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Attrition in Batterers Counseling - The Role of Social and Demographic-Factors

Alfred DeMaris
Bowling Green State University, ademari@bgsu.edu

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Bowling Green State University

This study was designed to assess the extent to which social and demographic characteristics predict noncompletion of therapy by spouse batterers. Characteristics that were significantly associated with noncompletion of treatment were employment status, relationship to victim, timing of abuse, arrest record, alcohol problems, motivation to terminate violent behavior, age, income, and age of partner. In combination, however, these factors only improve prediction of noncompletion by about 12 percent over what would be obtained by chance. Although not measured in this study, the anticipated responses of either the criminal justice system or the batterer's mate to termination of treatment are hypothesized to be key determinants of attrition.

The last decade has witnessed a proliferation of programs designed to treat those who physically abuse their spouses or partners.[1] Preliminary data suggest that these programs may be effective in reducing the likelihood of further violence, particularly for men who attend all of the sessions. For example, Edleson and Grusznski conducted a follow-up study of 63 men who started treatment groups at the Domestic Abuse Project of Minneapolis. Female partners of men who did and did not complete all sessions of treatment were interviewed, on average, a year later. The authors found that program completers were less

often violent and more often nonviolent at follow-up, when compared to noncompleters.[2]

Studies in other areas of counseling, however, have found high dropout rates to be typical. For example, Baekeland and Lundwall found that between 20 and 57 percent of patients at general psychiatric clinics fail to return after the first visit, while between 31 and 56 percent attend no more than four times.[3] Steer's study of admissions for outpatient drug-free counseling at a community mental health center revealed that only 18.2 percent of patients completed treatment.[4] Similarly, Leigh and his associates found that 72 percent of patients at an outpatient alcoholism treatment program failed to complete treatment successfully.[5]

Across a broad range of problem areas, sociodemographic variables have consistently emerged as predictors of dropping out of therapy. Dropouts have been shown to be younger, lower in socioeconomic status, lower in education, and more often white than black, compared to those who complete therapy.[6]

Motivation to be rehabilitated has also proven to be an important discriminator. Krasnoff's study of alcoholics in a 6-week state hospital treatment program showed the dropouts to be less motivated to remain abstinent and more likely to view their drinking in rewarding terms than those who stayed in treatment.[7] (Hereafter, those clients who complete treatment programs will be called "completers.")

Furthermore, social stability, particularly in the occupational, marital, and residential spheres, has been shown to be an important correlate of remaining in treatment. Leigh and his associates discovered that early dropouts from an outpatient alcoholism treatment program had significantly lower social stability scores than completers.[8] Hahn and King found treatment dropouts to be more likely to be unemployed than those remaining in treatment.[9]

The degree of functional impairment in the areas of mental disturbance or substance abuse has emerged as an important factor in counseling attrition. On one hand, Hoffman found that, among patients at a community mental health center, those diagnosed as psychotic were significantly less likely to be dropouts than nonpsychotics.[10] On the other hand, Hahn and King and Robinson and Little discovered that dropouts from substance-abuse programs had been abusing alcohol or drugs longer than had those who remained in treatment.[11]

Other predictors of completion are arrest record and motivation for entry into treatment. Dropouts typically have had a greater number of arrests or have spent more time in jail than completers.[12] Those in treatment voluntarily, rather than by institutional referral, have been found to be more likely to complete treatment programs.[13]

As yet, only scanty information is available regarding either completion rates for batterers or the kinds of factors associated with dropping out

of treatment for this population. In virtually the only study devoted to this problem, Carillo examined the influence of selected sociodemographic variables on batterer attrition. He discovered that, compared to completers and partial completers, dropouts were more often never married, unemployed, and involved for many years with their victims. He also noted that completers were higher in education, income, and occupational status than the other two groups. A stepwise discriminant analysis revealed income to be the most important differentiating factor for the three groups, followed by the need to establish and maintain satisfactory relationships, education, and length of relationship with the victim. A subsequent attempt to classify dropouts and completers based on discriminant functions, however, produced disappointing results. Only 51 percent of the cases were classified correctly.[14]

The present study is a further effort to understand attrition in batterers' counseling. The work of Carillo has been extended through the incorporation of several factors that were not included in his analysis, such as the batterer's prior arrest or prison record, history of alcohol and drug abuse, seriousness of violence inflicted on the victim, as well as several indicators of motivation to reform. This study is particularly concerned with (1) identifying individual correlates of noncompletion, and (2) assessing the extent to which sociodemographic factors taken together enable one to predict successfully individuals at highest risk of noncompletion.

