

Offender Workforce Development Specialists and Their Impact on the Post-Release Outcomes of Ex-Offenders

Eric Lichtenberger
Southern Illinois University

THE FOLLOWING ARTICLE highlights the findings of a program evaluation that used post-release outcome information, among other sources, to determine the impact of the National Institute of Corrections' (NIC) Offender Workforce Development Specialist (OWDS) program as it was implemented by the Kansas Department of Corrections (KDOC). Although the focal point of the OWDS program is the specialists who provide an array of services to the offender population as they prepare for release, this evaluation relied heavily upon information directly related to the offenders. The purpose of the evaluation was to determine the extent to which the OWD specialists, and in aggregate the program itself, had contributed to the successful re-entry of ex-offenders. This determination was made by examining the post-release outcomes of the offenders served by the OWD specialists and using a comparison group comprising offenders released during the same timeframe who had not received such services.

In an effort to control for differences between the group receiving OWD services and the comparison group in terms of demographics, participation patterns in alternative prison-based programming, and other factors related to risk, I used logistic and multiple regression. The post-release outcome measures included in the evaluation were recidivism—defined as state-level recommitment for either a new crime or a parole violation—and wages during the first two quarters following release.

What is the Offender Workforce Development Specialist Program?

According to the National Institute of Corrections' *Administrative Guide for the Offender Workforce Development Specialist Partnership Training Program* (2007):

The objectives of the OWDS are to (1) provide participants with the knowledge and skills required to deliver effective workforce development services, (2) promote collaboration that will result in increased positive employment outcomes, (3) help participant teams develop a plan for delivering OWDS training in their communities, and (4) prepare trainees to be instructors of the OWDS curriculum.

The OWDS program encompasses the workforce development services that the specialists provide to the offender population. According to Lichtenberger and Weygandt (2011), offender workforce development (OWD) services that KDOC provided to offenders include comprehensive pre-employment preparation, job-retention planning, and post-release case management for individuals assessed as facing the greatest barriers for successfully gaining and keeping employment. The idea behind the OWDS program, including the OWD services, and the subsequent evaluation parallel the recommendations developed by Heinrich (2000), Holtzer, Raphael, and Stoll (2003), and Brown (2011).

Heinrich (2000) suggested that in an effort to reduce the workforce barriers and increase employment opportunities for offenders the following were needed:

- A holistic array of services, initiation of services before offenders are released,
- The development of long-term relationships with potential employers,
- Incentives for employers to recruit and hire ex-offenders (such as tax breaks and bonding), and
- The performance of long-term follow-up.

Holtzer, Raphael, and Stoll (2003) concluded that while some barriers are related to the offenders themselves, others are embedded within the behaviors of employers; both of these kinds of barriers are addressed by the OWDS program. The OWDS program provides the specialists with the knowledge and skills necessary to address both types of barriers through their own actions and as they instill within the offenders the skills to deal with the behavior of employers. Brown (2011) posited that offender workforce development is greatly needed and should address the development of employment-related skills and the non-technical and soft skills that are related to employment retention.

How was the Evaluation Framed?

It was hypothesized that individuals receiving intensive offender workforce development services are more likely to have lower recidivism rates and higher wages than individuals not receiving such services. This hypothesis is a conceptually viable model based on human capital and rational choice theory (Lochner, 2004). The framework argues that offender workforce development services not only increase human capital but improve the likelihood that gains in human capital from other prison-based programming can be utilized

upon release. Visher, Smolter, and O'Connell (2010) found that federal probationers enrolled in a workforce development program were more likely to find and maintain employment, especially when the program included vocational training.

Methods

Data

At the core of the evaluation were the 122 individuals who received offender workforce development (OWD) services at some point during the study period. Members of the OWD group used in the current evaluation received such services beginning in 2008 and ending in 2010. The OWD group used in the analysis was limited to moderate- and high-risk offenders based on overall Level of Service Inventory-Revised (LSI-R) scores. The LSI-R is a risk classification tool with 10 sub-scales: criminal history, education/employment, financial, family/marital, accommodations, leisure/recreation, companions, alcohol/drugs, and attitudes/orientation. The comparison group included 5,969 individuals released from KDOC during the same time-frame as the members of the OWD group who had not received offender workforce development services. The comparison group was limited to individuals within the same range of total LSI-R scores and the same range of time served for their current sentence as members of the OWD group. In terms of the data, several KDOC files were merged, along with data from the NIC OWDS data collection system, and Kansas Department of Labor (KDOL) employment and earnings information.

