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Research paper

Exposure to project-based Housing First is associated with reduced jail time and bookings☆

Seema L. Clifasefi[a,*], Daniel K. Malone[b], Susan E. Collins[c]

[a] Center for the Study of Health and Risk Behaviors, University of Washington, Seattle, WA, United States
[b] Downtown Emergency Service Center, Seattle, WA, United States
[c] Center for Healthcare Improvement for Addictions, Mental Illness and Medically Vulnerable Populations, University of Washington – Harborview, Seattle, WA, United States

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ABSTRACT

Background: Project-based Housing First (HF) programs provide immediate, permanent, low-barrier, nonabstinence-based supportive housing to chronically homeless people within a single housing project. Previous studies have shown project-based HF is associated with 6-month reductions in jail time (Larimer et al., 2009), and that people with criminal histories are able to maintain their housing in supportive housing, such as project-based HF (Malone, 2009; Tsai & Rosenheck, 2012). This study aimed to extend these findings to document the criminal histories of project-based HF residents and to test the associations among exposure to project-based HF, criminal histories and jail time over a 2-year follow-up.
Methods: Participants ($N = 95$) were chronically homeless individuals with severe alcohol problems who moved into project-based HF. Measures included administrative data on criminal history, project-based HF exposure, and jail days and bookings for two-years prior to and subsequent to move into project-based HF.
Results: The majority of all past criminal convictions were misdemeanors (91.3%). Further, criminal convictions did not predict participants' housing retention in project-based HF. Months of project-based HF exposure – not prior criminal histories – predicted significant decreases in jail days and bookings from the two years prior and subsequent to participants' move into HF.
Conclusions: Findings suggest that participants' criminal histories primarily reflect "symptoms" of homelessness rather than threats to public safety. Further, the extent of participants' criminal histories was not associated with subsequent jail time or housing attrition. Although causation cannot be implied, these findings show that the amount of time spent in project-based HF is associated with decreased jail time for up to two years following initial HF exposure.

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Introduction

Housing First (HF) programs provide low-barrier, nonabstinence-based, immediate and permanent supportive housing to chronically homeless individuals (Gulcur, Stefancic, Shinn, Tsemberis, & Fischer, 2003; Tsemberis & Eisenberg, 2000). To date, two HF models have been developed and empirically tested. In the scattered-site HF approach, people are offered a choice of individual units scattered throughout a community and access to assertive community treatment. In the project-based HF approach, residents are offered units within a single housing project, where they can elect to receive onsite case management and other supportive services.

Both HF models have been associated with improved housing outcomes for affected individuals, as well as reduced publicly funded service utilization and associated costs (Larimer et al., 2009; Pearson, Montgomery, & Locke, 2009; Tsemberis & Eisenberg, 2000; Tsemberis, Gulcur, & Nakae, 2004). These encouraging empirical findings are garnering increased interest and support across the public health and policy domains (Bassuk et al., 2010; National Alliance to End Homelessness, 2009, 2010; Substance Abuse and Mental Health Services Administration, 2008). On the other hand, some researchers have questioned the appropriateness of nonabstinence-based HF (Kertesz, Crouch, Milby, Cusimano, & Schumacher, 2009; Kertesz & Weiner, 2009), and community-based agencies with HF facilities have faced public opposition to this approach (Jamieson, 2002; Schram, 2004).

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* Corresponding author at: Center for the Study of Health and Risk Behaviors, University of Washington, Box 354944, Seattle, WA 98195, United States.
Tel.: +1 206 543 3452.
E-mail address: seemac@uw.edu (S.L. Clifasefi).

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Because HF has both engendered controversy and drawn empirical and governmental support, it is increasingly important to understand its effects for both affected individuals and their communities. Given the documented correlations among homelessness, alcohol use and contact with the criminal justice system (Burt et al., 2004; Ditton, 1999; Eberle, Kraus, Pmeroy, & Hulchanski, 2000; Fischer, Shapiro, Breakey, Anthony, & Kramer, 1986; Fitzpatrick & Myrstol, 2011; Greenberg & Rosenheck, 2008a; Greenberg & Rosenheck, 2008b; Kushel, Hahn, Evans, Bangsberg, & Moss, 2005; Snow & Anderson, 1989), research exploring the potential protective effects of HF on these outcomes is warranted. There are, however, only three studies to date that have documented the associations between HF or other types of supportive housing and either criminal history or jail outcomes among chronically homeless people. One study tested whether chronically homeless individuals' criminal history was predictive of subsequent housing attrition (Malone, 2009). Findings indicated that there were no differences in housing retention between those with and without criminal histories (Malone, 2009). This study, however, did not address whether criminal history and/or HF provision are related to *subsequent* criminal activity.