Methods

Sample selection.—The House of Ruth is a domestic violence treatment facility located in downtown Baltimore. This institution provides counseling programs for both self-referred and court-referred men who batter. Typically, between 300 and 400 men are counseled yearly in the court-referred program. The sample for this study consists of all men assigned by the court to this program between July 1, 1985, and June 30, 1986, for whom complete information was available. This resulted in a total of 295 men.

The majority—75 percent—were black, with 24 percent white, and 1 percent other nonwhite. Seventy-four percent were employed at intake. A wide range of occupations was represented in this group, although craftsmen and heavy vehicle operators composed the largest group, with fully 47 percent of the men falling into this category. In addition, 3 percent were professional and technical personnel, 8 percent were managers and administrators, and 14 percent were unskilled laborers. Eighty-seven percent had 12 or fewer years of education. Median income was $10,000, and mean age was 32 years. Seventy-one percent reported that the women they had assaulted were their wives. Mean length of involvement with partner for the group as a whole was 9.85 years.

The court-referred program. — Men who are ordered by either the civil or criminal court to attend counseling find themselves involved in a treatment regimen that is highly structured and didactic in nature. Employing films, handouts, and other visual aids, counselors lecture the group on such topics as the cycle of violence, the physiological cues that signal impending violence, the difference between "fighting dirty" and "fighting fair," role stereotyping and unrealistic expectations of men and women, jealousy, and substance abuse. Additionally, men engage in peer group activities and discussions that help them to recognize how these issues pertain to their own relationships, and what immediate procedures—such as the "time-out contract"—can be utilized to stop the abuse.

Classification of dropouts. — Despite the fact that men are under court order to complete treatment, this program experiences a substantial dropout rate. Enforcement of attendance differs, depending on whether the case is criminal or civil. Both situations entail circumstances that frequently enable the batterer to avoid completion. When a man misses more than one of the 12 sessions, he is considered a dropout. In a criminal case, his probation officer is notified and he is brought back to court. The judge may then decide on one of several courses of action. The batterer may be ordered again to complete counseling, he may be sent to jail, or the case against him may be dismissed under the presumption that he is no longer in need of counseling. In civil cases a contempt order is forwarded to the sheriff's office, which is then obliged to make three attempts to contact the recalcitrant client. If these attempts are unsuccessful, the batterer may well avoid having to return to treatment. Men in the sample were therefore classified into one of three possible categories: those who completed the program the first time they were referred by the court, those who dropped out the first time but completed after they were reordered to attend, and those who failed to complete at any time. Of the 295 men in the sample, 198 (67%) completed the first time through, 16 (5%) completed after being reordered to attend, and 81 (28%) failed to complete.

Independent variables. — Information on social and demographic characteristics of the batterers was obtained from records of their intake interviews. Several variables found to distinguish completers from noncompleters in other studies were used as predictors. The batterer's occupation and annual income were used as indicators of socioeconomic status. Additional demographic factors included age, race, education, employment status, and number of children. Several characteristics of the batterer's social background were examined, such as history of prior violence, arrest, or imprisonment; use of drugs or alcohol; history of prior counseling; whether he had ever witnessed violence between his parents; and whether he was abused as a child. Other attributes included in the analysis were the relationship of the batterer to the victim, the victim's age, length of involvement with the

victim, duration of the abuse (in months), the batterer's motivation to reform, and the seriousness of the abuse.

Except for motivation to reform and seriousness of abuse, measurement of these variables was quite straightforward. Motivation to reform was assessed through responses to two questions during the interview: "How important is it to you to stop being violent with your partner?" and "How hard will you try to avoid being violent in the future?"; both had answer categories "very," "fairly," "a little," and "not at all." An answer other than "very" to either question was considered an indicator of low motivation. There were two reasons for this. First, these items exhibited very little variation. A response other than "very" was given by only 8 percent and 6 percent, respectively, to each question. The second reason is a conceptual one. Ultimately, the responsibility for ending violent behavior rests with the batterer. Unless he is very motivated to change it is unlikely that the violence will stop. Therefore, to be only "fairly" or "a little" motivated to change one's behavior is to exhibit low motivation, given the gravity of the problem.

The seriousness of the client's violence was assessed with the Conflict Tactics Scale (CTS),[15] which asked the batterer to report the frequency with which he had committed several specific acts of violence toward the partner. These acts range in severity from pushing, grabbing, or shoving the partner, to "beating up" the partner or assaulting her with a weapon. For any specific act, greater frequency of abuse was taken as an indicator of a more serious problem. In addition, the summation of all CTS items provides another, more global, index of seriousness. However, this should be regarded as only an approximate indicator, since summing the CTS tends to equate actions that differ markedly in their consequences for the victim.

