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A PROFILE OF WHO COMPLETES AND WHO DROPS OUT OF DOMESTIC VIOLENCE REHABILITATION

April A. Gerlock, PhD, ARNP
Domestic Violence Program Supervisor, VA Puget Sound Health Care System, Tacoma, Washington, USA and Clinical Assistant Professor, Department of Psychosocial and Community Health Nursing, University of Washington, Seattle, Washington, USA

Despite changes made in domestic violence (DV) programs, attrition continues to be a major problem. For this study on DV rehabilitation attrition, 62 male batterers and 31 female victims were recruited during a six month time frame from an existing batterers' program. Of the 62 batterers, one man was removed from the study, 38 dropped out of the program, and 23 made the transition from rehabilitation to the maintenance phase of the program. A logistical regression to predict completion status resulted in a Model Chi-square statistic of 31.08 ($p = .000$). Completers were more likely young, court-monitored, had lower levels of stress (SOS Inventory) and posttraumatic stress (PCL), and had higher levels of mutuality (MPDQ) in their relationships than noncompleters. The model predicted 88.89% of the noncompleters, 78.26% of the completers, and had an overall predictive ability of 84.75% for the study sample.

Public awareness campaigns and high-profile criminal cases have increased the general awareness of domestic violence (DV) as a problem during the past decade. As a result of pressure from victims' services and research, some states have mandated criteria for length and content

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Address correspondence to April A. Gerlock, VA Puget Sound Health Care System, American Lake Division, Tacoma, WA 98493-5000. E-mail: April.Gerlock@Med.VA.Gov or aprila@u.washington.edu

of batterers' rehabilitation programs. In Washington state, treatment for perpetrators of domestic violence is limited to specialized batterers' rehabilitation programs (Washington Administrative Code [WAC] 388-60, 1997). While batterers' programs often maintain an anger management component, many of the early DV programs have evolved to include a profeminist focus that helps batterers stop all forms of abuse and violence and build equality and partnership in intimate relationships (Gerlock 1997; Tolman & Edleson, 1995).

Despite the gains made in identification and intervention in domestic violence, DV continues to represent a major problem for families, communities, and nations. Attrition from batterers' rehabilitation programs may have dire consequences for the victims of domestic violence. In fact, rehabilitation dropouts have been reported to have higher rates of repeated violence than completers, up to a year after dropping out of treatment (Dutton, Bodnarchuk, Kropp, Hart, & Ogloff, 1997; Hamberger & Hastings, 1988, 1989). Noncompleters not only have higher rates of reassault, but also reassault repeatedly with higher rates of injury and bruising to victims (Gondolf, 1997).

Results of outcome studies indicate a reduction in the use of direct physical violence by men attending specialized batterer treatment programs (Gerlock, 1997). However, large numbers of men contact rehabilitation programs but attend very few sessions (Harrell, 1991). Attrition rates as high as 75% between assessment and completion of the program also have been reported (Grusznski & Carrillo, 1988). Gondolf and Foster (1991) report attrition rates from the initial inquiry to intake as high as 73%, with only 1% of inquiries actually completing eight months of counseling.

The intent of this study is to look at variables associated with DV rehabilitation attrition by revisiting some of the variables of the early studies. Additional variables that are clinically relevant to this sample and to the treatment model also are included in the comparison. Because attrition from DV rehabilitation can have dire consequences for victims, victims' reports are viewed as important to the analysis. The research questions are: How do completers and noncompleters compare on the study variables? and Can completion or noncompletion be predicted for the study sample?

VARIABLES RELATED TO DV REHABILITATION ATTRITION

A number of research methods have been employed to evaluate DV rehabilitation completion and dropout. The earliest study was a national

survey of batterers' intervention programs exploring administrators' estimates and impressions of dropouts from batterers' rehabilitation (Pirog-Good & Stets-Kealey, 1986). While not a prospective design, the study did provide useful initial information for later studies to build upon. The authors found that programs with the greatest potential for program completion were those that were short in length, utilized referrals from the legal system, and provided services for a reduced or no fee. They found dropouts more likely to be Caucasian, blue collar, and unemployed.

In a prospective design, Gruznski and Carrillo (1988) compared program completers, intake completers, and partial program completers on the following measures: demographic information, the Modified Conflict Tactics Scale (CTS; Straus, 1979), the Fundamental Interpersonal Relations Oriented-Behaviors Scale (FIRO-B; Schultz, 1967), and the Attitudes Towards Women Scale (ATW; Spence & Helmreich, 1978). The program consisted of 32 sessions using both social learning theory and cognitive behavioral formats. The sample consisted of 59 completers and 116 dropouts. A discriminant function analysis revealed that the use of indirect threats, history of abuse victimization, witnessing domestic violence in the family of origin, educational attainment, employment status, FIRO-B control expressed subscale, and the number of children in the family significantly distinguished completers from dropouts. These variables correctly classified 64.4% of those completing the entire program, 55% of those completing only the assessment, and 25% of those completing some of the program.