Another study evaluated associations between project-based HF and subsequent use of publicly funded services (i.e. jail, emergency medical services, sobering center, hospitals). This study showed that chronically homeless individuals with alcohol problems who received project-based HF accumulated fewer jail days and bookings during the six-month follow-up compared to a waitlist control group (Larimer et al., 2009). This relationship also increased as a function of HF exposure, such that increased time spent in project-based HF was associated with fewer jail bookings and days. Limitations of these findings, however, include the relatively short follow-up period and the fact that this study did not take into account *prior* criminal history as a predictor of housing retention or subsequent contact with the criminal justice system.

Finally, Tsai and Rosenheck (2012) compared chronically homeless individuals with various levels of incarceration history on demographic and health-related outcomes (e.g. health status, employment, income, health service use, community adjustment, substance-use, and homelessness, etc.) at baseline and one year following the provision of supportive housing (see Tsai & Rosenheck, 2012). Although these groups evinced significant baseline differences, primary analyses indicated only one significant difference among the groups at follow-up (i.e. health status). Secondary analyses found that participants with extremely long incarceration periods (i.e. longer than 10 years) had worse substance-use outcomes than those with no history of incarceration. The authors pointed out that their findings largely echoed those of Malone (2009), which showed that homeless people with incarceration histories can benefit just as much from housing as those without incarceration histories.

Study aims

This study's aim was to document and test the associations among prior criminal history, project-based HF exposure and subsequent jail time among chronically homeless adults with alcohol problems. This study will thereby extend previous findings that separately assessed the associations between prior criminal history and housing retention (Malone, 2009; Tsai & Rosenheck, 2012), and between project-based HF provision and subsequent jail time (Larimer et al., 2009).

Methods

Participants

Participants were chronically homeless individuals with severe alcohol problems ($N = 95$) who moved into an HF project in Seattle, Washington between December 2005 and March 2007. Participants were recruited for a larger parent study from two primary sources: (a) a rank-ordered list of individuals who had incurred the highest public costs for alcohol-related use of emergency services, hospital, sobering center (i.e. "sleep-off" facility), and county jail in 2004; and (b) a list of eligible individuals suggested by community providers familiar with the target population (Larimer et al., 2009).

Measures

Demographic information, including age, gender, racial/ethnic background, education and partnership status, was assessed using single items during participants' baseline interview to provide a sample description.

Participants' criminal history data were used in the sample description and as predictors in primary analyses. These data were obtained from the Washington State Patrol in the course of routine background checks conducted at move-in for each participant. Background checks described all adult criminal convictions for Washington State. Each conviction record was coded into frequency of conviction type and crime severity (i.e. felony versus misdemeanor) and using a four-group taxonomy used by the U.S. Department of Justice: crimes against people, property crimes, drug crimes and public order offenses (James, 2004).

Jail data were obtained from King County jail records for the two-year period prior to (baseline) and subsequent to (two-year follow-up) participants' move into the project-based HF program. Baseline data were used in descriptive analyses and served as covariates to control for baseline jail time in analyses of HF associations with the two-year follow-up jail outcomes.

Housing data for each participant were obtained from the housing agency records. Number of days continuously housed during the two-year follow-up served as the censoring variable in survival analyses, and housing retention (0 = maintained continuous housing, 1 = did not maintain continuous housing) served as the outcome variable. In other analyses, total days spent in housing during the two-year follow-up was converted into months to represent total months of HF intervention exposure.

Project-based HF Intervention

Project-based HF entails the provision of immediate, permanent, low-barrier, nonabstinence-based supportive housing within a single housing project. Participants in this study were assigned to either receive a private studio apartment, or in the case of greater medical needs, a semi-private cubicle unit. On-site supportive services were tailored to the needs of individual residents and included 24-h housing project staffing, intensive case management, nursing/medical care, access to external service providers, and assistance with basic needs.

Procedures

In the parent study (Larimer et al., 2009), program staff offered project-based HF units to people on the target list as they were located in the community. Once the housing project was filled, additional participants were added to a waitlist. Verbal consent for the parent study was collected by housing program staff. Interested individuals then met with research staff for an informational session for which they were paid $5, regardless of study participation.

