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FAITH-BASED CORRECTIONAL PROGRAMMING IN FEDERAL PRISONS

Factors Affecting Program Completion

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The Life Connections Program (LCP) is an 18-month, faith-based correctional program operating in five Federal Bureau of Prisons (BOP) institutions. The program is a residential, multi-faith program designed to provide a positive environment for spiritual growth and ultimately behavioral change. This study presents a quantitative analysis of factors associated with program volunteers' completion or failure using operational and survey data collected from the program sites. Survival analysis indicated that scripture reading, perception of self-worth, and the degree of desire for community integration were associated with program completion. Future research should include constructs of mental health status and levels of self-control while addressing whether faith-based programming is more effective for certain groups of individuals than others.

Keywords: faith-based programs; correctional programming; prisoners; program completion; federal prisons

Religion has been ingrained in the fabric of corrections since the late 1800s. Despite this extended tenure, minimal research has directly examined the role of formal, structured religious programming in relation to the behavior of inmates. This dearth of research has led to a lack of theoretical development to guide practitioners as to any potential benefits of religious programming. Some existing literature has shown that participation in structured religious programs can reduce recidivism (Johnson, 2002, 2004; Johnson, Larson, & Pitts, 1997; Sumter, 1999) and improve institutional adjustment (Camp, Kwon, Daggett, & Klein-Saffran, in press; O'Connor & Perreyclear, 2002). Despite these positive findings, however, a few questions prompt lingering concerns, such as whether these programs are more effective for certain types of offenders or if certain program elements are more effective than others. This research addresses the more fundamental issue of what types of inmates are most likely to complete faith-based programming. As described below, understanding the process of program completion/failure is critical for planning programs as well as evaluating them.

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Previous research for other types of correctional programs has shown that program completers and noncompleters are different regarding various characteristics such as age, criminal history, crime type, or previous misconduct (Benda, Toombs, & Peacock, 2005; Pelissier, 2004; Pelissier, Camp, & Motivans, 2003). There is little research into religious programming, so it is difficult to say what, if any, differences exist between program completers and noncompleters for faith-based programs. However, it is probably safe to assume that people who complete religious programs are different from those who do not in measurable ways. For one thing, previous research found that inmates who volunteer for religious programming were more motivated to make changes in their lives, evidenced in part by increased participation in religious activities and a decreased likelihood of engaging in more serious forms of misconduct than the control group (Camp et al., in press; Camp, Klein-Saffran, Kwon, Daggett, & Joseph, 2006).

Methodologically, understanding how completers and noncompleters differ is important for future evaluations of religious programs. One of the key methodological issues with observational evaluation studies is the handling of incomplete treatment (Rosenbaum, 1995). Many studies simply delete noncompleters and compare treatment completers to a previously defined control group. However, this technique only makes sense if the treatment noncompleters are a random subset of the entire treatment group, as comparisons are typically drawn to match the characteristics of the entire treatment group, not the subset of treatment completers. The assumption that treatment incompleteness is a random process is tenuous and was tested in this research.

The purpose of the study was to identify any significant differences between the types of individuals who complete the Life Connections Program (LCP) program and those who do not. Equally important, the current analysis may provide information that program providers can use to alter the administration of the program so that more individuals complete it. Furthermore, if there are characteristics more indicative of noncompletion, such as disruptive behavior, these characteristics could be used to identify individuals at higher risk of failure and allow for special treatment to address concerns or issues, thus improving the chances of program completion. Last, if differences are found, these factors should also be considered in future analyses of outcome success.

LITERATURE REVIEW

Correctional programs, including religious programs, are found in practically all prisons. Interest in the effectiveness of these programs has varied over the years. Correctional programming came under increased scrutiny in the mid-1970s. In an unusual convergence of criticisms, brought on for different reasons, conservatives criticized the rehabilitative efforts of correctional programs as coddling offenders, liberals viewed the same programs as coercive, and social science researchers questioned the effects of the programs (Cullen & Gendreau, 2000). Martinson (1974) asked, "What works?" but many took his research to imply that "nothing works." Martinson was convinced that no program effectively "cured" all criminals under the prevailing notion of a medical model of crime (Lipton, Martinson, & Wilks, 1975; Martinson, 1974), although he did document that some programs worked for specific populations of inmates. Programs generally lost ground in prison systems during the 1980s and 1990s in the United States, as many criminologists focused their attention

on the impact of surveillance of offenders, rather than on rehabilitation of inmates (MacKenzie, 2000).