Hamberger and Hastings (1989) conducted a comparison of completers and dropouts and a prediction of program completion based on demographic and personality variables. The intervention program consisted of a total of 16 sessions. Their sample included 88 completers and 68 dropouts. Dropouts were younger, had lower employment levels, and higher pretreatment levels of police contact for drug and alcohol-related offenses (as well as miscellaneous offenses). The dropouts had higher levels of borderline and schizoid tendencies, while the completers had lower levels of psychopathology. A discriminant function analysis successfully predicted 71% of the dropouts on the following variables: younger age of participants, less well employed, higher average annual crime rates, higher levels on the Millon Clinical Multiaxial Inventory (MCMI; Millon, 1983) alcohol scale, and no court or probation mandate. The analysis also revealed that blacks were marginally overrepresented, and dropouts were less well educated.

An additional study using a prospective design was done by Saunders and Parker (1989). The intervention program was a 12-week,

cognitive-behavioral oriented group. A sample of 156 men entered the program; 97% of them were court referred. The authors looked at attrition occurring during the four to six week assessment phase, between assessment and entering treatment, and during the treatment phase. The authors summarized that voluntary clients older than 25, with more than a high school education, were seven times more likely to complete assessment and treatment than voluntary, young clients with no college education.

In a second analyses, Saunders and Parker (1989) looked at the overall number of sessions completed by a sample of 104 completers and 29 dropouts. They included referral sources and categorized them as deferred prosecution, probation or parole, or voluntary through other agencies. The authors found completers were significantly more likely to be employed, older, had higher incomes, more likely to report anger in work and friendship situations, and had less marital agreement. Mandated treatment improved completion for the young noncollege educated.

DeMaris (1989) looked at court-referred batterers to a cognitive-behavioral 12 session program. The sample consisted of 198 completers and 81 dropouts. Completers and dropouts were compared on social and demographic variables and seriousness of the violence (measured by the CTS). In addition, the author included two questions to assess the batterer's motivation to change. DeMaris found that younger men, with lower incomes, unemployment, prior arrests, self-identification as a drinker, and those whose motivation was less than 'very' likely to stop battering were more likely to drop out. Men who abused nonmarried partners, younger partners, and those who began abusing partners before marriage also were likely to drop out. In the logistical analysis, only age (younger men) was significant at the $p < .05$ level and prior arrest at the $p < .10$ level in predicting dropout.

The studies of the 1990s reflect some of the same themes as the earlier studies while adding some additional ways to conceptualize dropout from DV programs. Cadsky and colleagues (Cadsky, Hanson, Crawford, & Lalonde, 1996) looked at attrition from a brief 10-week cognitive-behavioral program. Drawing from the largest sample of all the studies ($n = 526$), the authors again looked at demographic variables commonly associated with DV rehabilitation attrition as well as alcohol history and usage (Short-MAST), criminal history, and court mandate. In addition they included witnessing and being abused, level of violence towards partners (CTS & Buss-Durkee Indirect Hostility; Buss & Durkee, 1957), marital adjustment/relationship (Dyadic Adjustment

Scale, DAS-Cohesion; Spanier, 1976), prior mental health treatment, and personality variables. Of their sample, 132 (25%) completed the entire 10-week program. Dropouts were younger, court mandated, less likely to be identified as having marital problems and indirect aggression, witnessed parental violence or were abused, drank more, had more extensive criminal histories, and had a negative evaluation of themselves. The results of the multiple regression analysis correctly identified completers at the $p < .05$ level for the following variables: being self-referred, fewer household moves, and less marital cohesion (DAS Cohesion).

The most recent study on batterers' attrition (DeHart, Kennerly, Burke, & Follingstad, 1999) looked at attrition from a brief 12-week support group. Of their sample of 61, 90% failed to complete the program. The authors investigated demographic data, including miles traveled to attend, clinical disorders (MCMI), social rigidity, self-disclosure, attitudes towards counseling, and relationship violence (CTS). They introduced a measure of external monitoring by introducing the variable "someone checking" (p. 29). They found that completers traveled further to attend sessions and were more likely to have someone monitoring their attendance. These two variables resulted in correct classification for 50% of the cases. No other variables were found to be significant.

The program lengths in these studies were highly variable, ranging from 10–32 weeks with only one program longer than four months. The programs ranged in focus from support to structured cognitive-behavioral programs designed to stop all forms of abuse and violence. These factors alone may make comparison of studies over time difficult. However, there are common threads in the findings thus far. Age, employment, substance usage, criminal history, and court-mandated status generally demonstrate some relationship to DV program completion. Relationship measures, other than marital status, also show promise in being related to DV program completion. Also, psychological indices may demonstrate relevance in predicting rehabilitation completion. Newer studies introduced variables designed to measure motivation and the impact of monitoring.