Data analysis.—Two categories of completion were used. Since there were very few men in the category "completed after being reordered to attend," and since these men did eventually complete the program, they were counted as completers. The other group consisted of those who failed to complete the program at any time, and will be referred to as dropouts.

Two separate analyses were conducted. The first consisted of an examination of the bivariate relationship between completion and each of the independent variables listed above, considered separately. The variables found to discriminate significantly between completers and dropouts were then included in a logisitic regression to determine the relative impact of each on the probability of dropping out of counseling while controlling for all other variables in the model.

Logistic regression resembles multiple linear regression except that the former is used whenever the dependent variable is categorical. When, as in this case, there are only two categories, logistic regression

models the natural logarithm of the odds of being in the category of interest as a linear function of the independent variables. In the present analysis, the category of interest was "dropout," and thus the response variable was the log of the odds of being a dropout. Maximum likelihood estimates of the logistic regression coefficients were obtained. Estimated probabilities of being a dropout for various combinations of the independent variables can be recovered from the estimated log odds by applying the appropriate exponential transformation.[16]

Unlike the R^2 in multiple regression, there is no widely accepted measure of predictive adequacy for the logistic regression model. However, Aldrich and Nelson have proposed two means for assessing goodness of fit that are "in the spirit of R^2," both of which were employed in this study.[17] The first is a "pseudo-R^2," $= c/(N + c)$, where c is the model chi-square statistic that tests whether all regressors are simultaneously equal to zero, and N is the sample size. The second measure is a proportional reduction in error (PRE) statistic. It indicates the proportion by which prediction error is reduced when employing the independent variables, all together, to predict dropout status, as opposed to predicting dropout status without employing these variables.[18]

Results and Discussion

Of the total set of batterer characteristics examined, nine proved to be significantly associated with dropping out of counseling at the .05 level in the bivariate analysis. One additional variable was significant at the .1 level. Table 1 shows these key variables, how they differ between completers and dropouts, the associated chi-square or t-statistics, and the attained significance levels for the tests.

As the table shows, sociodemographic characteristics of the batterer as well as attributes pertaining to the relationship between batterer and victim are individually predictive of dropping out. Younger men, those with lower incomes, and men who were unemployed at intake were more likely than others to be dropouts. In addition, men who had ever been arrested were almost twice as likely to drop out (31% compared to 18%) as men who had never been arrested.

Men who reported themselves to be drinkers of alcohol, as well as men who said that they had ever "gotten into trouble" because of their drinking, were both more likely than others to drop out of counseling. With regard to motivation to stop abusing a partner, those who gave any response other than "very" when asked how important it was to them to stop being violent were almost twice as likely to drop out (48% compared to 26%).

Men whose victims were reported to be women other than their wives were somewhat more likely to drop out than others. Among

Table 1

THE RELATIONSHIP OF 10 KEY VARIABLES TO DROPPING OUT OF COUNSELING

Characteristic	Percent Who Dropped Out	χ^2	p
Employment status:			
Employed	23.96		
Unemployed	37.33	5.009	.025
Relationship with victim:			
Wife	24.15		
Other	36.47	4.56	.033
First time for abuse:			
Premarital	42.19		
Postmarital	21.37		
N.A.	15.38	11.139	.004
Arrest record:			
Ever arrested	31.19		
Never arrested	17.57	5.117	.024
Drinks alcohol:			
Yes	31.44		
No	20.21	3.981	.046
Trouble because of drinking:			
Yes	36.99		
No	25.48	3.513	.061
How important to stop violence:			
Very	26.02		
Other	47.62	4.508	.034

	Mean for Completers	Mean for Noncompleters	t	p
Age	33.4	30.1	2.849	.005
Income ($)	11,246	8,282	2.538	.012
Age of partner	30.5	28.3	2.115	.035

NOTE.—N.A. = "not applicable."

those whose victims were their wives, men who began abusing their partners before marriage were twice as likely to drop out (42% compared to 21%) as those who began their abuse after marriage. Finally, those with younger partners were more likely to drop out than those whose partners were older.

Results of the logistic regression.—As in linear regression, the coefficients for the independent variables in logistic regression indicate the effect on the dependent variable of a one-unit change in a particular independent variable, controlling for all other predictors in the model. In this case, the dependent variable is the log odds of being a dropout. As in ordinary regression, dichotomous independent variables can be entered as dummies. The regression coefficient is then interpreted as the estimated increment to the log odds of being a dropout for those in the category coded "1" on the dummy variable.