With criminologists directing their attention to other criminal justice issues, only a few continued to focus on correctional programming. This left theoretical development linking correctional programming and postrelease offending often unattended (Wilson, Gallagher, & MacKenzie, 2000). Whereas some correctional programs, such as educational programs, were based more on isolated experiences, intuition, and good intentions rather than empirical evidence (Gaes, Flanagan, Motiuk, & Stewart, 1998), others linked program goals with outcomes such as recidivism (Saylor & Gaes, 1992, 1997; Seiter, 1975; Singer, 1986). Evidence-based corrections and data-driven performance measures have affected the federal prison system directly. For example, the Federal Bureau of Prisons (BOP) provides annual assessments of the impact of prison industries and drug treatment on recidivism. The theoretical foundation of faith-based programming has the potential to reduce recidivism by providing prosocial skills, increasing maturity and moral development, improving cognitive skills, and refining problem-solving abilities.

PROGRAM EVALUATIONS

In a meta-analysis of correctional programs, Cullen and Gendreau (2000) found that some treatment modalities had a substantial impact on recidivism, yet others were negligible. With this information, they outlined four basic principles that are important in evaluating program effectiveness. First, treatment should address factors that can be changed and that directly influence criminal behavior. Specifically, known predictors of crime should be targeted in these programs; these include factors such as low self-control (Gottfredson & Hirschi, 1990) or antisocial attitudes and maintaining criminal associates (Akers, 1977; Warr, 2002). Second, the implementation of the treatment program is important in the assessment. Programs that are not implemented as intended, are short in duration or intensity, or are implemented by individuals who are unqualified may be less likely to have an effect. Third, offenders who are at high risk for reoffending should be targeted. If an individual is at low risk for future criminal behavior, then the ability to reduce his or her probability of future criminal behavior is negligible. Fourth, the treatment program must be tailored to the various learning styles and abilities of the individuals receiving treatment. In other words, the better the program plays to the audience, the better the participants are served as shown in the results (MacKenzie, 2006).

COMPLETION STUDIES

There have been a limited number of studies evaluating correctional program completion rates (Benda et al., 2005; Pelissier, 2004; Pelissier et al., 2003; Wormith & Olver, 2002). Generally, these studies focus on identifying characteristics likely to lead to program completion. Ultimately, understanding the characteristics of those individuals most likely to complete or not complete a program enables researchers to gain a better sense about their future criminal behavior.

Most correctional program completion studies have focused on substance abuse programs (De Leon, Melnick, Thomas, Kressel, & Wexler, 2000; Hiller, Knight, & Simson, 1999; Pelissier, 2004; Pelissier et al., 2003) or sex offender treatment programs (Geer, Becker, Gray, & Krauss, 2001; Pelissier, 2005; Shaw, Herkov, & Greer, 1995). A number

of other research studies that have examined completion rates have been conducted with community-based programs (e.g., substance abuse, sex offender, and domestic violence) rather than those that are prison based.

Correctional research has found varying results from one program to another. Some drug abuse program evaluations have found that the more severe the current offense, the shorter the sentence length, or the greater the social bond with family, the more likely that inmates are to complete the program (Pelissier et al., 2000). Others have found that race and age are important (Mosher & Phillips, 2006), whereas still others have found that employment, emotional instability, and levels of self-efficacy are important factors (Hiller, Knight, Broome, & Simpson, 1998). A study of boot camps found that level of income, self-efficacy, religiosity, and the number of children that an offender had were significant for program completion (Benda et al., 2005). For a federal sex offender program, education level, age, motivation, and time from admission to program entry were significant for program completion (Pelissier, 2005). A state-correctional sex offender program found that education level, victim of sexual abuse, previous number of incarcerations, and not making excuses for one's behavior were significant (Geer et al., 2001).