PURPOSE AND DESIGN OF THE STUDY

This study examines variables already established from prior research (e.g., age, employment, criminal history, alcohol/drug history,

court-mandate for treatment, level of intimate violence, and witnessing DV). It addresses the issue of monitoring by adding the variable of court monitoring. Monitoring through the courts takes place either through scheduled reviews with the judge or face-to-face monthly appointments with a probation officer.

The program model in this study is designed to help batterers stop all forms of abuse and violence and build equality in relationships. It is anticipated that men who are interested in building equality in intimate relationships are more likely to complete DV rehabilitation. The relationship between intimate equality and battering has received little attention thus far. In a study of 30 self-identified battered Latina immigrants and 30 nonbattered Latina women, Perilla, Bakeman, and Norris (1994) attempted to measure this relationship. They found, among other variables, that battered Latina women perceived less mutuality in their intimate relationship than the comparison women. Assessing relationship equality, through an instrument measuring mutuality in the relationship, may provide another way of looking at readiness to change and willingness to complete rehabilitation.

The question of how psychological factors affect DV attrition has been addressed in prior attrition studies. Hamberger and Hastings (1989) found completers to have lower levels of psychopathology. Cadsky et al. (1996) included questions that asked about prior mental health treatment, suicidal thoughts and actions, and negative evaluation of DV rehabilitation participants. Lastly, DeHart et al. (1999) were interested in whether clinical manifestations of personality disorder, psychotic symptoms, dysthymia, depression, or anxiety (among others measured by the MCMI) were related to program completion. Because the batterers' sample assessed in the present study is exclusively military veterans and active duty military, many of the men have been seen for posttraumatic stress disorder (PTSD), depression, and other stress-related disorders. Therefore, two scales were added to measure symptoms of both stress and posttraumatic stress. The batterers' "negative evaluations of themselves" (Cadsky et al., 1996, p. 59) were measured using a self-esteem instrument.

Lastly, this study differs from all prior attrition research by including responses from victims. The Washington State Administrative Code for batterers programs (WAC 388-60, 1997) mandates the guiding principles of victim safety, victim autonomy, and batterer accountability for batterer treatment programs. In an effort to include the views of victims, several questions and two instruments were added to determine if a relationship to batterer completion existed.

METHOD

Community Context

The batterers for this study were recruited from an existing state-certified DV rehabilitation program in the Puget Sound area of Washington state. Participants were veterans and active duty military attending a combined Department of Veterans' Affairs (DVA) and Department of Defense (DoD) DV rehabilitation program. Washington state has mandatory arrest policies for probable cause of DV offenses. A deferred sentence with DV rehabilitation is one possible option for arrested batterers. Domestic violence victims are provided a victim's advocate by the court. The program studied had no out-of-pocket treatment expenses for the participants.

Batterers given the deferred option of state certified rehabilitation enter programs that are a minimum of one-year in length and that meet state standards for batterers' rehabilitation (WAC 388-60, 1997). Completion is defined by satisfactory completion of rehabilitation and is not based solely on the number of sessions attended. In addition, batterers must self-identify that they have a DV problem and victims are notified in writing of their abusers' standing in the program. Rehabilitation takes place in weekly group sessions.

Procedure

Men seeking DV rehabilitation from June 1997 through December 1997 were recruited following a recruitment protocol. Those that met the Washington state and program criteria and who decided to enter the program were invited to participate in the study. Two assessment interviews were conducted by DV program staff. The research participants were given eight instruments to complete at either the initial or second interview (see Table 1 for complete listing of instruments). When assessment interviews were completed, the batterers entered a four weeks orientation class that met for two hours a week. The intensive rehabilitation phase followed the orientation phase and was a minimum of 26 weeks, with weekly two hour meetings. An adaptation of the curriculum-based program developed by the Duluth Domestic Abuse Intervention Project, referred to as "Education Groups for Men who Batter: The Duluth Model" (Pence & Paymar, 1993), was utilized.

Transition from one phase to the next is based on meeting behavioral transitional protocol. In order to better compare the results of this study to others, completion was defined as the transition from the intensive

TABLE 1. Study Instruments and their Relationship to Rehabilitation Completion

Instrument name	Completed by:	Significance/nonsignificance
Demographic interview	Batterer and victim	Batterers employment*
		Batterers age*
Domestic violence history of batterer	Batterer and victim	Batterer court mandated*
		Batterer court monitored*
		Batterers assault charges (per victim report)*
		Batterers level of general* violence (per victim report)
Symptoms of Stress Inventory (SOS)	Batterer	SOS overall*
		SOS subscales (neurological, habitual patterns, depression, anxiety/fear, anger, cognitive disorganization)*
Self-esteem Rating Scale (SERS)	Batterer	n.s.
Brief Michigan Alcoholism Screening Test (MAST)	Batterer	n.s.
Drug Abuse Screening Test (DAST)	Batterer	n.s.
PTSD Checklist (PCL)	Batterer	PCL*
Conflict Tactics Scale (CTS)	Batterer	n.s.
Abusive Behavior Inventory (ABI)	Batterer and victim	n.s.
Mutuality Psychological	Batterer and victim	MPDQ- A(self)*
Develompment Questionnaire (MPDQ) Form A		MPDQ-A(partner)*
Mutuality Psychological Development Questionnaire (MPDQ) Form B	Batterer	MPDQ-B*