Table 2 shows the results of this analysis, including the regression coefficients; the chi-square statistics and associated probabilities for

testing the significance of each; the overall, or model, chi-square and associated significance level; and the psuedo-R^2 value. The model includes only eight of the 10 individual predictors discussed above. The variable "first time for abuse" was omitted since it only applied to part of the sample, and "age of partner" was omitted because it was too highly correlated with respondent's age.

The model chi-square of 20.53 is significant ($p = .0085$), indicating that the hypothesis that none of the predictors is significantly related to the log odds of dropping out should be rejected. However, in the presence of other variables, only respondent's age reaches significance at the .05 α-level ($p = .017$), and ever having been arrested is marginally significant at $p = .071$. None of the other variables even approaches significance, in the presence of the remaining predictors.

To get a sense of the impact of age and arrest record on the dependent variable, I examined the estimated probabilities of being a dropout for fixed categories of the other six variables while varying the respondent's age and arrest record. For example, a batterer who is "average" on the other six characteristics, that is, he is employed, he has an income of $10,000, he is married, he drinks, he has not been in trouble due to his drinking, and he says it is "very important" to stop being violent will have an estimated probability of dropping out of .48 if he has ever been arrested before and is 20 years old. He therefore has about a 50-50 chance of being a dropout, according to the model. However, this probability drops to .33 for a 30-year old, and to .21 for a 40-year old. If a man with the same initial six characteristics is 20 and has no prior arrest record, the estimated probability of being a dropout is .3. It drops to .19 if he is 30 and .11 if he is 40. Thus, a

Table 2

LOGISTIC REGRESSION COEFFICIENTS AND ASSOCIATED SIGNIFICANCE
LEVELS FOR PREDICTING NONCOMPLETION OF TREATMENT

Regressor	Logit Coefficient	χ^2	p
Intercept	.785	.68	.410
Age	−.061	5.72	.017
Yearly income	−.00003	1.39	.238
Employed	.021	.00	.965
Victim is wife	.102	.07	.790
Ever arrested	.750	3.27	.071
Drinks alcohol	.368	1.01	.314
Trouble due to drinking	.331	.81	.367
Important to stop violence	−.595	1.42	.234
Model χ^2		20.53	
p		.0085	
Pseudo-R^2		.0829	

Table 3

Comparison of Predicted and Actual Classification of Clients
with Respect to Dropping out of Counseling

	PREDICTED CLASSIFICATION ACCORDING TO MODEL		
ACTUAL CLASSIFICATION	Completer	Dropout	TOTAL
Completer	104	62	166
Dropout	18	43	61
Total	122	105	227

man in the last category is predicted by the model to have only an 11 percent chance of being a dropout.

The fit of the model. — While the "pseudo-R^2" does not have a "proportion of variance explained" interpretation, it is comparable to R^2 in that it ranges from a value of zero when the model has no predictive ability, to a value of 1 when the model is a perfect fit.[19] The observed value of .0829 indicates that the model provides only a slight improvement in predictive ability, compared to not using the model at all. This can be sensed more directly by examining the proportional reduction in error achieved when using the model to classify batterers, as opposed to classifying by chance alone. Table 3 shows the comparison of actual dropout status to predicted dropout status according to the model. The 227 men for whom there are complete data on all variables in the model were classified and, of these, 147, or 64.8 percent, were classified correctly. This is somewhat higher than the 51 percent reported to be correctly classified by Carillo.

The proportional reduction in error is 0.12. In other words, I achieve about a 12 percent reduction in classification or prediction error when using the model to predict dropout status as opposed to prediction by chance alone. Again, this indicates only a slight improvement caused by using, as against ignoring, the predictor variables.

Conclusion and Implications

Results from the current study suggest that selected sociodemographic variables are predictive of attrition in batterers' counseling. Along with Carillo, I find that men who are unemployed as well as men with low incomes are more likely than others to be dropouts. However, unlike the former study, I found no significant relation between either education or occupation and dropping out. As is the case for other rehabilitative programs, I found that younger men, those with a history of prior arrest, and those with relatively low motivation to reform were

more likely than others to be dropouts.[20] Additionally, those with younger partners, those whose victims were not their wives, and those who either drink or have been in trouble because of their drinking were more likely to be dropouts.

These findings are not particularly surprising. They confirm that men with a history of problematic adjustment in areas such as work, relations with the legal system, or alcohol consumption are also likely to be those who are unable to complete the additional task of undergoing therapy. For some individuals, dropping out is part of a general pattern of low achievement in socially valued areas.