During the past 10 years, numerous program evaluations have assessed treatment completion rates for court-mandated batterer intervention programs. There have also been several studies that summarize this literature. Even with the substantial amount of research on batterer intervention programs, there is little consistency between studies and their results to draw any firm conclusions as to what factors are important for treatment completion (Carney, Buttell, & Muldoon, 2006). This is also the case with correctional programs such as substance abuse, sexual offender, and boot camp approaches. Some of these studies have found a range of factors to be important for program completion, such as education, number of previous incarcerations, motivation to change, and previous employment, although other studies found that these factors are not important.

The definition of program completion can vary from one analysis to another, which makes it very difficult to compare results across studies. For example, batterer intervention programs have a very high dropout rate. To offset this high dropout rate, some researchers have defined a program completer as someone who has completed a certain period of time rather than the entire program duration (Carney et al., 2006; Daly, Power, & Gondolf, 2001; Rosenfeld, 1992). Changing the definition of a completer from program to program, depending on the dosage received, can bias the results of the analysis and potentially misrepresent the effectiveness of the program.

Only one study to date has evaluated program completion rates for faith-based programs (Roman, Wolff, Correa, & Buck, 2007). This program, the Ridge House residential program in Reno, Nevada, is a 3-month program designed to foster substance abuse treatment and job placement training within a spiritual/religious context. The study used five measures of religiosity (religious preference, general religiosity/spirituality, core spiritual experiences, salience, and spiritual change in prison) to identify differences between completers and noncompleters of the program. Using a sample of 92 individuals (63 males, 29 females), the researchers found that approximately one third of the participants did not complete the program and more than half of these noncompleters did not stay in the program 40 days. Overall, the study was not able to identify any significant differences between completers and noncompleters in terms of the defined religion variables. Overall, one variable, a measure outlining an increased sense of a "higher power," was found to be a significant predictor of program completion.

Although there are some benefits to this study (e.g., multiple measures of religion), the results should be interpreted with caution. First, the small sample size does not allow for a confident analysis of a wide range of predictors, nor does it give relevant predictive power for individual groups. Second, the results may not be generalizable because of the limitation of the program being at one location only. In addition, the sample is limited to less serious offenders. Third, and most important, the program is based more on developing an ethos of spirituality, rather than structured cognitive behavioral growth based on spiritual principles (Roman et al., 2007).

Overall, there is little consistency from one study to another regarding the types of predictors included in program evaluation models. Furthermore, there is even less consistency across studies regarding factors that have been found to be important for program completion. Some factors that were significant across multiple studies include levels of motivation to change, self-efficacy, education, and familial variables such as number of children and marital status. In short, very little is known about whether the factors that influence program completion in faith-based programs match those found for other types of programs. The study by Roman et al. (2007) suggested that religious factors were not important in predicting program completion, but as noted, the power of the tests in the study was extremely low. An examination of the respective factors for inmates enrolled in a faith program in the Bureau of Prisons allows us a better opportunity to study this process primarily because of the larger sample size, multiple-site orientation, and the inclusion of female offenders.

THE LIFE CONNECTIONS PROGRAM

The pilot project LCP is one example of a faith-based correctional program currently operating in the federal prison system. The BOP has offered this pilot faith-based residential program since 2002. A unique feature of the BOP program is its multi-faith approach; faith programs in other correctional settings have been limited to a single faith. LCP offers a core curriculum that all inmates follow. Spiritual guides from the community are hired by the LCP chaplain to teach the daily curriculum. The spiritual guides incorporate their own faith traditions within the context of the core material. Depending on the religious composition of the inmates in the LCP, four or five spiritual guides from different faiths (such as Islam, Catholicism, Buddhism, Protestant denominations, and Judaism) work with inmates at each prison. Standardized classroom workbooks and exercises have added consistency between the different sites and increased the ability to replicate the program outside of the federal system.

The demands of LCP involve living with, studying with, and attending class with a limited number of individuals during a rather lengthy period of time. Another part of the program is the daily word, where each individual is assigned a specific religious topic and writes an essay describing the significance of their topic. Individuals present their final products to all of the LCP participants at the community meetings, where everyone is encouraged to share.

The criteria for eligibility for participation in the LCP includes fulfilling educational requirements (e.g., completing a GED, earning a high school diploma), meeting financial obligations, speaking English or having completed English as a Second Language courses, and being within 24 to 60 months of release. The months-to-release requirement is waived for high-security inmates and is extended for female prisoners up to 120 months. LCP is

voluntary and currently does not offer any time-off incentives. Therefore, one would expect those volunteering to participate in the program to be more motivated and have a stake in completing the program as compared to individuals who participate in programs that offer time-off incentives or individuals not involved in any programming. However, even with this perceived level of interest, program completion is not always attained.

