Enduring Risk? Old Criminal Records and Short-Term Predictions of Criminal Involvement

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Abstract

It is well accepted that criminal records impose collateral consequences on offenders. Generations of researchers have studied the obstacles offenders face when they apply for employment. More recently, researchers have also examined the effects of criminal records on access to public housing, student financial aid, welfare benefits, and voting rights. An axiom of these policies is that individuals with criminal records - even old criminal records - exhibit significantly higher risk of future criminal conduct than individuals without criminal records. In this paper, we use police contact data from the 1942 Racine birth cohort study to determine whether individuals whose last criminal record occurred many years ago exhibit a higher risk of acquiring future criminal records than individuals with no criminal record at all. Our findings suggest that after approximately 7 years there is little to no distinguishable difference in risk of future offending between those with an old criminal record and those without a criminal record.

Keywords: criminal records, labeling, collateral consequences, recidivism.

1 Introduction

In 2004, law enforcement officers made over 14 million total arrests (U.S. Department of Justice, 2005). For some of those arrests, the journey through the criminal justice

system ended with pre-trial diversion or dismissal of charges For others, the process concluded with a conviction or guilty plea and sentencing. Many of these individuals will feel the consequences of their criminal justice system involvement – years and years after that involvement occurs. These so-called "collateral consequences" of criminal involvement include such varied policies as restrictions on voting rights, access to firearms, loss of eligibility for public assistance – such as housing and food stamps – and limits on educational loans. Perhaps one of the most concerning consequences, however, are restrictions placed upon employment opportunities.

Legislation exists at both the federal and state levels that precludes the hire of people convicted of certain crimes into a variety of occupations and prevents the attainment of a license to practice an estimated 800 additional occupations (Han, 1991; Cromwell, 2005). However, these formal barriers may be just the tip of the iceberg. Research shows that it is becoming ever more common for employment applications to include a questions such as "Have you ever been arrested for an offense other than a traffic violation"? Moreover, with improved technology, it is becoming increasingly easy for employers to follow up this initial inquiry with a formal criminal history check (Holzer, Raphael and Stoll, 2003). If prior criminal activity is discovered, employers express reluctance – or even outright refusal – to hire the individual (Grogger, 1995; Holzer, Raphael and Stoll, 2003; Pager 2003). Moreover, individuals who falsify information about their criminal history are increasingly likely to be terminated from jobs as employers become more aggressive about verifying background information supplied by job applicants.

We believe this particular consequence to be one of the most problematic for several important reasons. First, with the increase in computerization of records, there has been a large increase in the number of employers using criminal background checks on a routine basis (Munro, 2002). Put simply, more employers are using this information today than ever before. Second, there is no legal standard for what type of information they collect. In fact, the type of criminal background check done by employers typically includes not only conviction information, but arrest information as well regardless of the case outcome (Legal Action Center, 2004). Third, once the information is obtained the standards for how that information can be used vary widely from jurisdiction to jurisdiction. As noted above there are specific circumstances in which a person must be denied employment in a given field based on a prior conviction. However, most statutory language also allows an employer to deny employment if the offense relates to the duties required of the position. This vague language allows for broad discretion in the application of criminal justice records in employment decisions and little regulation or accountability for decisions made on part of the employer or vendors of criminal history data.

In addition, it is equally important to note that an abundance of criminological research suggests that one of the key social bonds that help past offenders lead law abiding lives is the attainment of stable employment. Indeed, evolving policies to aid offender integration and reintegration include a heavy focus on obtaining gainful employment. In fact, the current administration has dedicated significant funds to federal job training and employment programs for offenders. Yet, many efforts continue to be crippled by the imposition of lasting civil and political restrictions placed on offenders that hinder the reintegration process.

This apparent paradox sets up the broad question for the current study. Specifically, we ask what policies governing the use of criminal records to deny employment make sense? In this particular study, we limit our focus to the issue of the time period for which a past criminal justice contact should be considered relevant to employment decisions. That is, for a person with a prior criminal justice contact, is there a period of time after which if he/she has remained crime free, that prior contact is no longer predictive of future criminality? In the following sections we look at both the theoretical and empirical applications of this question.