Analysis

Descriptive, inferential, and predictive statistics were calculated using SPSS, an analytics software package. The evaluation begins by establishing the differences between the OWD and comparison groups that could potentially impact the outcome measures and serve as alternative explanations for the results. Second, it uses simple descriptive and inferential analyses to look for differences between the OWD group and the comparison group in terms of both recidivism and wages. Finally, predictive analyses, namely logistic and multiple regression, were used to control for those differences in an effort to isolate the impact of receiving OWD services on the post-release outcome measures. The potential benefits of receiving OWD services are placed in the context of other factors and programming such as

overall risk and participation and completion of vocational education programs.

Research Questions

1. What were the differences between the OWD group and the comparison group in terms of demographics, other prison-based programming, and risk (based on the LSI-R)?
2. After controlling for those differences (if any), did receiving intensive OWD-related services improve post-release outcomes, namely the reduced likelihood of recidivism and increased wages?

Purpose

The results of the current evaluation could be used to better pinpoint where OWD services would have the greatest impact and for which groups based on risk (LSI-R). The results could also be used to establish other factors related to successful or unsuccessful reentry and provide insight regarding what additional modules should be integrated in OWDS or related programming.

Results

Differences between the OWD and Comparison Groups

Some of the results demonstrated that using basic descriptive or even inferential statistics was not sufficient to determine the impact of receiving intensive OWD services on post-release outcomes. That is, more sophisticated controls were required, since there were several key differences between groups, some of which were statistically significant. Relative to the comparison group, slightly higher proportions of the OWD group were male and

non-white and had participated in special education; however, none of those differences were statistically significant. Additionally, as shown in Table 1, the OWD group has significantly higher participation rates in vocational and therapeutic community programs and lower participation rates in work release.

When comparing the overall risk levels between the OWD group and the comparison group, there were differences indicating that the OWD group was at a significantly higher risk. The overall LSI-R risk level for the OWD group was 32.8 and 30.4 for the comparison group, for a statistically significant difference of 2.4 percentage points. Consequently, the OWD group was also at higher risk as measured by the specific LSI-R domains. As shown on Table 2, there were significant differences between the OWD group and the comparison group in the education and employment, family, companions, leisure and recreation, and accommodations domains.

OWD group members had a significantly ($p < .05$) lower mean number of dependents relative to the comparison group (0.71 to 0.95); this was perhaps associated with the fact that the typical member of the OWD group was significantly younger at release than the typical member of the comparison group (34 years 9 months to 39 years 3 months). OWD group members also served significantly longer sentences for their current incarceration spell (2.74 years compared to 1.98 years). This is perhaps a function of their significantly higher risk levels on the LSI-R and some of the domains. Time served is somewhat interesting in that it is positively associated with risk but provides more opportunities for programming that potentially could mitigate

TABLE 1:
Demographics and Participation/Completion Patterns in Other Prison-Based Programming

Variable	OWD Group		Comparison Group	
	n	%	n	%
Gender (Male)	115	94%	5,413	91%
Race (White)	71	58%	3,877	65%
Special Ed	27	22%	1,136	19%
Vocational Participation*	41	34%	1,349	23%
Vocational Completion*	26	21%	847	14%
Work Release Participation*	18	15%	1,350	23%
Work Release Completion*	10	8%	1,008	17%
Therapeutic Community Participation*	28	23%	870	15%
Therapeutic Community Completion*	11	9%	460	8%

*statistically significant at the $p < .05$

TABLE 2:
Overall LSI-R Score and Domains by Treatment

Variable	OWD Group	Comparison Group
	Mean Score	Mean Score
Overall LSI-R*	32.80	30.36
Criminal History	6.76	6.57
Education and Employment*	7.54	7.03
Family and Marital*	2.07	1.84
Companions*	3.42	3.08
Alcohol and Drugs	4.49	4.19
Attitude and Orientation	2.94	2.78
Emotional/Personal	1.57	1.40
Leisure*	1.82	1.64
Finance	1.07	0.96
Accommodations*	1.11	0.86

*Difference statically significant at the $p < .05$

risk. For example, the greater the amount of time served, typically speaking, the more serious the crime or crimes committed. Yet, the greater the amount of time served, the more opportunities one has to move up waiting lists and participate in and complete different programming related to reducing risk and increasing human capital.