METHOD

SURVEY DATA COLLECTION

The data for the current analysis were collected between July 2004 and February 2007 at five prisons (one female institution and four male institutions). Data collection is ongoing.¹ Out of a total of 1,094 LCP participants, 794 completed survey questionnaires. The response rate among LCP participants was 72%. The response rate was affected by an inability to travel to every site at the very beginning of program initiation; therefore, some LCP participants had already left the program before survey administration. Participants can leave the program in four ways: expulsion, voluntary withdrawal, involuntary withdrawal (incomplete), or graduation. A designation of incomplete occurs when a participant is removed from the program for reasons not under his or her control, such as an early release from prison. The program designation of incomplete is rare, and participants with this assignment were counted as noncompleters.

The probability of participants leaving the program before being administered the survey is represented in Table 1. The marginal totals show that indeed the probability that an LCP participant was surveyed was .72. More important, the table also shows that the probability of obtaining a survey for someone who had left the program was .41 as compared to a probability of .83 for a participant who had not left the program. As such, the sample of participants who were surveyed contained a disproportionate number of people who did not leave the program. To address this issue, weight variables were created to align the two groups in proper proportionality and to maintain the actual sample distribution. For those participants who were surveyed and left the program, responses were weighted by a factor of 1.77. For those participants who remained in the program, responses were weighted by a factor of 0.88.

For the weighting scheme to work, it is necessary to assume that the participants who were surveyed and subsequently did not complete the program represented the same factors as the participants who left the program before the survey was administered when predicting program noncompletion. Although it is possible that this assumption was violated, we feel confident that it was not for the following reasons. The majority of participants who did not fill out the survey were missed because the surveys were not administered in the first month of the program. Administrative reasons such as budget difficulties and scheduling issues made it difficult to administer the surveys at the very beginning of the program. There does not appear to be a systematic effect on which institutions and cohorts were surveyed early or late. Refusal to fill out the survey by participants was a negligible factor. This gives us some optimism about the lack of bias to the data.

Another reason to believe that the assumption was not violated comes from statistical examination of participants who did not complete the program. For the variables in the analysis that come from operational records, and thus are available whether or not an LCP

TABLE 1: Cross-Tabulation of Surveyed and Life Connections Program (LCP) Program Status

	<i>LCP Participants Surveyed</i>					
	<i>Yes</i>		<i>No</i>		<i>Totals</i>	
LCP program status						
Did not complete program	110	41%	158	59%	268	25%
Completed program	684	83%	141	17%	825	75%
Totals	794	72%	299	28%	1093	100%

participant was surveyed, it was possible to compare program noncompleters who were and were not surveyed. These variables included sex, ethnicity, age, annual rate of prison misconduct, program entry, and custody classification score. The only significant difference between participants who were surveyed or not prior to leaving the program was between males and females.² Whereas 64.8% of the women who did not complete the LCP program had been surveyed, only 35.2% of the men who did not complete LCP had been surveyed. Given this evidence, it was concluded that the current analysis had face value and should not be rejected out of hand.

MEASURES

Religiosity measures were used that cover five of the six dimensions discussed by Johnson, De Li, Larson, and McCullough (2000). These measures included religious service attendance, salience, denomination, prayer, and Bible study. The current study used two measures of attendance, whether the inmate practiced a religion before incarceration and the frequency of attendance since incarceration. Johnson et al.'s (2000) religious salience scale measures daily spiritual experience. The items used have been previously validated and are part of the Brief Multidimensional Measure of Religiousness/Spirituality (John E. Fetzer Institute, 1999). A third dimension of religiosity measured was category of faith or denomination. Respondents could list themselves as Christian but not Catholic, Catholic, Islamic, other, or none. The final two dimensions covered participation in prayer outside of religious services and knowledge of applicable sacred writings.

There were several scales used to measure the level of inmate motivation for change, feeling of self-worth, and community awareness. All of these measures were created from items in the self-reported surveys. Prochaska and DiClemente (1986) developed the Motivation scale, which is composed of four subscales measuring precontemplation, contemplation, action, and maintenance. The Self-Worth scale contains six items that tap personal satisfaction or the inmate's perceived importance to others. The Community Integration scale was established from five items that relate to a person's anticipated activities in the community on release.