2 Stigmitization and Blocked Opportunity

The social reactionist perspective of deviance seeks to define how and why some behaviors are labeled as deviant as well as the effects the label of "deviant" has upon its recipient. In this discussion, we will focus on the latter. The roots of the social reactionist perspective date back to the early 1900's and the writings of George Herbert Mead. In his essay, "The Psychology of Punitive Justice" (1918), Mead discusses the ways in which the criminal justice system's ability to label one a criminal relays the message to others that this person is to be cut off from the world of legitimate people. With this label, people are separated into acceptable and unacceptable, or in the later words of Howard Becker (1963), classifications of insiders and "outsiders."

The effect of being labeled a deviant has been referred to in many terms such as tagging (Tannenbaum, 1938), or stigmatization (Goffman, 1963). Whatever the terminology, the underlying concept is the same: once a label has been effectively applied to an individual, the label impacts the way that person is perceived by others, and, even the way a person views oneself. Perhaps this phenomenon is best summarized by Becker (1963:33) when he states that the "possession of one deviant trait may have a generalized symbolic value, so that people automatically assume that its bearer possesses other undesirable traits allegedly associated with it." The label therefore infers that the person did not just do something wrong, but that there is something wrong with the person.

Beyond the theoretical implications of the label come the social realities it produces. Through a process known as objectification (Berger and Luckmann, 1967) the theoretical symbolism of such a label becomes a social reality for the bearer. The label of "deviant" or "criminal" serves as a cue informing others how to respond to that individual. In our society some of these practices of social shunning have been formalized into law so that a person possessing a criminal justice record faces civil disenfranchisement such as the loss of the right to vote, loss of the right to run for or hold a public office, restrictions on employment and disqualification for licensure for a multitude of occupations deemed to require "good moral character," and reduced eligibility to receive various forms of government assistance such as public housing, food stamps, and student loans.

Moreover, even when restrictions are not formalized into law like those noted above, an individual with a criminal record may face unspoken discrimination when searching for housing (particularly for sex offenders) and employment. In fact, research consistently shows that persons with a criminal record of any type have a difficult time securing and maintaining employment. In fact, they experience more difficulty in obtaining steady employment than any other disadvantaged group (e.g., minorities, welfare recipients, illegal aliens, etc.) (Holzer et al., 2003).

In an early study of this issue, Schwartz and Skolnick (1962) prepared four sample employment folders that differed only in respect to the reported criminal record of the offender. The first having no criminal record, the second having an arrest but no conviction, and the third having an arrest, no conviction and a letter of support from the judge and the final folder having an arrest and conviction. A sample of 100 employers was then chosen and divided into four groups with each group viewing only one folder. Of the 25 employers who saw the folder of the candidate with no criminal record, 9 expressed interest in hiring the candidate. In comparison, the folder for the candidate with a criminal conviction received only 1 offer for employment. Interestingly, although our justice system is premised on the notion of presumptive innocence, the proposed two candidates with only an arrest and no conviction also had reduced employment opportunities (3 offers for the person arrested but not convicted and 6 offers for the person arrested, not convicted and offered a letter of support from the judge).

More recently, Pager (2003) conducted a field experiment to test the effects of

both race and criminal record on job prospects. Two white male and two black male college students were assigned as "testers." The participants were matched on basis of appearance and presentation style and within each pair the treatment assignment of having a criminal record was rotated between the testers to account for unobservable differences. The white pair audited 150 employers and the black pair a total of 200 employers, all for entry level positions in low skill jobs. Her analysis revealed that white male candidates with no prior conviction received 34 job offers compared to only 17 offers for his counterpart with a "conviction." The black testers faired considerably worse with only 14 offers for the test condition of no criminal record and 5 offers for the test condition of a criminal record. Given recent estimates that one in 4 black males has at least one criminal justice contact (cite), the results of this study are potentially devastating in regards to future employment prospects for this portion of the labor force.

These findings regarding the application of criminal records become even more pertinent at a time when the increased ease of conducting criminal background checks has apparently lead to a vast increase in the overall use of such records in employment decisions. For example, in 2004, Wal-Mart, the nation's largest corporate employer, announced that it would be conducting criminal history checks on all potential employees (Zimmerman and Stringer, 2004). Wal-Mart is not alone. According to recent research by Holzer (2002), after 9/11 there was a stark increase in the use of criminal background checks, particularly by large companies. A recent employer survey suggests that over 50in the Los Angeles area (Stoll et al. forthcoming). Moreover, The Fair Credit Reporting Act, which governs the use of consumer information like criminal history records, was amended in 1998 to eliminate any restrictions on how far back conviction records could be reported (SEARCH 2005) meaning that in terms of employment a criminal record can truly follow a person for the rest of his/her life.

