Exiting Homelessness Without a Voucher: A Comparison of Independently Housed and Other Homeless Veterans

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Studies that have shown the superiority of housing voucher programs over standard care for homeless adults with mental illness have also incidentally shown that many are able to obtain independent housing without subsidies. The current study examined how individuals obtain housing without a voucher and whether greater employment earnings or better clinical outcomes were associated with such housing success. Data from an experimental evaluation of the Housing and Urban Development-Veterans Affairs Supportive Housing program were used for an observational study that compared participants who, at 3 months, were: (1) Independently Housed Without a Voucher \( (n = 96) \), (2) Independently Housed With a Voucher \( (n = 93) \), (3) Housed In Another Individual’s Place \( (n = 60) \), or (4) Not Yet Housed \( (n = 170) \). Participants who obtained independent housing without a voucher worked more days and had higher employment income than those who did use a voucher, but they were less satisfied with their housing. About a third of participants who lived in independent housing without a voucher had others living with them. Homeless veterans with mental illness are able to use employment and shared housing as naturalistic ways to obtain independent housing.

Keywords: homeless persons, supported housing, severe mental illness, disability, employment

As treatment of homeless adults with mental illness has shifted to community-based approaches, attention to housing has become central to rehabilitation and recovery (Drake, Osher, & Wallach, 1991). The McKinney-Vento Homeless Assistance Act of 1986 made federal funds available for permanent supported housing programs and a major development in the provision of housing services was offering homeless adults rental subsidies in the form of housing vouchers. Several rigorous experimental studies have demonstrated the effectiveness of vouchers in facilitating exit from homelessness.

One of the first significant housing interventions for adults with mental illness was the Robert Wood Johnson Foundation Program for Chronic Mental Illness (Goldman et al., 1990), which found providing housing vouchers to adults with mental illness was feasible and led to a positive effect on independent living (Newman, Reschovsky, Kaneda, & Hendrick, 1994). Soon after, a randomized controlled study from the McKinney San Diego Demonstration Project (Hough et al., 1997; Hurlburt, Hough, & Wood, 1996) found clients who received Section 8 rental subsidies were more likely to achieve stable independent housing than clients who only received case management and no Section 8 subsidy. However, there were no differences in the number of days clients were homeless. That is, clients who did not receive rental subsidies managed to exit from homelessness through housing arrangements other than independent housing.

The Housing and Urban Development-Veterans Affairs Supportive Housing (HUD-VASH) program is a similar program created for homeless veterans with mental illness. A randomized controlled trial of HUD-VASH (Rosenheck, Kasprow, Frisman, & Liu-Mares, 2003) assigned participants to one of three conditions: intensive case management with a Sec-
tion 8 voucher (HUD-VASH), intensive case management without a voucher, or standard VA homeless support services. Over 3 years, the HUD-VASH group had significantly more days housed and fewer days homeless than both the ICM and TAU groups. However, these differences attenuated over time and, in fact, were not significant by the second year. This shows that providing homeless clients with a voucher helped them obtain housing faster, but many who did not receive a voucher were also able to secure their own independent housing over time.

Similar results have been found in studies that offer clients immediate access to subsidized independent housing using a model known as Housing First. A randomized controlled trial clearly demonstrated the superiority of Housing First to standard care in helping clients exit homelessness, but clients in the control group who did not receive Housing First were still able to remain stably housed over 30% of the time after 2 years (Tsemberis, Gulcur, & Nakae, 2004). Thus, while housing vouchers improve and hasten clients’ access to independent housing, many of those who do not receive such subsidies also manage to obtain housing in naturalistic, but as yet, unstudied ways.