* = Statistically significant difference between completers and noncompleters.
n.s. = Nonsignificant.

rehabilitation to the once-a-month maintenance phase. At this point batterers have attended a minimum of seven months of intensive weekly rehabilitation. Some have attended for nearly one year. In addition, they have met behavioral transition criteria, are maintaining nonabusive behaviors, and building partnership in intimate relationships. Batterers transition when they have halted all physical violence, halted their *pattern* of psychological abuse and control, remain drug and alcohol free, complete all written homework satisfactorily, stop all blaming and

justification of abusive behaviors (both written and oral), remain in compliance with all court orders, identify a personal support system for remaining nonabusive, and present a personal review to the group leaders and group for feedback. A victim or community contact verifies the above.

This study is unique in gathering information about the batterer's behavior from the victim. All victims were notified, in writing, about the batterer's acceptance into the program. They were invited to participate in an interview for purposes of safety-planning, getting additional information about the program, and providing the program with information about the batterer's behavior. Victims also were invited to participate in the research study. Those consenting were given two instruments to complete at the end of the interview (see Table 1).

Participants

Sixty-two male batterers participated in the study. Forty-eight (77%) were veterans and 14 (23%) active duty military. The men were Caucasian (55%, $n = 34$), African-American (29%, $n = 18$), Latino (6%, $n = 4$), Asian American (5%, $n = 3$), Native American (3%, $n = 2$), and of mixed racial identity (2%, $n = 1$). Their ages ranged from 20–62, with a mean age of 38.81. Three men (African-American, Asian American, and Caucasian) declined to participate in the study, thus the sample represents 95% of all men entering DV rehabilitation during the six-month period specified. The men attended an average of 21.2 weekly sessions.

Thirty-one victims joined the study. Minority groups were underrepresented in the victim sample. Victims were Caucasian ($n = 22$, 71%), Asian-Amerian ($n = 4$, 13%), Latina ($n = 1$, 3%), African-American ($n = 1$, 3%), and of mixed racial identity ($n = 3$, 10%). All but three of the victims who joined the study were still married or partnered to the batterer. About half ($n = 17$) were still living with the batterer.

Research Measures

A personal demographic and battering history interview was conducted with victims and batterers. This interview instrument was modified and expanded from the standard clinical assessment previously utilized by the program. Information gathered from batterers included demographics, battering history, exposure to violence from family/community history, substance use and abuse, criminal history, and court-ordered status. The victim's interview gathered some general

demographic information about themselves and the batterer, a history of the batterer's pattern of abuse, his substance usage, and police contact.

The following nine research instruments were given to the batterers; two were given to the victims. Split-half reliability testing was conducted on each tool for overall scores and subscales (where indicated), and additionally examined for Caucasian and African American groups within the sample. For instrument psychometric properties see Gerlock (1999a).

The batterers completed the Symptoms of Stress (SOS) Inventory (Nakagawa-Kogan, Betrus, Beaton, Elmore, & Thompson, 1993) which quantified self-perception of affective, behavioral, cognitive, and physiological components of health and illness on a 5-point scale. Participants were asked the frequency with which they experienced the symptoms during the past week. Physiological scales included Peripheral Manifestations, Cardio-Respiratory, Neurological, Gastro-Intestinal Distress, and Muscle Tension. Psychological subscales included Habitual Patterns, Depression, Anxiety, Anger, and Cognitive Disorganization. Reliability testing for the research sample resulted in a Guttman split-half for the SOS overall range from .78–.93. The Caucasian group SOS subscales ranged from .57–.90, and for African-Americans, .83–.96. Due to the collinearity among the psychological subscales, a new variable called Mean Psychological was created by summing and taking the mean of each subscale.

The Self-Esteem Rating Scale (SERS) was given only to the batterers. The SERS is a 40-item instrument developed to provide a clinical measure of problematic and nonproblematic areas of self-esteem (Nugent & Thomas, 1993, 1994). The Guttman split-half reliability overall for the SERS was .95, for Caucasians .96, and for African Americans .92 for the research sample.