Those who wished to participate either completed the baseline assessment immediately or were scheduled for subsequent appointments. Written, informed consent was obtained at the baseline appointment. Individuals who consented and had been assigned to HF units served as the HF group in the parent study, whereas those who consented and were on the waitlist served as the waitlist control group in the parent study. Participants were administered self-report data collection interviews, which occurred at baseline, 3-, 6-, 9-, 12-, 18- and 24-month follow-ups, and were paid $20 for their participation in each interview. Only baseline self-report data were used for sample description in the current study.

The parent study featured a nonrandomized controlled trial of the HF intervention. The first 95 participants recruited were assigned to project-based HF, and the next 37 individuals served as the waitlist control group (Larimer et al., 2009). It was deemed unethical to maintain individuals on the housing waitlist for any longer than necessary for appropriate housing placement. Because the vast majority of these individuals were housed within the first year of the study, the unhoused control group was vastly reduced by the end of the second year of treatment. For these reasons, the current study included only the 95 participants in the project-based HF group. Additional information on parent study recruitment methods, the project-based HF intervention, measures, and outcomes are published elsewhere (Clifasefi, Collins, Tanzer, Burlingham, & Larimer, 2011; Collins et al., 2012; Larimer et al., 2009). The University of Washington and King County Mental Health, Chemical Abuse and Dependency Services Division Institutional Review Boards reviewed and approved these procedures.

Data analysis plan

Descriptive statistics were calculated using SPSS 19. Preliminary descriptive analyses were conducted to describe the sample and baseline criminal history, as well as to determine the distribution shapes of the outcome variables and the presence of outliers. Inferential analyses were conducted using STATA 11. Alpha was set to $p = .05$, and confidence intervals (CI) were set to 95%. We excluded 14 participants from inferential analyses involving the follow-up variables if participants (a) did not have a criminal background report ($n = 1$); (b) were unavailable to provide informed consent for use of their follow-up jail data ($n = 3$); or (c) died during the follow-up ($n = 10$). In the latter case, death during the follow-up period was confounded with key outcomes and predictors, such as HF exposure and jail days/bookings.

A Cox regression survival model was used to test baseline criminal history (i.e. number of felonies and misdemeanors) as predictors of housing retention (i.e. initial move-out during the two-year follow-up) using time until initial move-out as the censoring/offset variable.

Descriptive analyses indicated that baseline and follow-up jail bookings and days were positively skewed, zero-inflated count variables. We therefore used nonparametric tests (i.e. Wilcoxon signed-rank tests) to examine significant changes in jail days and bookings from baseline to follow-up.

To determine the relative contributions of criminal history and HF exposure (i.e. total months in HF housing) in predicting follow-up jail days and bookings, we used zero-inflated negative binomial (ZINB) modelling (Cameron & Trivedi, 1998). ZINB represents a subset of generalized linear models for count outcomes that are positively skewed and have more zero responses than would be expected given the distribution. ZINB models two processes: a Bernoulli trial, which determines the probability that an observation is consistently zero, and a negative binomial regression, if the observation is a feasible count response predicted by the negative binomial distribution (Hardin & Hilbe, 2007). For the purpose of the current analyses, we focused on the negative binomial portion of the ZINB models. The resulting effect sizes are reported as incidence rate ratios (IRRs).

Table 1
Baseline descriptive statistics for complete baseline sample ($N = 94$).

Variable	*M*(SD)/%
Sociodemographic variables	
Age	48.39 (9.39)
Race/ethnicity	
American Indian/Alaska Native	27.4%
Asian	1.1%
Black/African-American	7.4%
Hispanic/Latino/a	7.4%
Native Hawaiian/Pacific Islander	3.2%
White/Caucasian	40.0%
"More than one race"	10.5%
Self-reported "Other"	3.2%
Relationship status	
Married	2.1%
Consider self married	1.1%
Widowed	4.3%
Separated	7.4%
Divorced	33.0%
Never married	52.1%
Highest education level	
Some high school	37.2%
HS graduate/GED	29.8%
Vocational school	8.5%
Some college	18.1%
College graduate	4.3%
Some graduate school/advanced degree	2.2%

Notes. M, mean; SD, standard deviation. Quantity and frequency variables are based on the past 30 days. All other variables based on past 3 months. SIP-2R, Short Inventory of Problems summary score.