On the one hand, one can argue that housing vouchers provide an optimal direct exit from homelessness and act as a safety net to prevent future housing loss (e.g., Padgett, Gulcur, & Tsemberis, 2008; Tsemberis, 1999). On the other hand, housing vouchers may foster dependency, create disincentives for employment, or limit recovery through the client’s own personal strengths. Because public housing programs subsidize residents’ rent regardless of their work effort, they may undermine incentives to seek employment or move into self-sustained private housing (Messenger, 1992). Public housing residents are often required to pay a fixed percentage of their income toward rent, and thus may be subject to penalties for increasing their earnings. How this issue affects homeless adults with mental illness or addiction has not been studied. However, in other populations, one study that analyzed administrative data on 22,515 veterans in a work therapy program found that participants who received disability benefits worked fewer hours in the program each week, earned less income, were more likely to dropout, and were less likely to be competitively employed at discharge (Drew et al., 2001). Another study of individuals with severe mental illness also found that those receiving public income support were less likely to work net of other factors (Resnick, Neale, & Rosenheck, 2003).

The current study presents secondary analyses of data originally gathered in a randomized controlled trial of HUD-VASH (Rosenheck et al., 2003). Instead of examining participants according to their randomized groups, we used an observational design to compare four groups: (1) obtained independent housing without a voucher; (2) obtained independent housing with a voucher; (3) housed in another individual’s place; or (4) were not yet housed (i.e., living in an institution, hotel, or are homeless situation). We sought to describe associations between different housing situations and outcomes. More specifically, we asked: Do participants who obtain independent housing without a voucher by 3 months have higher employment or public support income, greater housing satisfaction, or better clinical outcomes than others?

Method

Sample

Data for this study were obtained from a 3-year prospective experimental study of HUD-VASH (Rosenheck et al., 2003). The original experimental study enrolled a total of 460 veterans from four VA medical centers in San Francisco and San Diego, California; New Orleans, Louisiana; and Cleveland, Ohio. Participants at each site were randomly assigned to either HUD-VASH (n = 182), case management only (n = 90), or short-term broker case management (n = 188). Baseline and follow-up assessment interviews every 3 months were conducted by trained evaluation assistants. Participants were paid $20 for each interview.

Veterans were eligible for the study if they were literally homeless at time of outreach assessment, had been homeless for 1 month or longer, and had received a diagnosis of a major psychiatric disorder or a substance use disorder. All participants provided written informed consent and the protocol was approved by the institutional review board at each medical center.

The current study regrouped 419 of the original 460 participants (41 were lost to follow-up by 3 months) based on their living situation at the time.
of the 3-month follow-up interview, regardless of
the original group assignment. The 3-month time-
point was selected so there would be an adequate
sample size in each group before attrition and data
were on clients when they were first housed in the
study. Clients were classified into the following
four groups: (1) Independently Housed Without a
Voucher ($n = 96$); (2) Independently Housed
With a Voucher ($n = 93$); (3) Housed In Another
Individual’s Place ($n = 60$); and (4) Not Yet
Housed (i.e., living in institution, hotel, or home-
less situation) ($n = 170$).

Among those Housed In Another Individu-
al’s Place, 14 (23.3%) were living at their par-
ticipants’ residence, 21 (35.0%) at another relative’s
place, 21 (35.0%) at a friend’s residence, and
three (8.6%) at someone else’s place on the
previous night before assessment. Among those
Not Housed, 70 (41.2%) lived in a hospital/
domiciliary/residential treatment program, 33
(19.4%) lived in a shelter, 24 (14.1%) lived in
an apartment, room, or house, 19 (11.1%) lived
doors, one (<0.0%) was in prison/jail, and
23 (13.5%) were in other arrangements on
the previous night before assessment.

Measures

Data on sociodemographic characteristics
was collected at the time of program entry,
including history of past homelessness, hospi-
talization, and incarceration. Mental health di-
gnoises were based on the working clinical
diagnoses of the case management teams.

Living situation. Details on participants’
living situations were recorded through ques-
tions about leasing, rent payments, and with
whom they were living. The quality of housing
was assessed with two scales from the Robert
Wood Johnson Foundation Program for
Chronic Mental Illness (Newman et al., 1994)
that asked about positive and negative charac-
teristics of the residence. One scale consisted
of 17 items that asked participants yes/no ques-
tions about positive characteristics and another
scale listed 11 negative characteristics that par-
ticipants rated them from 0 (no problem) to 2
(big problem). Each scale was summed for a
total score.