The Brief Michigan Alcoholism Screening Test (MAST) is a widely used and standardized instrument. Ten items of the original 25-item MAST were identified as the 10 best questions to identify alcoholism, and the short and long versions of the scale were very highly correlated in previous research (Selzer, 1971). Reliability for the research sample overall was a Guttman split-half of .90, for Caucasians .92, and for African Americans .90.

The Drug Abuse Screening Test (DAST; Skinner, 1982) is a widely used and standardized research instrument. The 28 items of the self-administered DAST parallel the items on the MAST. The internal consistency reliability (alpha coefficient) of .92 indicates that subjects were quite consistent when responding to all DAST items. A shortened version was developed using the 20 items with high item-total scale correlations (Gavin, Ross, & Skinner, 1989; Skinner, 1982). This shortened DAST

correlated almost perfectly (r = .99) to the original 28-item instrument. The Guttman split-half reliability overall for the research sample was .91, for Caucasians .85, and for African Americans .97.

The PTSD Checklist (PCL) was completed by the batterers. A self-administered rating scale for assessing PTSD (Weathers, Litz, Heerman, Huska, & Keane, 1993), it consists of 17 items that correspond to the *Diagnostic and Statistical Manual of Mental Disorders* (4th edition [DSM-IV]; American Psychiatric Association [APA], 1994) symptoms of PTSD. Subjects rate how much they have been bothered by each symptom in the past month on a 5-point scale. Guttman split-half reliability for the research sample resulted in an overall score of .95, Caucasians .93, and African-Americans .95.

The Conflict Tactics Scale (CTS) has been used primarily to measure abuse and nonabuse tactics in couple relationships. The authors have modified it for other measures of family violence as well (Straus, Gelles, & Steinmetz, 1980). Dutton (1995) used the slightly altered CTS to measure child-witnessing of parental domestic violence. In this current study a modified instrument was used asking batterers to rate their witnessing of conflict tactics used by their father and mother when they were children. Reliability scores on the Guttman split-half on the father subscale overall was .90, and on the mother subscale .93 for the research sample. For Caucasians the reliability score on the father subscale was .90, and the mother sub-scale .93. For African-Americans the father subscale reliability score was .91, and the mother subscale was .92.

The Abusive Behavior Inventory (ABI) was given to batterers and victims. It was developed to assess a wide range and intensity of physical and psychologically abusive behaviors (Shepard & Campbell, 1992). The ABI allows for matched pair analysis between male and female ratings of the batterer's abuse. It is a 30-item instrument using a five-point Likert-type scale to measure frequency of abuse. For the batterer's sample, Guttman split-half reliabilities ranged from .72 overall, .80 for Caucasians, and .78 for African-Americans. For the victim's sample, Guttman split-half reliability overall was .81, the psychological subscale .86, and the physical subscale .87.

The Mutuality Psychological Development Questionnaire (MPDQ), Form A was given to batterers and victims. The MPDQ measures perceived mutuality in close adult relationships (Genero, Miller, Surrey, & Baldwin, 1992). By including two relationship perspectives (self and other) the respondent provides a rating from his own perspective as well as his partner's. The shortened forms include 22 items with ratings ranging from "*never*" to "*all the time*" on a six-point scale. Batterers' ratings of themselves resulted in Guttman split-half reliabilities for the overall

sample of .90, for Caucasians .94, and for African-Americans .86. Batterers' ratings of their partners resulted in reliabilities overall of .85, Caucasians .88, and African-Americans .71. Guttman split-half reliabilities for the victim's sample rated .91 for the victim's 'self' subscale and .61 for the victim's 'partner' subscale.

A slight modification was made to the MPDQ (Form B) with the author's permission (N. P. Genero, personal communication, February 5, 1997). This instrument asked the batterer to rate himself on the same questions as the 'self' subscale. The only change made was the prefacing of the statement with, "It is important to me, when I talk about things." This form asked the batterer to rate the importance of these aspects of mutuality. This revised form had a correlation with the original of .73 ($p = .000$). Overall reliability for the sample was .87, for Caucasians .92, and for African-Americans .77.

RESULTS

Completers Versus Noncompleters

Batterers' Demographic Data

Sixty-two men started the study. One man (2%) was transferred to another duty station and was dropped from the comparison portion of the study. Twenty-three men (37%) made the transition from the rehabilitation phase to the maintenance phase and 38 (61%) dropped out of the program. Completers were men who met the criteria for transition from rehabilitation to maintenance. It took the men from 7–15 months to transition. Completers attended an average of 36 weekly sessions, while noncompleters attended an average of 13 weekly sessions.

There was a significant difference between completers and noncompleters on age ($t = -3.56$, $p = .002$). The mean age for completers was 33.87, and 42.16 for noncompleters. In addition, men who were unemployed, disabled, or retired were not as likely to complete. Eighty-seven percent ($n = 20$) of completers were employed or in school, while only 55% of the noncompleters had jobs or were students ($n = 21$; $X^2 = 7.07$, $p = 0.29$).