Overall, this research demonstrates that a criminal record of any sort has great im-

plications for future employment opportunities for one-time offenders. In the following section we further explore why such use of criminal records may indeed be counterproductive to efforts to rehabilitate and reintegrate offenders and begin to search for some reasonable guidelines for the use of such records by employers.

3 Removing the Stigma: Finding Direction from Ex-Offender Recidivism Research

On the one hand, individuals who have been arrested in the past are more likely than the average person to be arrested in the future. Undoubtedly, this reality of behavioral continuity has influenced a good deal of contemporary interest in scrutinizing individuals' criminal records. But a good deal of contemporary research also emphasizes the importance of behavioral change in the lives of offenders. For example, a common theme of life-course criminology is the finding that a majority of one-time offenders do not go on to lead lives of crime, but indeed age out of, or otherwise, desist from criminal activity. Significant predictors of desistance include not only age, but the forming of positive social bonds such as work and marriage (Sampson and Laub, 1993; Uggen, 1999). Thus, our theoretical discussion regarding the impact of a criminal record leads us directly back to the search for a reasonable application of prior record information in employment decisions. In the following section we therefore take a closer look at literature on recidivism and desistance in search of further guidance in addressing this question.

A variety of birth cohort studies in criminology have converged on a few common findings about long-term criminal careers (see review in Blumstein, Farrington, and Moitra, 1985; Blumstein and Moitra (1980)). These studies typically identify a relatively small number of individuals who are responsible for the majority of arrests, police contacts, and criminal convictions. These individuals are usually described as "chronic offenders" or "career criminals." While a great deal of attention has been paid to the chronic offender, there has been much less study of the remainder of the population of youths that had no police contacts, or those who had only one or two early contacts and then desisted from crime. In fact, the risk of new offenses among those who have offended in the past typically peaks within one or two years and declines thereafter.

Perhaps the most prominent example of this finding comes from Schmidt and Witte's (1988) study of two North Carolina prison release cohorts to estimate the percentage of released inmates who return to prison. Their analysis found that the percentage of inmates returning to prison peaked before ten months of street time By the twenty-month mark, this percentage had dropped to half of the peak level and by the 40-month mark, the percent was again cut in half from the 20-month level. Many other studies exhibit this same growth-then-decay time-to-recidivism pattern (see e.g., Greenberg, 1978; Harris and Moitra, 1978; Harris et al., 1981; Maltz, 1984; Schmidt and Witte, 1988; Visher et al., 1991; Lattimore and Baker, 1992).

These results imply that risk of recidivism for a cohort of offenders returning to the community peaks fairly quickly and then diminishes considerably with the passage of time. Based upon this consistently observed empirical pattern of criminal recidivism, we suggest that there may indeed be a point at which the risk of a new criminal event among a population with a prior record becomes similar to the risk of a criminal event among individuals who have not offended in the past. In the following section we empirically test this assumption using a data set of 670 young males born in Racine, Wisconsin in 1942 and followed until age 32.

4 Data

We assume that individuals with prior offending records are more likely to accumulate new offenses than persons without such records. But, we are considerably less certain that individuals with old prior records are more likely to accumulate new offenses. In other words, research suggests that the risk of recidivism among individuals with prior records does not remain constant over time; our principal aim here is to see whether individuals with old prior records have a distinguishably higher risk of new offenses than those with no record at all.

To address this question, we use data from the 1942 Racine birth cohort study conducted by Shannon (1982). This data set has several qualities that make it appropriate and useful for the proposed study. First, by using a prospective birth cohort design, it provides us with a population of both offenders and non-offenders growing up in a similar time-period and physical location. Second, the data track the 1942 birth cohort through age 32 allowing a look at long-term outcomes rather than the traditional one-to-two-year follow-up periods frequently used in recidivism studies. Third, because the data follow the same individuals over time, we have access to their entire Racine criminal history (each person's age at the time of a contact) so we can distinguish between individuals who exhibit persistent involvement in offending and individuals who stop offending or who offend intermittently. Our analysis focuses on the 670 males followed through age 32 from the 1942 Racine birth cohort. According to the Racine data collection procedures, police contact information was coded from the Juvenile Bureau and the Record Bureau of the Racine Police Department. Each individual's age at the time of the contact was recorded and included in the database.