Housing outcomes. The housing situation
of participants over the previous 3 months was
summarized by the number of days spent in each
of 11 different types of housing and categorized
into seven groups: (a) days spent in own place
(i.e., own apartment, room, or house), (b) days
spent in another individual’s place (i.e., someone
else’s apartment, room, or house), (c) days spent
in a hospital/nursing home, (d) days spent in a
residential program (i.e., domiciliary, residential
treatment program, halfway house), (e) days in a
hotel/boarding home (i.e., single room occu-
pancy), (f) days homeless (i.e., shelter, outdoors,
automobile), and (g) days in prison/jail.

Income/employment outcomes. Participants
were asked the number of days they worked in the past month. Income from em-
ployment, public support, other sources, and
total income was recorded. Public support in-
come included income from unemployment
insurance, welfare, supplementary security in-
come, disability, or pensions. Other income in-
cluded money from friends and family, panhan-
dling, and illegal means. Total income was the
sum of all three income sources.

Clinical outcomes. Psychiatric, alcohol,
drug, legal, and employment status were as-
essed using specific items and composite
scores from the Addiction Severity Index (ASI;
McLellan, Luborsky, Woody, & O’Brien,
1980). The ASI is an interview designed to
detect and measure the severity of potential
treatment problems in areas commonly affected
by alcohol and drug dependence. The current
study used 8 items on the psychiatric subscale, 6
items on the alcohol subscale, 13 items on the
drug subscale, 4 items on the legal subscale,
and 4 items on the employment subscale. Items
were combined for a standard composite score
ranging from 0 to 1 for each subscale with
higher scores reflecting more serious psychiat-
ric, alcohol, drug, or legal problems and greater
employment strengths.

Quality of life outcomes. Quality of life
was evaluated using subscales from the Lehman
Quality of Life Interview (Lehman, 1988). The
Lehman Quality of Life Interview was specifi-
cally designed to assess the lives of individuals
with severe mental illness. Eight subscales were
used including Living Situation (11 items),
Family (5 items), Finances (4 items), Health (6
items), Leisure (6 items), Life Satisfaction (1
item), Safety (7 items), and Friends (6 items).
Participants were asked to rate items on a scale
from 1 (Terrible) to 7 (Delighted) and mean
scores were calculated for each subscale.
Data Analysis

Baseline sociodemographic characteristics of participants in each group were compared using analysis of variance (ANOVA) and chi-square tests. Post hoc group comparisons were made using Fisher’s Least Significant Difference test and post hoc chi-square tests. The four groups were also compared on their living situation at 3 months using ANOVA and Chi-squares. Changes in housing, income/employment, clinical, and quality of life outcomes between groups from baseline to 3 months were compared using analysis of covariance (ANCOVA) by entering baseline values of dependent variables as covariates. These analyses were repeated using all data over 3 years using mixed linear regression models controlling for baseline values. SPSS software version 16.0 (SPSS, 2007) was used for data analysis.

Results

There were no differences between groups on baseline sociodemographic characteristics with the exception of lifetime homelessness where Participants Not Yet Housed had more years of prior homelessness (see Table 1).

Participants who were Independently Housed With a Voucher at 3 months were more likely to have a lease and their name on the lease than those Independently Housed Without a Voucher, and all other groups (see Table 2). Among those Independently Housed Without a Voucher, 34% reported other individuals living with them, mostly family members. Among those Housed in Another Individual’s Place, participants were also often living at a family member’s place. Participants who obtained Independent Housing With a Voucher had the highest rent, but those who were Independently Housed Without a Voucher, while report-

Table 1
Baseline Sociodemographic Characteristics of Groups Defined by Housing Status at 3 Months