There were no further statistically significant differences on the demographic variables for the completers and noncompleters. They did not differ according to their veteran or active duty status; nor did they differ according to ethnicity when comparing Caucasians to African-Americans, or whites to nonwhites. Most (87%, $n = 54$) of the men's incomes were less than $30,000. There was no statistical difference

between completers and noncompleters on income or their educational attainment. They did not differ on their marital status or living situation. One might speculate that there would be a difference between completers and noncompleters on the substance usage variables. Over half of the men (63%, $n = 39$) self-identified that they had had substance abuse treatment; however, there were no statistically significant differences between the groups on drinking or drug usage, diagnosis of substance abuse, or self-identified abuse.

Batterers' DV and General Violence

Statistically significant differences on the DV and general violence variables included court-monitored status and treatment-mandated status. Men being monitored either directly by the court or by court probation were more likely to complete ($X^2 = 6.65$, $p = .036$). In addition, there was a statistically significant difference on the basis of court-mandated treatment ($X^2 = 9.42$, $p = .051$). All ten of the men who were in the program for other than court mandated reasons left the program. Men who entered the program with recent police involvement but no arrest, or who entered only to have orders of protection dropped, dropped out.

Also of interest was how the subjects differed on their DV and criminal history variables. There was no difference on the remaining variables including prior convictions, prior DV police response, current police involvement, jail time, charge, or protection orders. No difference was found between completers and noncompleters based on prior anger management or domestic violence treatment. No difference was noted based on their reports of witnessing DV as a child, being abused as a child, being generally violent, or assaulting prior intimates.

Batterers' Responses to Research Instruments

Comparisons were made between completers and noncompleters on the nine research instruments. Significant differences between completers and noncompleters were found on the SOS, PCL, and both forms of the MPDQ. Comparisons between completers and noncompleters on all scores were made using t-test analysis (2-way). Completers indicated that they felt less depression, anxiety, anger, and cognitive disorganization, and displayed fewer habitual patterns of stress (psychological subscales; $t = -3.50$, $p = .001$) and stress overall than did the noncompleters at the initial interview ($t = -2.84$, $p = .007$). Completers also indicated significantly lower levels of PTSD symptoms than did the noncompleters at the time of the initial interview ($t = -3.75$,

$p = .000$). Lastly, comparisons were made on how the men rated themselves and their partners on levels of relationship mutuality (MPDQ). Completers rated both themselves and their partners higher on levels of relationship mutuality than noncompleters ($t = 3.12$, $p = .003$; $t = 2.08$, $p = .04$, respectively). In addition, completers responded that mutuality in the relationship was more important to them (Form B) than did noncompleters ($t = 2.29$, $p = .03$).

No statistically significant difference, however, was found between completers and noncompleters on the remaining subscales of the SOS. Nor were differences found on the ABI overall or on the psychological or physical subscales. Differences between completers and noncompleters also failed to reach the .05 significance level on the SERS and CTS. The anticipated differences between completers and noncompleters on the substance usage scales (Brief MAST and DAST) were not found to be significant at the .05 level.

Victims' Reports

The program contacted all victims. The women participated in the research protocol to evaluate the batterer's pattern of abuse and the impact on the victim. In addition, the women were asked to complete two instruments to compare their responses to those of the batterer. There were no statistically significant differences between completers and noncompleters based on victim characteristics. Victim ages followed the men's in a normal distribution, ranging from 18–55 years old. There was no significant difference on their marital/partnered situation and the batterer's completion status. Of the married/partnered victims, 12 were partnered to completers and 16 were partnered to noncompleters. The divorced victims' partners were all noncompleters. Only two of the DV descriptive variables, based on the victims' reports, demonstrated differences between completers and noncompleters. Batterers whose victims reported that the batterer had a combination of assault and other charges were not as likely to complete ($X^2 = 6.06$, $p = .05$). Additionally, batterers' victims who reported that the batterer assaulted others were not as likely to complete ($X^2 = 6.67$, $p < .01$). As with the batterers' reports, victims' reports revealed no other statistically significant differences on the general DV variables. Similar to the batterers' reports, victims' reports of the batterers' substance usage were not significant when comparing rehabilitation completion.

Victims completed the ABI and the MPDQ to provide comparison information with the batterers' reports. The ABI partner form asks victims to rate the batterer's physical and psychologically abusive behavior in the past six months. Comparisons of the women's perspectives of the men's

abuse based on completion/noncompletion status were conducted using an independent t-test analysis. As with the batterers' data, there was no statistical difference found between the completers and noncompleters based on victim reports of his past abuse.