Results

Descriptive data analysis

Baseline demographic data are listed in Table 1. The original sample of 95 participants was reduced to 94 due to missing data for one participant's baseline criminal history. Regarding baseline criminal history, 91.3% of all convictions ($N = 1153$) were misdemeanors and 8.7% were felonies (see Table 2 for frequencies by crime severity and type). Of the 94 participants for whom criminal history was available, 43.6% ($n = 41$) had committed at least one felony, 40.4% ($n = 38$) had only misdemeanors in their criminal history, and 16% ($n = 15$) had no criminal history (see Table 3).

Baseline criminal history as a predictor of follow-up housing retention

A Cox regression survival model testing baseline criminal history (i.e. number of felonies and number of misdemeanors) as a predictor of follow-up housing retention was not significant, $\chi^2(2, N = 81) = 0.58$, $p = .75$. This finding indicated that neither number of felony nor number of misdemeanor convictions predicted participants' retention in the housing project during the two-year follow-up.

Baseline to follow-up changes on jail bookings and days

A Wilcoxon signed-rank test indicated that participants' number of jail bookings, z ($N = 81$) = 4.20, $p < .001$, and days in jail, z ($N = 81$) = 4.38, $p < .001$, decreased significantly from baseline to follow-up. Specifically, jail bookings decreased from a mean of 3.43 (SD = 4.80) in the two-year period prior to move-in to 1.49 (SD = 2.32) in the two years following. Days in jail decreased from a mean of 41.23 (SD = 71.72) in the two years prior to move-in to 18.10 (SD = 44.99) during the two-year follow-up.

Table 2
Baseline criminal history: classification of convictions ($N = 1153$).

Criminal conviction	Misdemeanor	(% total)	Felony	(% total)	Row sum	(% total)
Crimes against People	**149**	**(12.9%)**	**34**	**(2.9%)**	**183**	**(15.9%)**
Assault	102	(8.8%)	25	(2.2%)	127	(11.0%)
Assault, DV	17	(1.5%)	0	(0%)	17	(1.5%)
Other sex offense	16	(1.4%)	0	(0%)	16	(1.4%)
Robbery	0	(0%)	9	(0.8%)	9	(0.8%)
Weapons charge	14	(1.2%)	0	(0%)	14	(1.2%)
Property crimes	**466**	**(40.4%)**	**29**	**(2.5%)**	**495**	**(42.9%)**
Arson	3	(0.3%)	1	(0.1%)	4	(0.3%)
Burglary	0	(0%)	12	(1.0%)	12	(1.0%)
Forgery	8	(0.7%)	0	(0%)	8	(0.7%)
Theft	242	(21.0%)	15	(1.3%)	257	(22.3%)
Trespass	213	(18.5%)	1	(0.1%)	214	(18.6%)
Drug crimes	**11**	**(0.9%)**	**25**	**(2.2%)**	**36**	**(3.1%)**
Public order crimes	**427**	**(37%)**	**12**	**(1.0%)**	**439**	**(38.1%)**
Court order violation	22	(1.9%)	2	(0.2%)	24	(2.1%)
Disorderly conduct	38	(3.3%)	0	(0%)	38	(3.3%)
Drunk driving	27	(2.3%)	0	(0%)	27	(2.3%)
Driving offense, other	25	(2.2%)	0	(0%)	25	(2.2%)
Failure to appear	17	(1.5%)	0	(0%)	17	(1.5%)
Failure to comply	89	(7.7%)	1	(0.1%)	90	(7.8%)
False report	4	(0.3%)	0	(0%)	4	(0.3%)
Harassment	30	(2.6%)	7	(0.6%)	37	(3.2%)
Liquor offense	23	(2.0%)	0	(0%)	23	(2.0%)
Malicious mischief	63	(5.5%)	2	(0.2%)	65	(5.6%)
Other, not specified	89	(7.7%)	0	(0%)	89	(7.7%)
Total	**1053**	**(91.3%)**	**100**	**(8.7%)**	**1153**	**(100%)**

Notes. Numbers in the table represent the frequency of each type of criminal conviction by crime severity (i.e. felony and misdemeanor) and are organized within the corresponding category from the Department of Justice taxonomy (i.e. crimes against people, property crimes, drug crimes, public order crimes). The corresponding percentages represent proportion of convictions in that specific category to total convictions ($N = 1153$). DV, domestic violence.

