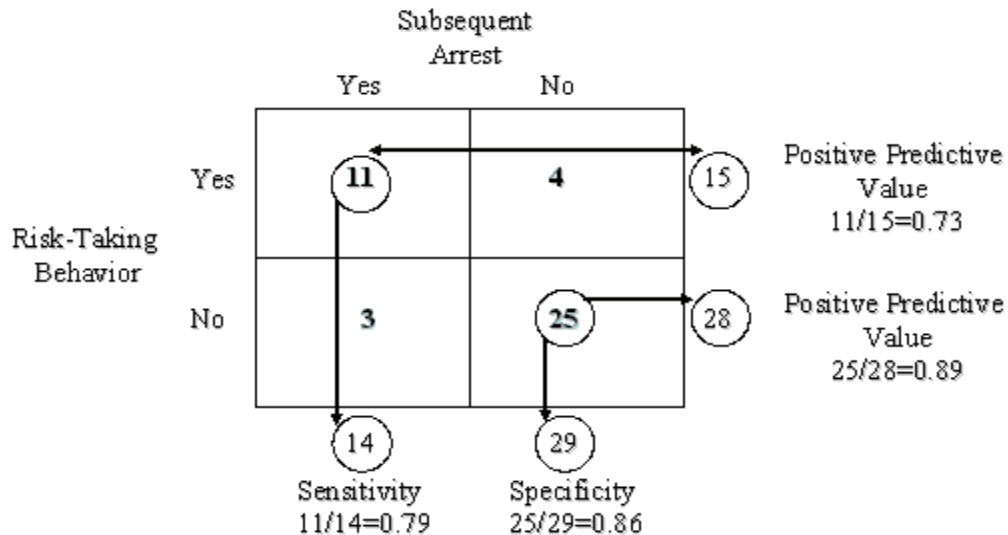
| Risky behavior threshold | Number of risky behaviors | Number of high-risk probationers | Number with subsequent arrests | Percent of probationers within a risky behavior threshold with a subsequent arrest |
|--------------------------|---|----------------------------------|--------------------------------|--|
| 1.0 | 0-1 | 28 | 3 | 11 |
| 2.0 | 2-3 | 9 | 5 | 55 |
| 3.0 | drug use > marijuana plus deceptive responses | 6 | 6 | 100 |
| Total | | 43 | 14 | 33 |

The sensitivity of the test is 0.79. Specifically, the probability that a predicted subsequent arrest actually happened is 0.79, (11/14). The specificity of the test is 0.86. That is, the absence of indications of elevated risky behaviors correctly identified 86 percent of the men with no subsequent arrests in the study period, (25/29). The accuracy of the test, the number true positives and true negatives identified, is 0.84 (36/43). This

simple index has an empiric ROC area of 0.85; this qualifies it as a good test.¹⁵ The 0.95 confidence interval for ROC/AUC is 0.71-0.94, p=0.0001. The power of the sample for 43 high-risk probationers is 0.80 with an alpha of 0.05. Chart 3, Indications of Risky Behavior and Subsequent Arrests Based on Polygraph Responses, illustrates the outcomes discussed here.

¹⁵ Binary data (arrested, not arrested) are the basis for the ROC/AUC calculations. Using a binary scale and if the data are distributed toward the extremes (e.g., in the near-term the police do not rearrest most criminals) the AUC measure is likely to be underestimated. As an alternative test, the ROC/AUC was calculated with integer data, a proxy for continuous data. The transformation of the data into a continuous or integer scale largely eliminates the bias. The fitted ROC Area using continuous data is 0.893, marginally different from the empiric AUC of 0.853 measured by the trapezoidal rule. Seong Ho Park, Jin Mo Goo and Chan-Hee Jo, *Receiver Operating Characteristic (ROC) Curve: Practical Review for Radiologists*, *Korean J. Radiology*, March 2004 Calculations based on Eng, J. (n.d.). ROC analysis: web-based calculator for ROC curves. Retrieved from <http://www.jrocfite.org>.

Chart 3. Indications of Risky Behavior and Subsequent Arrests Based on Polygraph Response



Area under receiver operating characteristic curve (ROC = 0.85)

As noted, the study condensed the polygraph pre-test information and the polygrapher's judgment about deceptiveness into a three-point scale. The first two points of the scale rely on a simple count of four behaviors: (1) drug use other than marijuana; (2) continued abuse of adults and children; (3) firearm ownership or handling; and (4) a deceptive polygraph test result as judged by the polygrapher. The third point on the scale is a combination of admitted drug use other than marijuana, plus a deceptive response to the polygraph questions.