Many of the differences indicated both directly (overall risk based on the LSI-R) and indirectly (age at release and time served) that the typical OWD group member was at significantly higher risk for recidivism than the typical comparison group member.

Initial Comparison of the Difference in Recidivism Rates

As shown in Table 3, the difference in the mean rate of recidivism between the OWD and comparison groups one year after release was four percentage points. The difference in recidivism rates equated to a program impact of roughly 19 percent. Unfortunately, using inferential statistics—independent samples T-test—this difference favoring the OWD group was not statistically significant. The t-score was 1.033 with a p-value of .302, which indicated that the difference was likely due to chance, perhaps because of the relatively small size of the OWD group (N=122). Additionally, there was no difference between the OWD and comparison groups at the end of year two. Relatively few OWD group members (73 combined) had at least two years of potential survival time, demonstrating the need for extending the evaluation.

As shown toward the bottom of Table 3, when the recidivism results are stratified by overall risk level (based on the LSI-R), the data suggest that during the first year following release, moderate-risk offenders benefit from OWD services more than high-risk offenders. Nonetheless, both moderate- and high-risk OWD group members benefit from receiving intensive services that first year upon release. Once again, these differences favoring both of the OWD groups lacked statistical significance. At two years out, the moderate-risk OWD group maintained their relative advantage over the moderate-risk comparison group; yet the high-risk OWD group had a higher rate of recidivism relative to the comparison group. This suggested an erosion of the benefits for high-risk offenders between year one and year two.

The lack of statistical significance between the OWD group and the Comparison group in terms of recidivism is most likely due to the relatively small sample size combined with one of the limitations associated with using

inferential statistics, such as independent samples T-tests. As evidenced in comparisons presented in Tables 1 and 2, there were several statistically significant differences between the OWD group and Comparison group, demonstrating that the groups were not equivalent. Many of the differences suggested that, as a whole, the OWD group would be at greater relative risk of recidivating. Further, in spite of the lack of statistically significant differences favoring the OWD groups and the fact that the high-risk OWD group members had higher recidivism rates at two years than their respective Comparison group members, this did not necessarily equate to either a lack of positive program impact or a negative program impact. Inferential statistics do not account for the variability between the groups in the other factors that are likely placing some of the OWD group members, particularly the high-risk offenders, at greater relative risk of recidivating. Fortunately, predictive analyses, such as logistic regression, allow researchers to control for such differences and determine the importance of each of the factors independent of each other as they relate to the outcome variable, holding all of the other factors constant.

As suggested below, logistic regression was used to control for the differences in other factors that could potentially impact the outcome measure, in an effort to better isolate the importance of receiving intensive OWD services on recidivism. More specifically, logistic regression was used to control for the differences between the OWD group and the Comparison group that arguably put the typical OWD group member at a higher relative risk of recidivism than the typical comparison group member. The outcome variable used in this regression analysis was simply whether someone recidivated (Y/N) during the first year following release (model 1) or second year following release (model 2). Due to missing data in one or more of the

TABLE 3:
Recidivism Rate Comparison at One-Year and Two-Years Following Release by Overall LSI-R Risk Level

Variable	OWD Group			Comparison Group		
	Total	Moderate	High	Total	Moderate	High
N with >365 Days of Survival Time	122	62	60	5,969	4,091	1,878
Rate of Recidivism at 1 Year	17%	10%	25%	21%	17%	30%
N with >730 Days of Survival Time	73	38	35	3,935	2,747	1,188
Rate of Recidivism at 2 Years	33%	16%	52%	32%	27%	42%

variables used in the logistic regression models, 39 members of the comparison group were omitted from the first model and 20 members of the comparison group were omitted from the second model.

It was found that participating in the OWD program significantly decreased the likelihood of recidivism as defined in this study, even after holding all of the other factors constant. In other words, the odds of recidivism within one year of release for an offender receiving OWD services were significantly lower than the odds of a comparison group member, even after controlling for differences in the other factors. This demonstrated the importance of using predictive statistical approaches, such as logistic regression, when the treatment group and the comparison group are not equivalent in other factors potentially related to recidivism. The LSI-R domains of Criminal History, Education and Employment, Emotional/Personal, and Accommodations were all statistically significant in predicting recidivism within a year of release, so that as the risk level increased, the odds of recidivism increased. Gender was also important, as males were significantly more likely to recidivate than females. An ex-offender's number of dependents was a significant factor: As the number of dependents increased, the odds of recidivating within a year of release decreased. Race was another significant factor, as white ex-offenders were significantly less likely to recidivate than their non-white counterparts. Participating in a vocational program without completing it was related to increased odds of recidivism; conversely, completing a vocational program was related to significantly lower odds of recidivism.