5 Results

In this section, we present several sets of analyses based on the police contact data for the 1942 Racine cohort. Our primary task is to identify several subgroups of individuals – each of which can be characterized by their juvenile or early adult criminal history. We then follow these groups prospectively into adulthood to examine how the risk of new offenses changes as they grow older. We approach this task by examining hazard rates of new offending and the estimated probability of new offenses during two time intervals: (1) ages 25 and 32; and (2) ages 28 and 32.

Table 1 presents several comparison groups for our hazard analysis. The first row of this table divides the 670 Racine males into two groups based on their juvenile police contact histories. The data reveal that 349 of these individuals had at least one contact before age 18 while the remaining 321 did not. We, therefore, characterize the 349 individuals with juvenile contacts as "baseline offenders" while the other 321 are characterized as "baseline nonoffenders." Because the follow-up period for this comparison proceeds from age 18 to age 32 we characterize the length of the follow-up period as 15 years.

Figure 1 presents the adult contact hazard rates for the 349 individuals with juvenile records in comparison to the 321 individuals without any juvenile record. At age 18, the hazard rate is simply the proportion of individuals in each group who had at least one police contact at that age. At each subsequent age, the hazard rate is based on the individuals with no contacts after age 18. Among these individuals, the hazard rate measures the proportion who have at least one contact at that subsequent age.

Group	Follow-Up	Baseline	Baseline	
	Period	Offenders	Nonoffenders	
Juvenile Record	15 Years	349	$321 \\ 519 \\ 535 \\ 550 \\ 407$	
Age 18	14 Years	151		
Age 19	13 Years	135		
Age 20	12 Years	120		
Young Adult	12 Years	263		

Table 1: Baseline Offender/Non-Offender Groups and Length of Follow-Up Period (N = 670)

Note: Individuals with any contacts as a juvenile or characterized as "offenders" in the Juvenile Record row. Individuals with a contact at ages 18, 19, or 20 are characterized as "offenders" in the Young Adult row.





Thus, this figure conceptually captures a key quantity of interest to any employment

decision maker: given no criminal record since the individual was a juvenile, what is the likelihood that person will recidivate in the future in comparison to someone with no record of offending at all. As Figure 1 illustrates, the juvenile offenders and nonoffenders exhibit important differences in the hazard rate for new offenses early in their adult years. Equally prominent, however, is the convergence between the groups by age 23. In any given year, after the mid-20's there appears to be little difference in offending likelihoods between juvenile offenders who have avoided offending during early adulthood and those with no record at all.

Next, we compare the 151 individuals with a record of at least one contact at age 18 to the 519 individuals with no contacts at age 18. We follow these individuals from ages 19 to 32 to see how the risk of new offenses varies between them. Figure 2 presents the results which reveal important differences between the age 18 offenders and non-offenders until the mid-20's. After that point, however, the groups become very hard to distinguish from each other. For example, over the nine year period from ages 24 to 32, the age 18 offenders have a higher hazard rate than the age 18 nonoffenders in five years while the age 18 nonoffenders actually do better than the age 18 offenders in three years. At age 32, the two groups have identical zero hazard rates. In sum, when criminal activity is in the recent past, we expect to see an elevated hazard rate; but the more distant the last evidence of criminal activity is in the past, the less likely there is to be a meaningful elevation in the hazard rate for new offenses.



We turn now to a comparison of the 535 age-19 nonoffenders to the 135 age-19 offenders. The follow-up period for this comparison extends from ages 20 to 32. As Figure 3 illustrates, there are significant differences in the hazard rate for new offenses between these groups at least through age 25 (or, perhaps, age 27). After age 26, however, it is clear that there is no important difference in the new offense hazard rates for these two groups. Figure 4 builds on this pattern by comparing the 550 age-20 nonoffenders to the 120 age-20 offenders. From ages 21 to 25 the age-20 offenders exhibit a significantly higher hazard rate for new contacts than the age-20 nonoffenders. But, from ages 26 to 28 the differences between these groups become much smaller and they disappear completely by age 29.