STATISTICAL MODELS

To examine the differences between individuals who complete the LCP (i.e., graduate) and those who do not complete the program (i.e., expulsion, voluntary withdrawal, incomplete), survival analysis models were employed to model the time until program failure. The

majority of the independent variables in the model were gleaned from the survey instrument (i.e., not operational data), so this analysis only includes participants who were surveyed. As we do not know the form of the survival function, we employed proportional hazard analysis as pioneered by Cox (1984) and implemented in the SAS PHREG and the STATA STCOX procedures. The participants who completed the LCP program were considered right-censored cases because they did not experience program failure. Conceptually, though, they could still fail the training of the program after completion, but they were simply not being observed during these months—hence, the censoring. Subjects who survived until the end of the study were considered as Type I censoring, and this type of censoring should not have any significant bias in the analysis (Harrell, 1997). Another type of censoring in the analysis is uninformative censoring; it occurred when a subject left the program early because he or she was released earlier than expected or transferred to another institution. The final type of censoring concerns participants who were still currently enrolled in the program. Although we knew that they survived to that date in the program, we did not know what would happen to them before program completion. None of these types of censoring bias the results of the study of program noncompleters.

RESULTS

The univariate results for the model examined here are included in Table 2. For dichotomous variables marked with an asterisk, the mean represents the proportion of respondents with that characteristic. For example, the proportion of Black respondents was .524, meaning that 52.4% of the respondents self-identified as Black. For the continuous variables, the metrics are self-explanatory, with the exception of the scale variables for Self-Worth, Community Integration, and Motivation. As mentioned previously, the Self-Worth and Community Integration scales can take a value between 1 and 5. The values near 4 for both the Community Integration and Self-Worth scales suggest that the average respondents have fairly positive feelings of self-worth and desire to reintegrate into their communities. The average score for the Prochaska Motivation scale was 9.6 on a scale ranging in value from -5 to 15.

The results for the proportional hazards model of program noncompleters are presented in Table 3. The variables were conceptually divided into religious activity/belief variables, criminal history variables, general well-being and motivation scales, sociodemographic variables, and control variables. Because of the limitation on the number of variables in the model set by the number of incidents of program failure, the religion variables were selected in an ad hoc fashion. In the final analysis, there were 716 cases used because of listwise deletion of cases with missing information, and only 101 of these cases were noncompleters. The prevailing practice is to have a minimum of 5 to 10 observations of the event of interest for every independent variable included in the model (Peduzzi, Concato, Kemper, Holford, & Feinstein, 1996). This meant that the model could comfortably accommodate 10 variables, and 20 was the upper limit. Because there were more potential variables for inclusion than 20, and because most of the variables pertained to religious activity or belief, five preliminary models with only one of the five dimensions of religion included were examined. Of the five dimensions of religion included here, only denomination and knowledge of sacred writings (what Johnson et al., 2000, called “Bible study”) were significant in the preliminary models. As such, these two dimensions were included in the final model presented in Table 3.