The accuracy of the test, the number of true positives and the number of true negatives identified, was 84 percent (36/43). If the scale omitted deception as an ingredient, the accuracy of the test is 74 percent (32/43). Although this is not a significant difference in this small study sample, a difference of this size would be significant in a larger ongoing risk management program. Thus, although the pre-polygraph test based on the bogus

pipeline effect is critically important, the polygrapher's interpretation of the test is an important ingredient in an ongoing program.¹⁶

Previous Efforts to Predict Batterer Recidivism

The literature that has developed around the problem of predicting batterer recidivism and violent recidivism of men on probation provides a comparative measure of the value of the study results described here. A diagnostic question arises as to what is a test for the reasonable sorting of domestic violence offenders between those who have an elevated risk of re-offense and those whose risk is not elevated, although not likely zero.

At the local level, the police, the Solicitor, the courts, and probation routinely administer legal and extra-legal assessments of dangerousness and the risk of repeated offenses. The police determine whether to make an arrest. The Solicitor continues the assessment using several legal, extra-legal,

¹⁶ It is important to understand that risk-management tools are imperfect. For example, in this study, one participant had zero risky behaviors, but the police arrested him for drug possession with intent to distribute.

and bureaucratic criteria, including the priority that the Solicitor affords domestic violence cases. The effect of the police and Solicitor's assessment is to group cases between those the police decline to arrest or the Solicitor declines to pursue and cases where there is an arrest and the evidence of assault is sturdier or the crime more serious. This leaves the Solicitor room to plea bargain the case with a resultant disposition by the court that usually includes probation, no violent contact, and mandated attendance at a batterer treatment or anger management program. Probation may, after adjudication, further assess the dangerousness of the abuser, either formally or informally, and enhance the offender's probation process. The outcome of this local police-solicitor-probation assessment process provides much of the grist for the formal assessments developed by criminal justice researchers.

There is agreement in the criminal justice literature that men the courts convict of violent crimes and have a history of previous crimes have an elevated risk of recidivating either violently or nonviolently. Hilton, Harris, & Rice (2001) write as follows with regard to the evidence of the common characteristics of men that criminal justice agencies prosecute for wife assault:

The growing research on predictors of wife assault shows that several static (i.e. fixed and/or unchanged by treatment) offender variables are correlated with recidivism, including age, duration of prior violence, substance abuse history, violence in family of origin, antisocial behavior including generalized aggression and nonviolent offenses, and a diagnosis of personality disorder. These variables also predict both general and violent recidivism among a wide variety of offenders...and there is little empirical evidence as to whether there are unique predictors of wife assault.

Loretta J. Stalans and her colleagues, who focused their research on violent recidivists, suggest, in contrast, that separate tests for generalized aggressors, family only aggressors, and non-family only aggressors may provide better accuracy in the prediction of violent recidivism (Stalans, Yarnold, Seng,

Olsen & Repp, 2004). Stalans and her colleagues focused on recidivism during the probationary period.

To assist the probationary process and allow probation to target its resources on the most serious cases, the probation agency needs proximal measures of dangerousness and recidivism. The method of assessment should focus on domestic violence criminals who are likely to fail within the probationary period. Typically, probation officers consider a lack of probationary compliance a technical violation, which returns the offender to court after his re-arrest. While noncompliance may be a significant predictor of recidivism, the response of probation and the courts does not normally provide an effective rehabilitative response. The usual response to the disruption of the probationary process is for the probation officers to request a warrant from the court for the man's arrest. If the court complies, it is the task of the sheriff or police to arrest the absconder, which may not happen. When it does happen, the court's response is uncertain. It may reinstate probation, levy a fine, or the court may revoke his probation, jail the offender for a brief period, and close the case. If the police arrest the absconder for a new crime, the probationary infraction is likely to be a minor concern.

The specific concern during probation should be on reducing the dynamic behaviors that support violent criminal thinking, recidivism, and noncompliance. The task, then, is to develop a test based on dynamic needs so that the prediction of recidivism has an operational analog for deterrence and habilitation.