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>1) Independently Housed Without a Voucher (n = 96)</th>
<th>2) Independently Housed With a Voucher (n = 92–93)</th>
<th>3) Housed In Another Individual’s Place (n = 59–60)</th>
<th>4) Not Yet Housed (n = 169–170)</th>
<th>Test of Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>41.7 (8.6)</td>
<td>42.4 (7.6)</td>
<td>40.7 (6.8)</td>
<td>42.2 (7.6)</td>
<td>F = 0.70</td>
</tr>
<tr>
<td>Gender, male</td>
<td>92 (95.8%)</td>
<td>90 (96.8%)</td>
<td>55 (91.7%)</td>
<td>161 (94.7%)</td>
<td>F = 2.24</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>26 (27.1%)</td>
<td>25 (26.9%)</td>
<td>10 (16.7%)</td>
<td>46 (21.7%)</td>
<td>χ² = 15.88</td>
</tr>
<tr>
<td>Black</td>
<td>41 (42.7%)</td>
<td>49 (52.7%)</td>
<td>39 (65.0%)</td>
<td>79 (46.5%)</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>1 (1.0%)</td>
<td>5 (5.4%)</td>
<td>0 (0.0%)</td>
<td>3 (1.8%)</td>
<td></td>
</tr>
<tr>
<td>Asian/Indian/Alaskan</td>
<td>3 (3.1%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>3 (1.8%)</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>18 (18.8%)</td>
<td>14 (15.1%)</td>
<td>11 (18.3%)</td>
<td>39 (22.9%)</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>7 (7.3%)</td>
<td>4 (4.3%)</td>
<td>1 (1.7%)</td>
<td>10 (5.9%)</td>
<td>F = 2.66</td>
</tr>
<tr>
<td>Education (years)</td>
<td>12.6 (1.8)</td>
<td>12.6 (1.4)</td>
<td>12.5 (1.5)</td>
<td>12.7 (1.7)</td>
<td>F = 0.26</td>
</tr>
<tr>
<td>Primary diagnosis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychiatric disorder</td>
<td>6 (6.3%)</td>
<td>4 (4.3%)</td>
<td>1 (1.7%)</td>
<td>13 (7.6%)</td>
<td></td>
</tr>
<tr>
<td>Bipolar disorder</td>
<td>2 (2.1%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>6 (3.5%)</td>
<td></td>
</tr>
<tr>
<td>Depressive disorder</td>
<td>4 (4.2%)</td>
<td>7 (7.5%)</td>
<td>3 (5.0%)</td>
<td>17 (10.0%)</td>
<td>χ² = 31.86</td>
</tr>
<tr>
<td>PTSD</td>
<td>9 (9.4%)</td>
<td>6 (6.5%)</td>
<td>4 (6.7%)</td>
<td>5 (2.9%)</td>
<td></td>
</tr>
<tr>
<td>Alcohol dependency</td>
<td>25 (26.0%)</td>
<td>38 (40.9%)</td>
<td>24 (40.0%)</td>
<td>55 (32.4%)</td>
<td></td>
</tr>
<tr>
<td>Drug dependency</td>
<td>48 (50.0%)</td>
<td>33 (35.5%)</td>
<td>28 (46.7%)</td>
<td>68 (40.0%)</td>
<td></td>
</tr>
<tr>
<td>Other disorder</td>
<td>2 (2.1%)</td>
<td>3 (3.2%)</td>
<td>0 (0.0%)</td>
<td>4 (2.4%)</td>
<td></td>
</tr>
<tr>
<td># times hospitalized in lifetime</td>
<td>1.1 (2.7)</td>
<td>1.2 (2.2)</td>
<td>0.9 (1.9)</td>
<td>1.7 (7.8)</td>
<td>F = 0.58</td>
</tr>
<tr>
<td>Lifetime homelessness (years)</td>
<td>2.8 (3.8)</td>
<td>3.8 (4.1)</td>
<td>2.7 (2.9)</td>
<td>4.1 (4.1)</td>
<td>F = 2.98*</td>
</tr>
<tr>
<td># times homeless in lifetime</td>
<td>2.4 (1.3)</td>
<td>2.6 (1.3)</td>
<td>2.3 (1.1)</td>
<td>2.4 (1.3)</td>
<td>F = 1.18</td>
</tr>
<tr>
<td>Lifetime incarceration (months)</td>
<td>13.5 (23.9)</td>
<td>11.5 (22.0)</td>
<td>6.8 (15.6)</td>
<td>13.5 (24.7)</td>
<td>F = 1.38</td>
</tr>
</tbody>
</table>