The other instrument completed by the victims was the MPDQ Form A. Victims were asked to rate the batterer on his level of mutuality in the relationship, and then asked to rate themselves. In contrast to the batterers' report, there were no statistical differences found between completers and noncompleters on victims' rating of batterers' mutuality. Nor were differences found in how victims rated themselves on mutuality and the batterers' completion status. However, when conducting comparisons between completers and noncompleters on the difference scores, an interesting result was found: There was a greater amount of disagreement between victims' and batterers' reports of batterer mutuality for the completers than the noncompleters ($t = 2.39$, $p = .025$).

Predicting Completion Versus Noncompletion

As is evident from the above comparisons, completers and noncompleters differ on several variables. A logistical regression analysis was conducted to determine the suitability of these variables in predicting completion or noncompletion of DV rehabilitation for the study sample. Only data from the batterers' sample were entered into the regression analysis because of the small victim sample. Two men were missing data on the MPDQ scale and they were dropped for the logistical regression. Correlation tables were computed for all the statistically significant variables to determine which variables would enter the regression analysis. Those variables entering the final analysis were based on existing research, had significant differences when comparing completion versus noncompletion, and had low collinearity.

The result of the logistical regression was a Model Chi-square statistic of 31.08 ($p = .0000$). The significant variables entering the regression analysis were age at $p = .03$, MPDQ at $p = .03$, PCL at $p = .02$, and court-monitored at $p = .73$. Only court-monitored status failed to reach significance at the .05 level. This is likely due to the small number of batterers who were not being monitored. In this study completers were more likely to be younger (<35 years of age), identify higher levels of relationship mutuality, have lower levels PTSD, and be court-monitored. On the other hand, the noncompleters were older (>35 years of age), identified lower levels of relationship mutuality, had higher levels of PTSD, and were not court-monitored. This model predicted 88.89% of noncompleters, 78.26% of completers, and had an overall

TABLE 2. Comparison of Predicted and Actual Classification of Batterers According to Completion/Noncompletion Status

	Predicted classification according to model			
Observed classification	Completer	Noncompleter	% Correct	Total sample
Noncompleter	4	32	88.89	36
Completer	18	5	78.26	23
Overall predictive ability			84.75	59

predictive ability of 84.75% for the research sample (see classification Table 2).

DISCUSSION

Historically, completion of domestic violence intervention has been low. As is apparent in this study, most of the men did not make it to the once-a-month maintenance phase of the program. It is likely that the noncompleters will continue to batter psychologically and possibly physically. They will continue to terrorize victims, model abusive behaviors to children, and set a poor example for their community. They may be visited by the police, and may even be referred to a DV program again. It is important to better understand why men complete or do not complete DV rehabilitation. The results of this study contain both expected and unexpected outcomes. Three of the significant variables distinguishin g completers and noncompleters were consistent with existing research on DV rehabilitation attrition. As expected, age, employment, and court-mandated status were important variables relating to completion or noncompletion.

While age was a significant factor in this study, it was the younger men who were more likely to complete rather than older men as noted in previous research. The mean age for completers in this study (mean age = 33.87) was consistent with the mean age for completers as found by Hamberger and Hastings (mean age = 31.9), Saunders and Parker (1989; mean age = 31.4), and nearly the same as completers in the DeMaris (1989) study (mean age = 33.4). The major difference however, is found when comparing the mean ages of the noncompleters. In this study noncompleters were 12–14 years older (mean age = 42.16) than the mean ages of noncompleters as found by Hamberger and Hastings

(mean age = 29.7), Saunders and Parker (1989; mean age = 28.7), and DeMaris (1989; mean age = 30.1).

The employment finding in this study also was consistent with prior research (DeMaris, 1989; Gruznski & Carrillo, 1988; Hamberger & Hastings, 1989; Pirog-Good & Stets-Kealey, 1986, Saunders & Parker, 1989). It was not the ability to pay that made this variable significant because there were no out-of-pocket expenses for the program. It may have been related to such things as employment and community involvement, called a 'stake in conformity' (Sherman, Smith, Schmidt, & Rogan 1992; Toby, 1957) as noted previously in the research on arrest and reoffense. There was a slight positive correlation between age and employment (Spearman's rho = .25, $p = .05$). In this study the greatest number of employed were younger than 36, with the unemployed in the 36–55 age group.

This study also was consistent with prior research on court-ordered status (Hamberger & Hastings, 1989; Pirog-Good & Stets-Kealey, 1986; Saunders & Parker, 1989). It is the first study that included court-monitoring as a separate variable. The court-monitored men were not only ordered into treatment, but also were held personally accountable through a review process through the court or with a probation officer.

Criminal history and levels of violence, on the other hand, were not found to be significantly related to rehabilitation completion in this study as they were in previous research (DeMaris, 1989; Hamberger & Hastings, 1989; Saunders & Parker, 1989). Neither did ethnicity factor into completion or noncompletion as it did in studies by Pirog-Good and Stets-Kealey (1986), Saunders and Parker (1989), and Hamberger and Hastings (1989).