Moreover, from a criminal justice viewpoint, the concern is for the offender to desist from all criminal behavior, not simply violent behavior, or domestic violence. Operationally, a probation department's assessment of recidivism and violence can be initially achieved by distinguishing between men who have previous convictions for substance abuse (e.g. DUI, possession of illegal substances, possession with intent to distribute and other substance abuse crimes), and a range of violent crimes, including domestic violence. Although this is a rough way to identify high-risk offenders, there is evidence that it works. In a longitudinal study

of men arrested for domestic violence, those convicted of substance abuse and personal assault prior to their study index crime of domestic violence had a criminal career, of continued domestic assault and other crimes, with a median length of 20 years. Those abusers who did not have these prior crimes had a median criminal career of 11 years. (Wilson & Klein, et al., 2006)

The data from this longitudinal study of batterers afforded the development of a diagnostic instrument with regard to the likelihood of the men's recidivism during the next nine years using a three-point scale. The scale was

1 = no crime against a person or arrest for substance abuse prior to their arrest for domestic abuse;

2 = an arrest for either substance abuse or a crime against a person;

3 = an arrest for both substance abuse and a crime against a person prior to their index domestic abuse arrest.

The accuracy of this simple test was equivalent to more complex instruments found in the literature. Specifically, the fitted ROC Area Under the Curve (AUC) for repeat crime including DV = 0.77, the accuracy = 0.77, and the sensitivity = 0.86. The specificity was 0.54. This qualifies as a test with fair quality. When the abusive person is under court supervision, probation can intervene with men who are likely to recidivate prior to their recidivism without the lengthy court process required by a new arrest. On this point, Donald Dutton and P. Randall Kropp (2000) write:

... (T)he evaluator should always consider the implications for risk management. The process of risk assessment should not *conclude* with a prediction of dangerousness or lethality – this is only the beginning. The evaluator should then formulate a risk management plan *aimed at specific risk assessment variables, particularly those dynamic variables that might change over time*. Such a plan can be linked to the risk factors that are present and absent.... It is...the true goal of the

evaluator is to prevent violence, not predict it (*Italics added*).

If the courts or its agents target the risk management plan at specific risky behaviors that might change over time, then it is necessary to retest the probationer for the continuing presence of behaviors associated with and predictive of recidivism. Static variables by definition are immutable, and although they may be a contributing part of a test that predicts recidivism, a test that relies on dynamic variables is necessary to assess an abuser's progress toward desistance. What Donald Dutton and P. Randall Kropp implicitly suggest is a two-step process. The first step is a test that identifies those who are likely to recidivate. The second step is a diagnostic tool based on dynamic variables that are mutable over time but predict recidivism with acceptable accuracy. "Acceptable accuracy" is, of course, a matter of judgment. If this is achievable, then the domestic violence community, probation in particular, can integrate the treatment of these predictive dynamic traits into rehabilitative batterer programs.

Static variables are prominent in predictive models of domestic violence recidivism described in the literature. The literature emphasizes, reasonably, the reworking of previous domestic violence research and in several cases validates the results on cohorts of abusers. Although researchers have made considerable effort to develop tests that identify likely domestic violence recidivists, probation officers cannot readily integrate them into the probation process, unlike the simple tests suggested in this study.

The risk instruments found in the literature are not parsimonious in their data requirements or within the administrative capacity of most probation departments. To apply them, the instrument user needs to refer to multiple data sources, often located in weakly cooperating multiple agencies, as well as interviews with victims and abusers. For example, the Spousal Abuse Assault Risk Assessment (SARA) as described by Dutton and Kropp (2000) includes interviews with the accused and the victims, standardized measures of physical and emotional abuse, measures of drug and alcohol abuse, and a review of collateral records such as police

reports, criminal records and available psychological procedures or records. The result is that instrument users, if they attempt to use the instrument at all, are likely to compute scores based on incomplete data. Researchers have not generally tested the robustness of their instruments.¹⁷ In addition, this study suggests that reliance on police reports and testimony by perpetrators and victims are likely to be deficient sources of data.

Finally, the domestic violence literature focuses on domestic violence recidivism, while the concern of probation officers is with all criminal activity. It is

desirable that measures of recidivism are inclusive of other crimes rather than restricted to domestic abuse; especially because it is common for high-risk men who are domestically abusive to be generally criminal.

The advantage of a parsimonious test is that local officials can calculate a useful index with data available within the agency and with available administrative capacity. Local data, used to determine risk initially, will take into account the local context such as the responses of the police, the prosecutor, and the courts to domestic abuse and other crimes.