Baseline criminal history and HF exposure as correlates of follow-up jail bookings and days

A zero-inflated negative binomial (ZINB; Hardin & Hilbe, 2007) regression model testing baseline criminal history (number of felony and misdemeanor convictions) and HF exposure as correlates of follow-up jail bookings was significant, $\chi^2(4, N = 81) = 15.98$, $p = .003$. HF exposure was a significant predictor of follow-up jail bookings (IRR = .95, SE = .02, $p = .01$). Specifically, for each additional month of HF exposure, participants experienced 5% fewer bookings. Baseline bookings and criminal history were not significant predictors of follow-up bookings ($ps > .10$).

The ZINB model for jail days was also significant, $\chi^2(4, N = 81) = 21.71$, $p < .001$. HF exposure was a significant predictor of follow-up jail days (IRR = .93, SE = .03, $p = .01$). For each additional month of HF exposure, participants had 7% fewer follow-up jail days. Baseline jail days (IRR = 1.01, SE = .002, $p < .01$) but not criminal history ($ps > .17$) variables positively predicted follow-up jail days.

Table 3
Descriptive statistics for criminal history and jail variables per study participant.

	Baseline *M* (SD)	Follow-up *M* (SD)
Criminal history ($N = 94$)		
Misdemeanor	12.06 (17.91)	–
Felony	1.07 (1.92)	–
Total	13.14 (18.60)	–
Jail data ($N = 81$)		
Total bookings in 2-year period	3.43 (4.80)	1.49 (2.32)
Total days in 2-year period	41.23 (71.72)	18.10 (45.00)

Notes. Criminal history is based on Washington State Patrol records obtained during regular background checks with participants' prior to move in. Criminal history refers to any criminal offense recorded in Washington State prior to individual participants' move-in. Jail data were obtained from King County records for any time spent in jail for the two years prior to (baseline) or subsequent to (follow-up) individuals' move-in dates.

Discussion

This study explored the associations among criminal history, HF exposure, and subsequent jail outcomes for chronically homeless people with alcohol problems. Findings indicated that the vast majority of crimes committed by participants involved misdemeanors – particularly property crimes (e.g. trespassing) and public order offenses – not violent felonies. Furthermore, criminal history was neither predictive of housing attrition nor subsequent jail bookings for participants in project-based HF. Next, findings indicated that participants decreased their jail bookings and days by over one-half from two years prior to HF exposure through the two-year follow-up. Even after controlling for prior jail time and criminal history, project-based HF exposure was the most consistent, significant predictor of subsequent jail time. Specifically, the more time participants spent in project-based HF, the fewer jail bookings and days they experienced.

Criminal activity as a symptom of homelessness and substance-use disorders

According to Washington State Patrol background checks, nearly all (91%) of the convictions in participants' criminal histories were misdemeanors. Further, property and public order offenses – not violent crimes against people – comprised the majority of crimes committed prior to housing acquisition. These findings corroborate those of other studies (Fitzpatrick & Myrstol, 2011; Metraux & Culhane, 2006), which suggest that most criminal activity in this population is precipitated by conditions of homelessness (e.g. trespassing charges may be brought against people who sleep in doorways) and/or symptoms of substance-use disorders (e.g. intoxication disrupts executive functioning resulting in failure to comply and disorderly conduct charges).

In a previous era, public intoxication itself was heavily criminalized, which resulted in a cycle of incarceration and marginalization

for chronically homeless individuals with alcohol-use disorders and effectively hampered their prospects for improved health and behavioral outcomes (Spradley, 1970). Although public intoxication has now been decriminalized in many US states and counties, our findings suggest these other, more subtle "symptoms" of homelessness and co-occurring substance use continue to be criminalized. This interpretation aligns with Fitzpatrick and Myrstol's (2011) assertion that the disproportionate representation of homeless people in US jails is more likely due to being perceived as offensive to society rather than a threat to public safety.

Criminal history is predictive of neither subsequent jail time nor retention in a project-based HF program

Findings indicated that participants' criminal history was not predictive of retention in a project-based HF program. This study thereby replicated findings in Malone (2009) and extended them to a subset of homeless individuals with even more extensive criminal histories. The finding that criminal history does not predict retention in project-based HF is of particular relevance for housing operators and policy makers because it counters a commonplace rule-out for housing. Specifically, federal legislation passed in 1996 strongly encourages housing authorities to exclude applicants with certain types of criminal histories – most notably drug offenses – from consideration for publicly assisted housing (Housing Opportunity Program Extension Act of 1996). It has been estimated that up to 3.5 million Americans have been made ineligible for public housing as a result of this legislation (Carey, 2004). Although it was introduced in part to protect tenant safety, this legislation has also been cited as a tacit and "politically cost-free" means of reducing the potential pool of housing applicants in a time of diminished public housing resources (Carey, 2004). Relatedly, the exclusion of people with criminal histories is believed by many housing operators to narrow the field of housing applicants to those who are most likely to successfully maintain their housing. On the contrary, findings show that criminal history does not preclude successful housing retention.