As shown on Table 4, the impact of receiving OWD services on recidivism fades away during the second year following release and is no longer statistically significant (Model 2). Gender and risk in the LSI-R Education and Employment domain also lost their statistical importance in increasing the amount of time for the outcome measure from one year to two years, while LSI-R Companions became statistically significant in the second model after lacking significance in the first. In terms of statistically significant factors in both year one and year two, similar patterns were evident across the two models regarding participation and completion of vocational programs, the number of dependents, race, LSI-R accommodations, and the age of the offender upon release.

Earnings

As illustrated in Table 5, the reported mean quarterly wages was universally low for all released ex-offenders who gained employment throughout the first four quarters following release. Although OWD group members maintained higher wages during the first two

quarters following release, the differences were not statistically significant. Also, the patterns were quite different between the comparison group and OWD group. The wages for the OWD group started off relatively high in the first two quarters and then decreased in subsequent quarters, while the wages of the

TABLE 4:
Logistic Regression Predicting Recidivism

Factor	Model 1		Model 2	
	Within One-Year of Release (N=6,052)		Within Two-Years of Release (N=3,988)	
	B	Odds Ratio	B	Odds Ratio
OWD	-.488	.614*	-.109	.896
Dependents	-.136	.873***	-.134	.874***
Race (White)	-.206	.814**	-.271	.763***
Gender (Male)	.325	1.383*	.165	1.180
Special Education	-.056	.945	-.014	.986
Voc. Participant	.225	1.253*	.380	1.463**
Voc. Completer	-.413	.662**	-.332	.718*
Work Release Participant	.188	1.206	.184	1.202
Work Release Completer	-.207	.813	-.092	.912
TC Participant	.072	1.075	-.085	.919
TC Completer	-.112	.894	.168	1.183
Release Quarter	-.001	.999	-.007	.993
LSI-R Domains				
Criminal History	.240	1.272***	.249	1.283***
Education and Employment	.059	1.061**	.016	1.017
Family	.024	1.025	.051	1.052
Companions	.088	1.092	.074	1.077*
Alcohol and Drugs	.017	1.017	.017	1.017
Attitudes and Orientation	.046	1.047	.011	1.011
Emotional/Personal	.078	1.081**	.093	1.097***
Leisure	-.061	.951	-.053	.948
Finance	.100	1.105	.054	.055
Accommodations	.103	1.108**	.079	1.082*
Age	.000	1.000***	.000	1.000*

*p<.05; **p<.01; ***p<.001

TABLE 5:
Mean Reported Quarterly Wages Comparison during the First Year Following Release

Variable	OWD Group	Comparison Group
	Mean Wages	Mean Wages
Quarter 1	\$417.69	\$238.82
Quarter 2	\$425.91	\$285.33
Quarter 3	\$301.02	\$303.88
Quarter 4	\$264.84	\$285.84

comparison group members increased the second quarter out and remained relatively flat after the second quarter increase. The relatively low wages for both groups highlight the extreme impact that being an ex-offender has on employment, particularly during an economic downturn. Once again, it should be noted that potential differences between the OWD and comparison groups exist that could serve as alternative explanations for the results, or in this case the lack of a statically significant impact for members of the OWD group.

Two multiple regression models were developed to determine the factors that were related to increased earnings during the first two quarters following release. The standardized coefficients (Beta) can be interpreted in much the same way as odds ratios, as they provide a measure of effect size for each variable. Only three variables were statistically significant in predicting wages during the quarter of release. Once again, having received OWD services was significantly related to the desired outcome, or in this case increased wages. An apparently counterintuitive finding was that those identified as having received special education had higher wages, all else being equal. The quarter of release was the only other statistically significant factor and offenders released later in the study period had significantly lower wages, perhaps as a result of decreased employment opportunities due to the recession.

In terms of predicting increased earnings during the second quarter following release, having received OWD services was no longer statistically significant. This suggests that obtaining employment with increased earnings upon release is less of an issue for the OWD group relative to the comparison group, but problems related to maintaining employment and obtaining subsequent jobs (employment retention) remain. One factor became statistically significant the second quarter following release, namely the number of dependents: Those with more dependents were more likely to earn higher wages during the second quarter following release. The quarter of release remained statistically significant in the second model and demonstrated that those released later in the study earned significantly less.