Table 7. Comparison of Instruments Designed to Predict Domestic Violence Re-abuse

| Predictor Instrument | ROC/AUC | Follow-up Period | Instrument Purpose | Source |
|---|---------|--------------------|---|---|
| Danger Assessment Scale (DAS) | 0.73 | 15 months* | Repeat DV violence | D.Alex Heckert, Edward W. Gondolf |
| Spousal Assault Risk Assessment (SARA) | 0.64 | 15 months* | Repeat DV violence | D.Alex Heckert, Edward W. Gondolf |
| Kingston Screening Instrument for Domestic Violence Offenders (K-SID) | 0.57 | 15 months* | Repeat DV violence | D.Alex Heckert, Edward W. Gondolf |
| Violence Risk Appraisal Guide (VRAG) | 0.75 | 10 years | Violent wife reassault | N.Zoe Hilton, Grant T. Harris, Marnie Rice |
| Level of Supervision Inventory - Revised (LSI-R) | 0.73 | 5 years | Repeat offense | R.Karl Hanson & Suzanne Wallace-Capretta |
| Domestic Violence Screening Instrument (DVSI) | 0.65 | 18 months | Repeat DV violence | Kirk R. Williams, Amy Barry Houghton |
| Violent Recidivism on Probation (VRP) | 0.67 | Offender probation | Violent recidivism by violent criminals | Loretta J. Stalans, Paul R. Yarnold, Magnus Seng, David Olson, Michelle Repp. |
| Woman's perception of safety from DV | 0.64 | 4 months | Violent DV recidivism | A Weisz, R. Tolman, D. Saunders |
| Multinomial model + women's perceptions | 0.83 | 15 months | Violent DV recidivism | D.Alex Heckert, Edward W. Gondolf |
| Polygraph evidence of continuing probationer risky behaviors | 0.85 | 12 months | All arrests | Douglas Wilson, et al. |

*Based on data collected by Edward Gondolf in four cities.

¹⁷ A common procedure in developing instruments predictive of recidivist behavior is to include variables based on a stepwise regression procedure. This implies that each added variable is informative. See for example, N. Zoe Hilton, et al., *A brief actuarial assessment for the prediction of wife assault recidivism: The Ontario domestic assault risk assessment*, *Psychological Assessment*, Vol 16(3), 2004, p.267-275. Stepwise regression is not a recommended procedure. Peter Kennedy, *A Guide to Econometrics*, Second Edition, The MIT Press, 1985, p.50, writes: stepwise regression is to be avoided. The estimates are biased.

Table 7 provides a comparison based on the ROC/AUC of several instruments designed to test for the likelihood of domestic violence re-abuse. The results, based on Thomas Tape's assessment of predictive value, range from poor to fair; specifically from 0.57 to 0.75 (Tape, nd). Edward Gondolf and D. Alex Heckert (2004), however, have developed a composite index, which relies, in part, on victim responses, with a ROC/AUC of 0.83. The median ROC for the nine risk instruments, excluding this study, in Table 7 is 0.67; overall a poor quality test result.

A comparison of the polygraph results of this study and the recidivist predictive instruments in Table 7, suggest several points. The research of Stalans and her colleagues' illustrates salient points of comparison. The polygraph study's focus, was on the probationary period. This is desirable. The Stalan's study used classification tree analysis (CTA), as well as logistic regression, and focused on static demographic variables and criminal history and dynamic variables based on violation of current probation conditions. The approach was sophisticated, not simple. The technique required to build the Stalan's predictive tool specific to a locality is beyond the capacity of a probation department, although a contractor could provide the required technical assistance.

The required data were available within probation department files. This is also desirable. Stalans and her colleagues did not investigate how probation officers could connect the predictive results to probationer habilitation. It was outside the scope of the study; as was often the case in analogous research. Its predictive strength was poor to fair (0.63-0.71), as is true of other measurements described in Table 7. Its sensitivity was a disappointing 0.352, compared to 0.79 for the polygraph testing; its specificity was 0.884, compared to 0.86 for diagnostic test developed with polygraph data.

Finally, looking beyond the research of Stalans et al. (2004), there is support for the hypothesis that probation departments can construct fair to good predictive models of high-risk violent probationers from criminal history data and use polygraph testing during probation to monitor dynamic factors with

good predictive power. As Dutton and Kropp (2000) noted earlier, the purpose of predictive models is not simply to predict, but to relate the prediction to evidence-based efforts of habilitation.