TABLE 2: Descriptive Statistics for Variables Considered for Survival Analysis

<i>Label</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Minimum</i>	<i>Maximum</i>
*Failures (1 = yes)	794	0.1385	0.3456	0	1
Days in program	794	380.5365	177.8343	3	810
Spiritual Experience Scale	791	4.8622	1.1964	1	6
Frequency of service, current	788	6.4530	1.9332	1	8
*Current denomination 1 (1 = yes)	761	0.1116	0.3151	0	1
*Current denomination 2 (1 = yes)	761	0.1379	0.3451	0	1
*Current denomination 3 (1 = yes)	761	0.1852	0.3887	0	1
*Conservative, fundamental referent (1 = yes)	774	0.1808	0.3851	0	1
*Moderate, fundamental referent (1 = yes)	774	0.2945	0.4561	0	1
*Liberal, fundamental referent (1 = yes)	774	0.1162	0.3207	0	1
*Other, fundamental referent (1 = yes)	774	0.2196	0.4142	0	1
Frequency of prayer	789	7.1406	1.6087	1	8
Frequency of sacred readings	788	6.4238	1.8564	1	8
Knowledge of own religion	774	4.2454	1.3133	1	6
Scale of Self-Worth	793	4.0730	0.7657	1.1667	5
Community Integration Scale	792	3.9405	0.6146	1.6000	5
Prochaska Motivation Scale	790	9.6276	2.0693	-0.2500	14
Yearly misconduct rate	794	0.3859	0.7025	0	7.9270
Custody classification score	792	10.2815	4.6359	1	25
Number of incarcerations	762	1.7296	1.0545	1	6
Actual age in years	794	39.1670	9.1399	21.5414	76.0520
*Hispanic (1 = yes)	794	0.0957	0.2943	0	1
*Black (1 = yes)	794	0.5239	0.4997	0	1
*More than high school (1 = yes)	790	0.4949	0.5002	0	1
*Currently married (1 = yes)	786	0.2926	0.4552	0	1
Time at risk	794	3.6980	4.0248	0.0410	26.2149
*LCP Site 1	794	0.2846	0.4515	0	1
*LCP Site 2	794	0.0843	0.2781	0	1
*LCP Site 3	794	0.2292	0.4205	0	1
*LCP Site 4	794	0.1788	0.3834	0	1

Note. For dichotomous variables marked with an asterisk, the mean represents the proportion of respondents with that characteristic. LCP = Life Connections Program.

The results in Table 3 demonstrate that the denominational comparisons included in the model were not statistically significant when the other dimension of religion, reading of sacred texts, was also included. The reading of sacred texts variables remained significant, suggesting that participants who reported reading their relevant sacred writings were less likely to leave the LCP program than participants who reported lower levels. An additional unit increase on this 8-point scale was associated with a 15.7% decrease in the hazard rate (e.g., the risk of failure at an instant in time) for otherwise similar inmates.

None of the three criminal history variables included in the model was statistically significant. In other words, history of previous incarcerations, the criminal history summary captured in the base custody score, and the prison adjustment captured by prison misconduct were not important when predicting whether or not participants completed the LCP program.

Two of the three scales measuring general well-being and motivation were statistically significant in predicting early program failure. These effects were not sensitive to which of the religion variables were included in the model. Only the scale for internal motivation, the Prochaska Motivation scale, was not statistically significant. Inmates with higher evaluations

TABLE 3: Survival Analysis of Program Noncompletion

<i>Variable</i>	<i>df</i>	<i>Parameter Estimate</i>	<i>Standard Error</i>	<i>Z</i>	<i>Pr > Z</i>	<i>Hazard Ratio</i>
Current denomination 1 (1 = yes)	1	-0.27381	0.42163	-0.65	0.516	0.760
Current denomination 2 (1 = yes)	1	0.498331	0.32420	1.54	0.124	1.646
Current denomination 3 (1 = yes)	1	-0.49672	0.32030	-1.55	0.121	0.609
Frequency of sacred readings	1	-0.17113	0.06255	-2.74	0.006	0.843
Scale of Self-Worth	1	-0.37566	0.14814	-2.54	0.011	0.687
Community Integration Scale	1	-0.54575	0.23410	-2.33	0.020	0.579
Prochaska Motivation Scale	1	0.04418	0.06360	0.69	0.487	1.045
Yearly misconduct rate	1	0.19210	0.13324	1.44	0.149	1.212
Custody classification score	1	0.03956	0.03032	1.30	0.192	1.040
Number of incarcerations	1	-0.01986	0.24253	-0.16	0.873	0.980
Actual age in years	1	-0.01633	0.01602	-1.02	0.308	0.985
Hispanic (1 = yes)	1	0.53836	0.39529	1.36	0.173	1.713
Black (1 = yes)	1	0.47044	0.29379	1.60	0.109	1.601
More than high school (1 = yes)	1	-0.28097	0.24156	-1.16	0.245	0.755
Currently married (1 = yes)	1	-0.35562	0.26525	-1.34	0.180	0.701
Time at risk	1	0.00485	0.04354	0.11	0.911	1.005
LCP Site 1	1	-0.95818	0.393781	-2.43	0.015	0.386
LCP Site 2	1	-1.23684	0.43654	-2.83	0.005	0.290
LCP Site 3	1	-0.22977	0.53565	-0.43	0.668	0.795
LCP Site 4	1	0.34830	0.35685	0.92	0.355	1.417