Conclusions and Discussion

The results of the evaluation demonstrated that the OWDS program is relatively promising in terms of its impact on short-term outcomes. Receiving OWD services contributed to a

TABLE 6:
Multiple Regression Models Predicting Quarterly Wages

	Wages Quarter 1		Wages Quarter 2	
	B	Beta	B	Beta
OWD	257.12	.049*	214.81	.040
Dependents	19.49	.035	30.54	.055*
Race (White)	12.82	.009	56.86	.038
Gender (Male)	29.60	.012	59.87	.025
Special Education	89.01	.047*	23.06	.013
Voc. Participant	-5.05	-.003	-40.39	-.024
Voc. Completer	-3.05	-.002	64.07	.033
Work Release Participant	98.82	.062	96.36	.061
Work Release Completer	135.75	.079	72.64	.043
TC Participant	-33.93	-.018	-17.01	-.009
TC Completer	-66.68	-.026	-133.28	-.053
Release Quarter	-5.82	-.069**	-8.39	-.092***
LSI-R				
Criminal History	-9.21	-.021	-10.01	-.023
Education and Employment	8.30	.020	2.56	.006
Family	11.41	.019	13.21	.022
Companions	-12.10	-.018	-7.10	-.011
Alcohol and Drugs	5.99	.021	6.85	.024
Attitudes and Orientation	-20.86	-.033	-30.97	-.050
Emotional/Personal	2.67	.005	-6.95	-.015
Leisure	-5.08	-.005	-18.37	-.017
Finance	-16.64	-.016	-27.06	-.027
Accommodations	-14.23	-.021	-10.89	-.016
Age	0.00	-.004	0.00	.009

*p<.05; **p<.01; ***p<.001

decreased likelihood of recidivism within one year of release. That is, after controlling for other factors that could potentially impact the likelihood of recidivism—such as race, gender, and other programming to name a few—the difference between the OWD and the comparison group in terms of the odds of recidivating was statistically significant and indicated that OWD group members had lower odds of recidivating. Unfortunately, this impact dissipated when measuring recidivism within two years of release for those with the minimum amount of potential survival time (at least two years).

All ex-offenders appeared to have a difficult time obtaining employment upon release; however, once pre-existing differences between the OWD and comparison groups were controlled for, a significant difference in wages during the first quarter following release was established. Receiving OWD services was not significantly related to increased

wages during the second quarter following release. This erosion of the positive program impact on earnings during the second quarter suggests that employment retention should be a continued area of emphasis for Offender Workforce Development Specialists.

Coincidentally, the NIC has recognized the need for employment retention and has developed an Offender Employment Retention Specialist Training program. The program combines cognitive behavioral principles with motivational interviewing strategies, providing specialists with the skills they need to deal with offenders targeted as being at high risk for job loss. The program's purpose is to connect offenders to services and programs that support their long-term attachment to the workforce, providing them with knowledge of employer needs and expectations as well as an understanding of the relapse prevention model as it applies to job loss indicators.

Policy Implications

Employment Retention

Offender Workforce Development specialists should continue to place a heavy emphasis on employment retention. Obtaining employment is still critical, as it serves as a conduit to retention; however, the positive program impact related to both recidivism and earnings fades away at a point when employment retention or the ability to get another job becomes critical. Unfortunately, the job market for ex-offenders in Kansas is less than robust, so the investment in human capital is not always realized due to a lack of opportunity. Nonetheless, Offender Workforce Development specialists should continue to develop and maintain relationships with employers willing to hire ex-offenders as well as attempt to break down the barriers that exist with employers unwilling to hire ex-offenders.

Varying the dose of services

Varying the level (dose) of offender workforce development services based on risk is not only economical, but could lead to improved outcomes. For example, high-risk offenders should be provided with a greater level of services than moderate-risk offenders. First of all, high-risk offenders, by their very nature, have a greater need. Second, moderate-risk offenders might not need the same level of services, and providing an unnecessarily high dosage to them means that other high-risk offenders could potentially not receive the level of services that are required to mitigate risk. This is important, as many offender-based programs are often forced to deal with counter-cyclical pressures—increased need for programs during economic downturns—that require the most efficient use of existing resources. A suggestion would be to provide core OWD services to all ex-offenders regardless of risk level, and then triage the intensive OWD services so that high-risk offenders are served first, followed by moderate-risk offender and so on, as resources allow.

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