Study Conclusions

This study focuses on an examination of whether information gained from a post-conviction polygraph of high-risk domestic violence probationers is predictive of near-term subsequent offenses and is thus a useful risk management tool. The group psycho-educational setting of batterer intervention programs is not suited to the integration of individual information from polygraph results. Many states regulate the structure and process of their domestic violence intervention programs leaving little room for broad experimentation. Batterer program facilitators rarely intervene with regard to the criminogenic needs exhibited by high-risk probationers in their pre-polygraph interviews. The focus of traditional batterer programs is narrow and neglects issues of chronically abusive behavior toward men as well as women, substance abuse, involvement with firearms, and chronic criminal behavior. Domestic violence intervention protocols do little in the way of managing the recidivism risk of assigned probationers.

The study indicates that the enrollment of high-risk men in a FVIP does not deter the likelihood of a subsequent arrest for men who have underlying risky behaviors. This is an expected result given that FVIP programs do not deal with the range of risky behaviors associated with domestic violence; a range of risky behaviors that are also associated with other criminal acts.

On the other hand, this small study suggests that polygraphy can assist probation departments to monitor effectively the risky behaviors of probationers who have an elevated risk of continuing criminal behavior and direct high-risk domestic violence probationers to habilitation programs that may reduce the risk of recidivism. While the small sample of tested probationers in this study militates against proof of effectiveness the evidence is intriguing, and is in the expected direction given the outcome of earlier psychological and criminal justice research.

The demonstration worked within the operational processes of the DeKalb County criminal justice system, which is similar in its operations to many urban probation departments, and provides insight into how the polygraph could be an effective strategic tool if the local criminal justice system supported a policy decision to utilize it.

Polygraphy appears to have five benefits in the management of high-risk domestically violent men.

- Polygraphy appears to provide information that can support good prediction of near-term recidivism.
- Standard polygraphy practice affords retesting every three to six months or longer to determine if habilitative interventions, ordered because of polygraphy test information, have reduced the probationer's recidivism risk.
- The pre-polygraph interview provides a broader range of information about criminogenic behaviors, than is provided by narrower tests such as urinalysis. Probation, however, needs both tools. They are reinforcing.
- The polygraph tool helps the probation officer and intervention facilitators to distinguish between the probationer's contextually appropriate behavior, as exhibited during FVIP sessions or meetings with probation officers, and the probationer's more closely held beliefs, feelings, and actions; i.e., it provides the officer or facilitator with the needed "bogus pipeline."
- Probation can integrate polygraph results, especially pre-test interview results and the polygrapher's interpretation into protocols for the contingent management of these high-risk probationers.¹⁸

The polygraph is not simply a stand-alone instrument. It is best when the criminal justice system integrates it into a reorganized probation system. Probation must support this improved risk management with swift accountability. Polygraphy, because it can be an effective method of monitoring probationer behavior requires follow-up, otherwise the testing will simply demonstrate to the probationer that he can continue his risky behavior with impunity.

For polygraphy to be an effective probation risk management tool, it is necessary that men whom the court has placed on probation comply with their sentence. Probation cannot give polygraph tests to men who do not appear. Probation, at its core, is a cooperative relationship between the probation officer and the probationer. Probation departments do not have sufficient enforcement capacity to prevent opportunistic defections from probation, and probationers, especially those criminals the court has probated often, understand that the likelihood of arrest upon defection is modest. In this study, 46 percent of the high-risk domestic violence probationers in the cohort either did not meet with their probation officers or failed to enroll in a family violence program (FVIP) and then stopped complying with Probation.

Although probation officers in DeKalb County have the power to arrest absconders, the DeKalb County Sheriff's office usually makes the arrests based on a court-issued warrant or the police arrest the absconder during the initial investigation of another crime. The enforcement capacity in DeKalb County, as is generally true of probation, is such that the likelihood of arrest of a defecting probationer is modest. During the study period, the police or the Sheriff arrested 34 percent of the absconding men, and the median length of time between the probation infraction and the issuance of the warrant is 150 days.

Swift accountability, as this study illustrates, is difficult to accomplish. High-risk probationers, who fail to report to

¹⁸ For a discussion of contingent management in the framework of community corrections see Faye S. Taxman, *The Role of Community Supervision in Addressing Reentry from Jails*, Urban Institute Reentry Roundtable, June 2006.

probation, fail to enroll and attend a FVIP, as well as those who attend their FVIP sessions all need improved monitoring, although probation may require different tools to respond to the varieties of noncompliance.

Targeted polygraphy applied to high-risk domestic violence criminals is likely to have its greatest effect in an agency with computerized administrative capacity, which rapidly identifies absconders, has support from a Sheriff that places priority on the swift arrest of these men, and has routine drug testing with certain consequences, whether it is a brief jail sentence, enrollment in a substance abuse program or both.