Our final hazard rate analysis is based on a comparison of a young adult offender group (N = 263) comprised of individuals with at least one contact at ages 18, 19,

or 20 to a larger group of 407 individuals with no police contacts during the age 18-20 period. Our comparison focuses on contacts experienced by both of these groups between ages 21 and 32. Figure 5 presents the results which show important differences in these hazard rates from ages 21 to 25. But, as in the other analyses, when the mid-20's approach, our ability to distinguish between the behavior of these two groups diminishes considerably. Although there is some indication of an elevated risk of new offenses throughout the entire period, the differences between these groups in the late 20's are very small indeed.



The preceding hazard rate analysis provides a useful window on the risks of new criminal behavior in a particular year but it is less helpful for thinking about cumulative risk of failure over a period of several years. This is important because seemingly small differences in a hazard rate analysis can accumulate to larger, more important differences over the course of several years' time. To address this problem we conducted two additional analyses. First, we compared groups with different criminal history backgrounds on the probability of being contacted at least once between the ages of 25 and 32. Second, we compared criminal history groups on the probability of at least one contact between ages 28 and 32.

This type of analysis provides a useful basis for thinking about the policy implications of our findings from the Racine data. For example, suppose an employer is faced with two applicants for a position. Both applicants are 25 years old but one of the applicants has never had a record of any arrest activity while the other one was arrested at age 18 but has not been arrested since. Do these two applicants have different probabilities of experiencing an arrest in the next seven years? In this second analysis, we build on our hazard rate studies to obtain answers to these types of questions.

The criminal history groups for the first analysis were comprised of the following categories: (1) no record at all through age 24; (2) a juvenile record only; (3) last contact at age 18; (4) last contact at age 19; (5) last contact at age 20; (6) last contact at age 21; (7) last contact at age 22; (8) last contact at age 23; and (9) last contact at age 24. Within each of these groups, we calculate the proportion of individuals with at least one police contact during the eight year period between ages 25 and 32. For the second analysis, we use these same nine categories plus an additional three: (1) last contact at age 25; (2) last contact at age 26; and (3) last contact at age 27. Then, for each of these twelve groups, we calculate the proportion of individuals who have at least one police contact from age 28 to age 32. Table 2 provides a summary of the number of people in each of the groups and the follow-up period contact rates for both analyses.

The clear implication of Table 2 is that individuals with no record of police contacts have the lowest likelihood of being contacted again within the two follow-up periods. Another clear implication of this table is that individuals with juvenile or early adult records but no subsequent contacts have a somewhat higher likelihood (than those with no record) of acquiring new contacts during each follow-up period. Individuals with

Group	Age 25-32		Age 28-32	
Description	N =	p(Contact)	N =	p(Contact)
NDI	100	0 101	1	0.070
No Record	199	0.181	177	0.079
Juvenile Record	119	0.294	100	0.160
Age 18	27	0.296	24	0.208
Age 19	39	0.359	30	0.167
Age 20	44	0.341	34	0.147
Age 21	41	0.537	24	0.208
Age 22	45	0.578	31	0.387
Age 23	65	0.538	41	0.268
Age 24	91	0.747	33	0.303
Age 25			34	0.412
Age 26			54	0.389
Age 27			88	0.693
Total	670	0.387	670	0.267

Table 2: Comparison Groups (N = 670)

Note: The "No Record" and "Juvenile Record" groups refer to those with no record of any kind before age 25 or age 28 and those with only a juvenile record, respectively. Ages refer to age at time of last contact before the beginning of the age 25-32 or age 28-32 follow-up period. p(Contact) is the proportion of individuals with at least one contact during the follow-up period (age 25-32 or age 28-32). more recent adult records exhibit a much higher likelihood of new contacts during each follow-up period.

A limitation of the analysis in Table 2 is the relatively small sample sizes involved. To address this issue, we calculate exact 95% binomial confidence intervals around each of the estimated proportions in Table 2. For the age 25-32 analysis, these confidence intervals are presented in Figure 6 while the age 28-32 results are presented in Figure 7.



As Figure 6 suggests, the estimated contact probabilities in the age 25-32 follow-up period are higher for those with older records (in comparison to those with no records). But the analysis reveals that the 95% confidence intervals for those with juvenile records and those whose last contact occurred at ages 18, 19, or 20 overlap with the confidence interval for those with no record at all. Individuals whose last contact occurred at age 21 or later had substantially higher probabilities of new contact between ages 25 and 32.