Note. Summary of the number of event and censored values: total cases: 716; events: 101; censored: 615; % censored: 85.89. Test of proportional hazards assumption: $\chi^2 = 14.18$, $df = 20$, $p = .8212$; Harrell's C = 0.7275 (weights excluded from model). Pr = probability of significance; LCP = Life Connections Program.

of self-worth were less likely to terminate the program early. A movement of 1 unit on the 5-unit scale was associated with a 32.2% lowering of the hazard ratio. Likewise, the Community Integration scale was significantly related to program failure. For this scale, a difference of 1 unit on the 5-unit scale was associated with a 42.1% reduction of the hazard ratio.

The sociodemographic variables included in the model were race, age, ethnicity, education, and marital status.³ As can be seen in the results, none of these variables exerted a significant impact on identifying those who left the LCP program early, as none of the effects were statistically significant.

The effects for the control variables that captured differences between the different program locations suggest that there may be differences from one program implementation to another. This was not the focus of the present study, so the only effects included were the four comparisons to the one institution excluded when defining the dummy variables. A complete list of all program comparisons was not provided, as the concern was for controlling for program differences, not explaining them. Also, the effects for the institutional differences were sensitive to the specification of the religion variables.

The final model results were tested for the proportional hazards assumption, using the Stata program. The test examines whether the log hazard ratio is constant for all time points. Grambsch and Therneau (1994) first proposed the test. A value of 14.18 for the chi-square with 20 degrees of freedom was associated with a probability of 0.8212. That is, there is no statistical reason to reject the null hypothesis of no difference in the hazard rates over time. Harrell's C (Harrell, Califf, Pryor, Lee, & Rosati, 1982) was also calculated for the data to

examine the predictive ability of the model. Because Harrell's *C* cannot be calculated for weighted models, the model was respecified without the weights. It is important to note that the significance of the effects did not differ for the weighted and unweighted models. For Harrell's *C*, a value of .5 means no predictive property, where values of 0 and 1 indicate perfect discrimination of the model into failures and successes. The Harrell's *C* for this model was modest at 0.73. This means that we can use the independent variables of the model to correctly order the survival times of pairs of LCP participants 73% of the time.

DISCUSSION

This article examined factors that may be important regarding whether participants complete the entire 18-month LCP program. Although the results of the survival analysis revealed that there were no significant differences regarding an individual's religious affiliation for program completion, the frequency by which an individual reads sacred readings is important. Although there are no incentives for volunteering to participate for LCP, sometimes individuals have ulterior motives for volunteering. Anecdotally, some reasons mentioned for volunteering have been to be closer to home, because one of their friends is participating in the program, or the housing unit is nicer than the one they were in. Even though some individuals may volunteer to participate for reasons other than personal development, the frequency with which participants read their sacred readings could be an indicator of being more committed to learning and practicing their religion on their own time and not in the structured class environment.

Individuals with higher levels of self-worth were also more likely to complete LCP. Those with lower levels of self-worth might not feel comfortable participating in some of the required activities, such as writing essays and sharing thoughts with others. Unfortunately, the only indicator related to mental health status was the Self-Worth scale, which does not capture information regarding mental illness.

There were both similarities and differences regarding important factors for individuals who volunteered for the LCP and individuals who completed the program. Although there were no significant differences between the people who volunteered for LCP and those who did not volunteer regarding levels of self-worth, previous levels of misconduct, or the importance of reintegration, there were differences in motivational levels (Camp et al., 2006). So higher or lower levels of self-worth did not affect whether an individual entered the program, but once enrolled in the program, individuals with lower levels of self-worth were more likely to fail or withdraw from the program. Also, the level of expressed interest in community involvement after release did not differ between prisoners who volunteered and those who did not, but this is important for program completion. Participants with higher levels of interest in community involvement were more likely to complete the program. Interestingly, levels of previous misconduct were not important for either volunteering for or completing the program. Although individuals with higher levels of motivation to change were more likely to volunteer for the program, once enrolled in the program, motivation to change did not affect whether a participant completed the program.