In addition, a probation officer's domestic violence caseload and training must be commensurate with the officer's tasks. In a behavioral management demonstration, initiated in Maryland, labeled Proactive Community Supervision (PCS), the Maryland Department of Corrections, and Rehabilitation reduced the community supervision caseload to 55 from 100. (Taxman, 2006)

Given the limited enforcement capacity of probation departments, limited administrative capacity, and the requirement of probationer cooperation, it is strategically important that probation identify high-risk probationers, target the management of their behavior, and apply the department's enforcement capacity with celerity to respond to men who trespass beyond the boundaries of their probation. Such an enforcement strategy that focuses on the lesser number of high-risk domestic violence probations may serve to warn other less risky probationers that the Probation Department is able to act swiftly and thus deter them from probation defection.

Effective targeted use of polygraphy along with operational changes may result in more effective domestic violence community corrections programs. On the other hand, simply adding polygraphy to a probation department's current domestic violence operations may be less rewarding and fail to gain the leverage that the instrument can provide.

References

- Appel, A.E., & Holden, G.W. (1998). The co-occurrence of spouse and physical child abuse: A review and appraisal. *Journal of Family Psychology*, 12(4), 578-599.
- Babcock, J., Green, E., & Robie, C. (2003). Does batterer treatment work? A meta-analytic review of domestic violence outcome research. *Clinical Psychology Review*, 23(8), 1023-1053.
- Campbell, J., Webster, D., Koziol-McLain, J., Block, C., Campbell, D., Curry, M.A., Gary, F., Glass, N., McFarlane, J., Sachs, C., Sharps, P., Ulrich, Y., Wilt, S., Manganellow, J., Xu, X., Schollenberger, J., Frye, V., & Laughon, K. (2003). Risk factors for femicide in abusive relationships: Results from a multi-site case control study. *American Journal of Public Health*, 93(7), 1089-1097.
- Durose, M.R., Wolf Harlow, C. & Langan, P.A., Motivans, M., Rantala, R.R., & Smith, E.L. (2005). Family violence risk statistics, including statistics on strangers and acquaintances. Bureau of Justice Statistics. Available at <http://bjs.ojp.usdoj.gov/content/pub/pdf/fvs06.pdf>.
- Dutton, D.G., & Kropp, R. (2000). A review of domestic violence risk instruments. *Trauma, Violence and Abuse*, 1, 171-182.
- English, K. (n.d.). Some thoughts about treatment efficacy and the polygraph, *California Coalition on Sex Offending Newsletter*, Spring, n.d.
- Fawcett, T. (2006). An introduction to ROC analysis. *Pattern Recognition Letters*, 27(8), 861-874.
- Hanson, R.K., & Wallace-Capretta, S. (2000). Predicting recidivism among male batterers. Department of the Solicitor, Canada. Report number 2000-06.
- Heckert, D.A., & Gondorf, E.W. (2000). Assessing assault self-reports by batterer program participants and their partners. *Journal of Family Violence*, 15(2), 181-197.
- Heckert, D.A., & Gondorf, E.W. (2004). Battered women's perception of risk versus risk factors and instruments in predicting repeat reassault. *Journal of Interpersonal Violence*, 19(7), 778-800.
- Hilton, J.Z., Harris, G.T., & Rice, M.E. (2001). Predicting violence by serious wife assaulters. *Journal of Interpersonal Violence*, 16(5), 408-423.
- Jones, E., & Sigall, H. (1971). The Bogus Pipeline: A new paradigm for measuring affect and attitude. *Psychological Bulletin*, 76, 349-364.
- Kennedy, P. (1985). *A guide to econometrics, second edition*. The MIT Press.
- Office of Technology Assessment (1983, November). Scientific Validity of Polygraph Testing: A Research Review and Evaluation: A Technical Memorandum. OTA-TM-H-15. Washington, D.C.
- Quigley-Fernandez, B., & Tedeschi, J.T. (1978). The Bogus Pipeline as lie detector: Two validity studies. *Journal of Personality and Social Psychology*, 36, 247-256.
- Roese, N.J., & Jamieson, D. (1993). Twenty years of Bogus Pipeline research: A critical review and meta-analysis. *Psychological Bulletin*, 114(2), 363-375.