The results in Figure 7 for the age 28-32 follow-up period tell a similar story. Individuals with no record, a juvenile record, or whose last contact occurred at age 21 or younger appear to have overlapping 95% confidence intervals while those whose last contact occurred later in adulthood tended to have much higher contact probabilities between ages 28 and 32. Overall, the clear pattern from both Figures 6 and 7 is that the amount of time since the last police contact has occurred is relevant information for making short-term predictions about future criminal activity. Simple distinctions between those who have an official offending record and those who do not appear to be quite inadequate as a basis for future criminal activity predictions.

6 Discussion and Conclusions

Increasingly, individuals are being held accountable for their official criminal records. This trend has gained momentum in recent years as the technology for searching these records has become more commonplace and accessible while the expense involved in searching such records has been dropping. Accompanying this greater reliance on criminal record information is a substantial body of evidence suggesting that those with criminal records are likely to face important disadvantages in many activities and endeavors. Limited access to jobs, public housing, student loans, and other types of activities have all become more commonplace in recent years.

In this study we are particularly interested in the use of old criminal records in employment decisions. As previously noted, a criminal record of any type can be deemed as a character flaw on part of the owner, thus portraying to others the potential of the individual to commit other criminal and/or dishonest acts (Becker, 1963; Berger and Luckmann, 1967). This stigma works to limit employment opportunities for offenders both formally-through legislation prohibiting the hire of ex-offenders into certain occupations – and informally – by communicating to the potential employer that this individual is a higher than average employment risk (Holzer et al, 2003; Pager 2003).

The imposition of these disadvantages has some basis in empirical research on criminal careers: individuals who have offended in the past are more likely than average to offend in the future. However, this empirical fact can only be pushed so far for policy purposes. The problem is that a recent criminal record seems to be far more predictive of short-term future behavior than older criminal records from many years ago. Taken with our recent analysis of the 1958 Philadelphia birth cohort data (Kurlychek et al. 2006), we are skeptical that blanket decision rules based exclusively on whether someone has a criminal record will provide useful information for behavioral predictions. Instead, our analyses suggest that decision makers should place information about criminal records into a context that pays close attention to the recency of the criminal record as well as the existence of a criminal record. That is, if a person with a criminal record remains crime-free for a period of about 7 years, his/her risk of a new offense is similar to that of a person without any criminal record. Our analyses of the Philadelphia and Racine datasets lead us to a number of other relevant conclusions about research and policy as well. First, research that documents exactly how criminal record databases are being used to make decisions about employment and access to other opportunities is badly needed. We simply do not know enough about the quality of the data upon which such decisions are based or the extent to which decision makers already discount older criminal records or criminal records for certain types of offenses. Second, our survey of the literature indicates that the criminal record industry is thriving and growing in an environment of limited regulation. This lack of regulation is troubling in light of the extensive regulation governing access to, and use of, personal information in the credit reporting and insurance industries.

On the other hand, the way these other industries use personal information can provide a useful roadmap for researchers and policy makers to study as they contemplate the optimal use of personal criminal history information. For example, the nation's three largest credit reporting agencies (Equifax, TransUnion, and Experian) and the nation's largest credit score calculator (Fair Isaac), all explain on their websites that derogatory credit information carries less and less weight in the calculation of credit risk scores as the time since the triggering behavior increases. In other words, the credit reporting industry places more weight on recent behavior and less weight on older behavior. This is precisely the implication of our analyses of the Philadelphia and Racine data sets. The search for useful policy analogies to the problem of optimal criminal history use is a worthwhile objective.

Finally, researchers and policy makers should think carefully about whether criminal records for some types of offenses should be treated differently than records for other types of offenses. Developing useful policy guidance in this area represents a daunting challenge because so little is currently known about how criminal records are already used and the quality of the information contained in those records is poorly understood. Nevertheless, involvement in some offenses may predict future behavior better than involvement in other types of offenses. In the near term, basic research about behavioral outcomes for different types of offenses is badly needed.

In information-intensive Western societies, it is perhaps surprising that knowledge about the proper use of criminal history information could lag so far behind the actual practice of using that information to make decisions about opportunities for exoffenders. This is a research area where the expertise of criminology and criminal justice researchers can directly contribute to the optimal use of this type of information. We hope this research will encourage others to use their own research skills to produce better practical usage of criminal history information.

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