It was anticipated that substance usage would be a significant variable in predicting completion and noncompletion in this study. Unexpectedly, this was found not to be the case. The substance use variables included the MAST, DAST, DUI arrests, diagnoses of substance abuse problems, reports of current drinking or using, and self-reported substance abuse problems. While completers did score lower on both the DAST and the MAST, it was only marginally significant (one-tailed t-test, $p < .10$, and $p < .05$ respectively).

The setting of this study may be unique from community settings in that both veterans and active duty military had substance abuse treatment programs available to them for no out-of-pocket expense. Program criteria mandated that batterers, identified as having a substance abuse problem, either complete or be actively enrolled in addictions treatment. In addition, the DV program staff worked closely with the addictions

staff in coordinating care, modifying treatment, and sharing pertinent information regarding the batterer's substance usage. Since substance usage has been identified as an important element in response to DV intervention, efforts had already been undertaken to better address this issue while these batterers were in rehabilitation. Underreporting is a possible explanation, because many of the men had abstinence as a condition of their probation.

Relationship mutuality is extremely important in helping men stop battering. DV rehabilitation is both a journey away from abuse and violence and a journey toward partnership and equality in intimate relationships. Both are essential if all forms of abuse and violence are to stop. As in the previous studies the general relationship variables (marital status and living situation) were not significant, but levels of relationship mutuality, as measured by the MPDQ, were. Completers rated both their own and their partner's mutuality as higher than noncompleters. Batterers' scores on the MPDQ indicated that it was either more desirable to appear to value mutuality, or it was indeed more important to them. Batterers who completed may have had an easier time working on building equality and partnership in the relationship because they valued it more.

The consequences of domestic violence are stressful (Gerlock, 1999b). In this study the men reported losing jobs, homes, marriages, and families. They reported feeling embarrassment and shame when handcuffed in front of family and neighbors. It is likely that all the men would be experiencing stress at the time of the initial interview. But would their psychological state have any bearing on their completion of DV rehabilitation? This component was studied by having the men complete the SOS Inventory and the PCL. In addition, the participants' number of mental and general health care visits in the past six months as well as their medical and psychiatric diagnoses were examined. Significant differences were found between completers and noncompleters on both the SOS and the PCL. There may be a number of explanations for the differences on the psychological indices between completers and noncompleters. Noncompleters' stress symptoms may have been more disruptive for them, thus making it more difficult to focus on the work. However, while many of the men were concurrently receiving other forms of interventions for mental health problems, there was not a significant difference between completers and noncompleters based on mental health diagnoses and number of mental health visits.

Some anecdotal reporting by veterans indicated that they were allowed to satisfy their court mandate through general and PTSD treatment and by staying on medications. This is a potential confound to the study by creating a unknown sample bias. When batterers are allowed to

satisfy court mandates through treatment modes that do not focus on the pattern of abuse and violence, or that do not hold them accountable for stopping all forms of abuse, the batterer is likely to drop out of DV rehabilitation. Continued victim contact for some of these noncompleters revealed that the men were still battering.

This sample differs from the samples in prior DV attrition research. However, it may not differ dramatically from other communities that work with active duty or veterans in batterers rehabilitation programs, as we have seen in our community (personal communication, Pepping, Pierce County Commission Against Domestic Violence, October 4, 1999). Generalizability is nevertheless limited due to the research method and sampling procedure.

RECOMMENDATIONS AND FUTURE DIRECTIONS

This study adds to the existing literature on domestic violence program attrition by providing an historical perspective on variables associated with completion and dropout. While the average age of completers in this study was consistent with the age of completers in the other studies, the noncompleters were roughly ten years older than those in the other studies. Age, employment status, and court mandate all survived the test of time as related to completion of DV rehabilitation.

This provides future direction in both judicial response as well as treatment interventions. Clearly employment and court-mandate are important. Both the employed and the court-mandated batterers have more to lose by dropping out of DV rehabilitation if noncompletion means additional jail time. Court jurisdiction should be extended to reflect the time needed for some batterers to complete DV rehabilitation. Substance use measures warrant further investigation. This study demonstrates some of the success in a coordinated effort to address this issue in DV offenders. Relationship measures also warrant additional focus, especially when rehabilitation success and completion is measured by building partnership and not just stopping abuse.

Finally, psychological indices may provide a new understanding of batterer rehabilitation attrition. This finding has ramifications for both judges and mental health providers. While general mental health followup is important to stabilize psychiatric symptoms and thus improve the response of the dually affected batterer, it should not be used as a substitute for the specific and specialized intervention available in DV programs. Domestic violence education for mental health providers should include information on how to hold violent offenders responsible for their behaviors while maintaining a therapeutic alliance and

treating psychiatric disorders. Prior or concurrent therapy for mental health disorders could be mandated as it is for substance abuse. Clear and consistent messages that do not support abuse or violence in any way should be communicated in all contacts with batterers.

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