- Tape, T.G. (nd). Interpreting diagnostic tests. Available at: <http://gim.unmc.edu/dxtests/default.htm>.
- Taxman, F. (2006). Assessment with a flair: Offender accountability in supervision plans. *Federal Probation*, 70(2), 2-7.
- Sigall, H., & Page, R. (1972). Reducing attenuation in the expression of interpersonal affect via the Bogus Pipeline. *Sociometry*, 35, 629-642.
- Stalans, L.J., Yarnold, P.R., Seng, M., Olsen, D., & Repp, M. (2004). Identifying three types of violent offenders and predicting violent recidivism while on probation: A classification tree analysis. *Law and Human Behavior*, 28(3), 253-271.
- Swets, J.A. (1988). Measuring the accuracy of diagnostic systems. *Science*, 240(4857), 1285-1293.
- Weisz, A., Tolman, R., & Sanders, D. (2000). Assessing risk of severe domestic violence: The importance of survivors' predictions. *Journal of Interpersonal Violence*, 15, 75-90.
- Williams, K.R., & Houghton, A.B. (2004). Assessing the risk of domestic violence reoffending: A validation study. *Law and Human Behavior*, 28(4), 437-455.
- Wilson, D., & Klein, A. (2006). A longitudinal study of a cohort of batterers arraigned in a Massachusetts District Court 1995-2004. BOTEK Analysis Corporation, National Institute of Justice 2004WBGX0011.

APPENDIX: VICTIM HISTORY OF DOMESTIC VIOLENCE SURVEY

Victim History of Domestic Violence

Interviewee survey number xxxx

Please read these instructions: The Georgia Commission on Family Violence requires that, in cases of domestic violence in which the defendant has been convicted, a Victim Liaison contact the victim to learn about the incident and the past history of abuse by the defendant to help with safety planning and suggest services that may help you.

The Victim Liaison is also required to try and contact you whenever there is a change in the probation status of the defendant, such as when he is no longer enrolled in the Family Violence Intervention Program, rearrested, completes probation or, if on the basis of his behavior at the Family Violence Intervention Program, a counselor considers that you are in danger.

The purpose of this questionnaire is to collect the needed information about your abuse. If you would prefer to answer these questions on the telephone, please call 1-800- xxx-xxxx. Participation is voluntary. If you feel that you would rather not participate you may decline. You will not be penalized in any way for not responding. All of the information shared on this questionnaire is confidential, except that relating to child abuse which must be reported to the appropriate authorities. In addition, Family Violence group sessions will not use this confidential information.

In an effort to improve the effectiveness of the Family Violence Intervention Program, the National Institute of Justice, a part of the United State Department of Justice, has contracted with a private firm to tabulate the responses of these questionnaires and report the results to them. All the information received by this private firm will be protected and remain confidential. The private firm tabulating the data will not have any information that will allow them to identify any person who responds to the questionnaire. If you volunteer to allow NIJ to include these data in their research, federal law protects all your responses from use in any judicial procedures; (specifically, the Omnibus Crime and Safe Street Act, 1968, Section 3789g.)

Please circle one of the following statements:

Yes, the research study may use my unidentified responses.

No, the research study may not use my unidentified responses.

Physical Violence — Any use of size, strength, force, or presence to control or hurt someone else. There are no acceptable reasons or excuses for violence. There is nothing you could have done to justify your partner’s abuse. It is his/her choice and responsibility.

1. In the boxes below check the kind of abuse you have experienced

| | Push | Pull | Trip | Choke/ Strangle | Grab | Hold | Throw | Punch | Bite | Slap | Stab | Pull Hair |
|--|------|------|------|--------------------|------|------|-------|-------|------|------|------|-----------|
| | | | | | | | | | | | | |

2. In the boxes below check how often these abuses have happened to you in month before the defendant was *arrested*.

| | | | | | | | | | | | | |
|----------------|--|--|--|--|--|--|--|--|--|--|--|--|
| Never | | | | | | | | | | | | |
| More than once | | | | | | | | | | | | |