HF exposure is associated with decreased jail time

A previous study established that HF exposure was associated with decreased subsequent jail time through a six-month follow-up (Larimer et al., 2009). The current study replicated and extended this finding by showing that participants' number of jail bookings and days decreased significantly over a two-year follow-up as a function of greater time spent in project-based HF. This study also extended the literature by showing that project-based HF exposure is more important than both prior criminal history and baseline jail time in predicting subsequent recidivism. This finding is notable because it runs counter to the assertion that prior criminal history is the strongest predictor of subsequent criminal activity (Caslyn, Lemming, Morse, & Klinkenberg, 2005).

Limitations

The limitations of this study deserve mention. The study sample comprised a smaller and more severely affected, costly and criminally active subset of the larger chronically homeless population. Additionally, participants were housed in a single project-based HF program in Washington State where they received wraparound supportive services (i.e. meals, outreach, intensive case management, nursing/medical care, assistance with basic needs). Considering the specificity and uniqueness of the participant sample and the project-based HF setting, the current findings may not be generalizable to other populations and other housing environments.

Given that individuals tend to commit fewer crimes as they get older, it is also possible that aging cohort effects could explain our findings. On the other hand, because criminal activity typically plateaus in adults by their 30 s and early 40 s (Piquero, Farrington, & Blumstein, 2003), our sample, which had a mean age of 48 years, had likely already reached their desistance plateau. Further, because our study provides a narrow, 4-year snapshot of these individuals' behavior, aging cohort effects are not likely to play the key role that would be expected when following 20–30 year criminal history trajectories. Thus, aging cohort effects are a possible but not highly probably explanation for our findings.

The criminal background data included only convictions within Washington State, and the jail data were obtained from King County records. Thus, these data are limited in their scope (i.e. they do not include convictions/jail time that may have been accrued in other states/counties), and they may include the inaccuracies and data missingness often encountered in archival records (Clifasefi et al., 2011; Killeen, Gold, Tyson, & Simpson, 2004). On the other hand, because these data are representative of the information that is typically available to housing providers as they make leasing decisions, the use of these data may have increased the relevance and generalizability of the current findings for real-world applications.

Finally, due to data collection limitations and ethical concerns stemming from the parent study (see Larimer et al., 2009), the current study did not include a randomized design or a control group. The within-subjects, correlational design of this secondary study therefore precludes causal interpretations regarding associations between project-based HF and decreased jail time. Thus, it is possible other factors besides the housing intervention might have accounted for the observed decreases on jail outcomes. That said, the parent study, which was a nonrandomized controlled trial, did indicate that project-based HF participants had significantly fewer jail days and bookings than the waitlist control participants over the initial 6-month follow-up (Larimer et al., 2009). The corroboration of the current, longer-term secondary study increases our confidence in the finding that decreases in jail time are related to increased time in project-based HF. Future studies should involve a randomized design and/or appropriate control condition to replicate the current effects and establish a causal role for project-based HF.

Conclusion

This study represents the first examination of criminal histories and jail outcomes within the context of a project-based HF setting. Findings suggest that participants' criminal histories reflect "symptoms" of homelessness more than threats to public safety. Further, participants' criminal histories were not associated with subsequent jail time or housing attrition in the context of an HF program – a finding which does not support the current use of housing rule-outs based on criminal history. Findings also provided further support for project-based HF via its association with decreased jail time for up to two years following initial HF exposure. Jail time also decreased as a function of greater HF exposure. In fact, HF exposure was the most important predictor of decreased subsequent jail time in a population of formerly chronically homeless individuals with alcohol problems and extensive criminal histories. The current study joins a growing body of literature on the associations between criminal justice outcomes and supportive housing indicating that (a) all individuals, regardless of incarceration history, can benefit from supportive housing models like project-based HF (Malone, 2009; Tsai & Rosenheck, 2012) and (b) supportive housing is associated with reduced criminal justice contact (Larimer et al., 2009; Roman, 2009). Taken together, the literature suggests that project-based HF may provide a solution to breaking the street to jail to street cycle of chronic homelessness.

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Conflict of interest

The authors declare that there are no conflicts of interest.

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