Higher levels of motivation to change may be important for individuals to initially enroll in a faith-based correctional program, but once engaged in the program, other factors become important. The LCP is piloted as a reentry program that is based on tolerance,

enhancing life skills, and providing individuals with the tools to encourage prosocial behavior. Those individuals who are not concerned with reintegrating into the community may not have as great of a stake in completing the LCP. Inmates who genuinely want to change and lead a more conventional lifestyle might feel that completing the LCP is one step in the process to obtain as many skills as possible during incarceration.

Last, criminal history indicators were not significant predictors of program completion or noncompletion. More specifically, there were no differences in completion rates for the number of previous incarcerations, previous misconduct, or custody classification score. Although criminal history indicators, such as the number of previous incarcerations, security level, and institutional adjustment (i.e., misconduct) are generally used as proxies for risk for future criminal behavior, none of these indicators were important for program completion.

The current analysis revealed that individuals who have had previous behavioral problems while incarcerated were not more likely to fail. This finding is particularly important from a policy perspective, because higher levels of misconduct have previously been shown to predict future criminal behavior and program noncompletion for other types of correctional programming. Individuals considered higher risk (i.e., with criminal history indicators) seem to be participating and succeeding in the LCP (see Table 2). It will be interesting to see whether this finding holds for recidivism as well.

CONCLUSION

For researchers and administrators, this study highlights the need for more comprehensive knowledge about the factors that lead to program completion. Attitudinal data were important elements in identifying program noncompletion, items typically not captured in operational data systems. Ignoring these factors lessens the likelihood that program providers can address particular needs of inmates to enhance their chances of program completion. Likewise, knowledge of the factors associated with program termination is needed to develop more accurate indicators used to match treatment and control groups for future evaluations of program outcomes.

The current study illustrates a first attempt at capturing this knowledge and data, but future research is needed to determine whether there are differences between inmates who were expelled from treatment as compared to those who withdrew voluntarily. Future analysis can then begin to compare graduates and failures for differences in ultimate outcomes, such as prison misconduct and recidivism. These tests should also include indicators such as levels of self-control (Gottfredson & Hirschi, 1990), mental health status, or IQ to determine whether they have an impact on program completion.

One limitation of this study is that data collection for the current analysis did not include items regarding mental health or levels of self-control, which could affect an individual's ability to follow institutional rules and regulations. Although individuals with serious mental illness can volunteer for LCP, they may be less likely to be able to follow the structure and intensity of the program until the end. Another issue is that a large component of the classroom instruction relies on the ability to read and write in the English language. Although education was not a significant factor predicting program completion, other types of intellectual measurement, such as IQ, might produce a different conclusion. Unfortunately these data cannot disentangle whether levels of self-control, mental health

issues, or IQ affect program completion. Last, a more methodologically important limitation is that the majority of participants who did not fill out the survey were missed because they had already left the program before survey administration.

Future studies should also address whether faith-based programming is more effective for certain groups of individuals, at the beginning or end of incarceration, or for younger or older individuals or whether tailored programs tied to individual needs are more effective. This study is unique because it includes a female sample. In many evaluations of correctional programs, women have not been included in the analysis; the reason cited for their exclusion is usually that the female incarcerated population is too small to produce any meaningful results. For example, in evaluations of educational programs, it is not possible to generalize the results to all female inmates because of the limited amount of data (MacKenzie, 2006).

The need for more rigorous research is paramount to provide performance measures, especially as the prison population continues to increase. Unfortunately, these programs are usually evaluated with one outcome measure: recidivism. Although reducing future criminal activity is indeed an important goal, other markers should be taken into consideration in determining the success or failure of a program. The emphasis on recidivism is partly because of the nature of the data: because arrest data are systematically recorded and easily obtainable by researchers. However, other markers—admittedly more difficult to collect—could include supervised release, postrelease employment, and continued participation in programs such as substance abuse or other vocational training (Steurer & Smith, 2001).

NOTES

1. This analysis does not include Cohort 1 because the research evaluation did not begin until the end of Cohort 1 (164 individuals have been excluded).

2. Results are not presented here for brevity but are available from the authors on request.

3. Sex could not be included in the models as an independent variable along with the controls for institutional differences because of collinearity. There was only one program with female participants, so the effects of the institutional difference and sex are confounded and not possible to separate in the models. When institutional differences are removed and sex is added to the model, the effect for sex is not statistically significant.

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