| | | | | | | | | | | | | | |
|---|------|------|------|--|------|------|-------|--|------|------|------|-----------|--|
| Several times | | | | | | | | | | | | | |
| 3. In the boxes below check how often these abuses happened to you <u>after</u> the defendant was <u>arrested but before he was placed on probation</u> | | | | | | | | | | | | | |
| | Push | Pull | Trip | Choke/ Strangle | Grab | Hold | Throw | Punch | Bite | Slap | Stab | Pull Hair | |
| Never | | | | | | | | | | | | | |
| More than once | | | | | | | | | | | | | |
| Several | | | | | | | | | | | | | |
| 4. In the boxes below check how often these abuses happened to you <u>after the defendant was placed on probation</u> . | | | | | | | | | | | | | |
| | Push | Pull | Trip | Choke/ Strangle | Grab | Hold | Throw | Punch | Bite | Slap | Stab | Pull Hair | |
| Never | | | | | | | | | | | | | |
| More than once | | | | | | | | | | | | | |
| Several | | | | | | | | | | | | | |
| All the questions below cover the time from when the defendant first began to abuse you to the present. In the boxes circle either Yes or No. | | | | | | | | | | | | | |
| 5. When you were first abused did you contact the police? Yes No | | | | 6. Did you first call the police when you were abused again? Yes No | | | | 7. Did you need medical care because of any abuse you suffered? Yes No | | | | | |
| 8. Did you leave where you were living to find somewhere safe? Yes No | | | | 9. Did your partner try to justify his violence? Yes No | | | | 10. Did he try to blame you for the violence? Yes No | | | | | |
| 6(a) For how long? _____ days | | | | | | | | | | | | | |
| 11. Are there ways that he thought he was the victim? Yes No | | | | 12. Has the violence gotten worse? Yes No. | | | | 13. Does he have any guns? Yes No | | | | | |
| 14. Has he ever used weapons to abuse you (guns, knives, clubs, or household items)? Yes No | | | | 15. Has he threatened you or attempted suicide or murder? Yes No | | | | 16. Do you have a restraining order against the defendant? Yes No | | | | | |
| Emotional Violence – The use of words or behaviors aimed at lowering your self-esteem, demean, isolate, belittle you or make you feel guilty. | | | | | | | | | | | | | |
| 17. Does he criticize you or put you down? Yes No | | | | 18. Does he call you names? Yes No | | | | 19. Does he control the money? Yes No | | | | | |
| 20. Does he control who you can see or have as friends? Yes No | | | | 21. Does he act jealous or accuse you of having affairs? Yes No | | | | 22. Is he often drunk because of alcohol or drugs? Yes No | | | | | |
| 23. Has he had an affair or affairs? Yes No | | | | 24. Has he ever forced or pressured you to have sex or perform sexual acts? Yes No | | | | 25. Does he use the children to manipulate you or spy on you? Yes No | | | | | |
| 26. Have the children witnessed the violence? Yes No | | | | 27. Has he threatened to take the children away? Yes No | | | | 28. Does he tell you that you are a bad parent? Yes No | | | | | |

| | | |
|--|--|---|
| 29. Has he ever threatened to harm them? Yes No. | 30. Has he ever harmed or abused them? Yes No | 31. Was the Department of Family and Children's Services involved? Yes No |
| 32. Have you ever had reason to suspect that he has sexually abused children? Yes No | 33. If you are separated, does he use visitation to threaten or manipulate you? Yes No | 34. Does he pass messages to you through the children? Yes No |
| 35 If you are separated or divorced, does he pay child support as ordered? Yes No | 36. Has he ever admitted to having a drinking or drug problem Yes No 36(a) Has he been in treatment? Yes No | 37. Have you and he ever been in couples counseling? Yes No |

Study Acknowledgements

The cooperation of DeKalb County is deeply appreciated. The goal of Kevin Batye and Roberto Riveros, Ph.D. is to improve the habilitation of batterers. It requires self-confidence and a willingness to tolerate discomfort for local organizations to welcome an outside organization to review their operations, even when the purpose is to do better.

During this study, a number of DeKalb County persons provided important help. Michelle Deutch, Victim Liaison, ably administered the survey of victim abuse and provided insight into the interpretation of the responses. Natalie Dunn and Jennifer Waindle, probation officers with the DeKalb County State Court Probation Department, developed the initial study databases. Probation officers Glenda Chatman, Sherry Coberly, and Ladonna Warner, as well as Natalie Dunn and Jennifer Waindle identified the high-risk men within their caseloads. Dan Sosnowski and Kristi Rosanski of S.O.S. Services, Inc. expertly administered and interpreted the polygraph tests. Sgt. Jay Eisner, Head, DeKalb County Police Department Domestic Violence Unit, provided the police incident reports, which were critical to understanding the circumstances and level of violence of the domestic violence incidents. Finally, two anonymous reviewers, who reviewed a study draft, provided insights and criticisms, which spurred the study's needed improvement.

NIJ, Office of Justice Programs, U.S. Department of Justice grant 2005-WG-BX-0010 supported the work. The views of this report are those of the authors and do not represent the views of the U.S. Department of Justice.