Alternatively, employing only sociodemographic factors in the attempt to identify those who are at high risk of noncompletion was not especially fruitful in this study. These factors taken together provide only a slight improvement in prediction of noncompletion, compared to chance classification alone. Thus, while the variables examined in this study are, indeed, related to dropping out, they account for a relatively small proportion of variation in attrition. Most of the variation in whether or not a batterer remains in court-ordered treatment must be a function of other, unmeasured variables.

What might these factors be? One suspects, first, that the kinds of sanctions brought to bear on the individual by the criminal justice system for failing to complete, in combination with the response of the victim to the batterer's withdrawal from the program may be significant determinants of completion. Thus, holding social factors constant, if a man can withdraw from counseling without the threat of being incarcerated, and if the victim is willing to reconcile in spite of his discontinuation of therapy, then there remain few external constraints on him to stay. He may then be at high risk for noncompletion of the program. Conversely, men who anticipate either incarceration or loss of the partner for failing to remain in treatment would be expected to have a high probability of completion, regardless of other personal characteristics. The impact of these additional variables could not be assessed with hard data in the current study. However, staff at the study facility reported to me that, based on purely impressionistic evidence, they consider these factors to be strongly influential in explaining attrition. Therefore, they should be explored in future attempts to understand this problem.

These factors can be viewed as containing both objective and subjective dimensions. One might measure the subjective aspects by asking men at intake what they think will be the response of the criminal justice system to their failure to complete the program. Similarly, they can be queried as to what they anticipate their partner's response to be under the same circumstances. Alternatively, more objective measurement of these variables might consist of tracking batterers through the criminal justice system and examining (a) the conditions under

which they were sent to counseling—whether through civil or criminal proceedings, whether in lieu of a jail sentence, and so forth—and (b) the sanctions applied to those who missed sessions or stopped attending altogether. The latter involves examining whether such men are successfully contacted and brought back to court and, if so, recording the action taken by the court in each case.

Similarly, the batterer's partner could be interviewed prior to initiation of treatment, and asked what her response will be if her partner fails to complete treatment. She might then be reinterviewed at termination of treatment and queried regarding any responses she actually made to either his missing sessions or his dropping out of treatment altogether. Some delicacy is required in the implementation of this latter procedure since the batterer may have discontinued treatment without her knowledge. The treatment facility may or may not, as a matter of course, inform the partner when a batterer begins missing sessions. If so, the procedure could be readily implemented. If not, the researcher must determine whether such a procedure is ethically permissible.

Other factors, as well, could be influential in attrition. The degree to which batterers accept full responsibility for their violent actions may be related to staying in therapy. Those who accept such responsiblity would be expected to be more likely to remain in treatment, compared to those who think that some, or perhaps even all, of the fault lies with the partner. Additionally, the extent to which the batterer feels that therapy is necessary to recovery may be an important factor. Even those who accept responsibility for the violence may still feel that they can handle it themselves, and that they do not need counseling to control their abusive behavior. Hence, attrition may be greater among those who do not consider counseling important to recovery.

Even further, it would be of interest to examine the extent to which batterers incur, from their perspective at least, significant "costs" in therapy which outweigh any perceived gains. Such costs could be material ones, such as time and money lost from employment, or the cost of transportation. On the other hand, the more substantial costs may be of an intrapsychic nature, such as being continually labeled a "batterer" and having to disclose oneself repeatedly to a critical group of peers. It seems likely that those for whom costs outweigh gains, and for whom there exist few external constraints to remain in therapy, would be most likely to be noncompleters. These hypotheses need to be explored in future research.

Notes

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17. Aldrich and Nelson, p. 57.

18. This measure is constructed as follows. The estimated probability of being a dropout, generated by the regression, is compared to a cutoff value of .275, which is the unconditional probability of being a dropout for the sample as a whole. Men whose estimated probabilities are above that cutoff are predicted to be dropouts. The others are predicted to be completers. One then compares the number of classification errors made using the model to the number of errors one would make in classification by chance alone. The proportional reduction in error is then calculated as

PRE = (no. of chance errors − no. of model errors)/no. of chance errors,

where the number of errors due to classification by chance is

$$\text{no. of chance errors} = 2 \times p \times (1 - p) \times N,$$

where p is the unconditional probability of being a dropout and N is the sample size. For a discussion of proportional reduction in error techniques, see Alan Agresti and Barbara Agresti, *Statistical Methods for the Social Sciences* (San Francisco: Dellen, 1979).

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20. Baekeland and Lundwall (n. 3 above); Hahn and King (n. 6 above); Krasnoff (n. 7 above); Leigh et al. (n. 5 above); Owen and Kohutek (n. 6 above).