* p < .05.
ing lower total rent, reported paying the greatest share of the rent themselves. Those who obtained Independent Housing Without a Voucher also had the lowest Positive Housing Characteristics score and highest Negative Housing Characteristics score (note: those not yet housed did not have stable housing so they reported few problems with housing).

As expected from the group definitions, at 3 months, both groups of participants who were Independently Housed had spent more days in their own place (see Table 3). Participants who were Housed In Another Individual’s Place spent more days in another individual’s place, and participants who were Not Yet Housed spent more days homeless.

Participants who were Independently Housed Without a Voucher at 3 months reported more days of work and higher monthly employment income than both those Independently Housed With a Voucher and those Not Yet Housed. There was no significant difference between groups on public support income or other sources of income. Overall, participants who were Independently Housed Without a Voucher had the highest total income among all four groups.

At 3 months, there were no differences on the Psychiatric, Alcohol, Drug, and Legal subscales of the ASI; however, higher mean ASI Employment scores were found for participants who were Independently Housed Without a Voucher than for two of the other groups.

Participants who were Not Yet Housed had lower scores on quality of life related to Family, Leisure, Life Satisfaction, and Living Situation than all other groups. Participants who were Independently Housed With a Voucher had higher scores on Living Situation and Safety than all other groups.

### Table 2

**Living Situation Across Groups at 3 Months**

<table>
<thead>
<tr>
<th>Housing characteristics</th>
<th>1) Independently Housed Without a Voucher (n = 96)</th>
<th>2) Independently Housed With a Voucher (n = 93)</th>
<th>3) Housed In Another Individual’s Place (n = 60)</th>
<th>4) Not Yet Housed (n = 170)</th>
<th>Test of Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living situation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has lease</td>
<td>40 (41.7%)</td>
<td>85 (91.4%)</td>
<td>0 (0.0%)</td>
<td>1 (0.0%)</td>
<td>$\chi^2 = 268.54^{***}$</td>
</tr>
<tr>
<td>Named on lease</td>
<td>36 (37.5%)</td>
<td>85 (91.4%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>$\chi^2 = 439.24^{***}$</td>
</tr>
<tr>
<td>Monthly rent</td>
<td>317.7 (156.5)</td>
<td>419.6 (140.5)</td>
<td>34.4 (137.8)</td>
<td>3.7 (47.9)</td>
<td>$F = 335.10^{***}$</td>
</tr>
<tr>
<td>Participant rent</td>
<td>277.3 (133.9)</td>
<td>170.8 (134.3)</td>
<td>23.0 (100.9)</td>
<td>2.1 (26.8)</td>
<td>$F = 184.92^{***}$</td>
</tr>
<tr>
<td>contribution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public housing authority subsidy</td>
<td>3 (3.1%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>$\chi^2 = 10.17^*$</td>
</tr>
<tr>
<td>Living with others</td>
<td>33 (34.3%)</td>
<td>9 (9.7%)</td>
<td>54 (90.0%)</td>
<td>1 (0.6%)</td>
<td>$\chi^2 = 215.64^{***}$</td>
</tr>
<tr>
<td>Other household members</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family members</td>
<td>0.4 (0.9)</td>
<td>0.2 (0.7)</td>
<td>1.8 (2.1)</td>
<td>0.0 (0.0)</td>
<td>$\chi^2 = 55.15^{***}$</td>
</tr>
<tr>
<td>Non-family members</td>
<td>0.3 (1.0)</td>
<td>0.0 (0.1)</td>
<td>0.6 (1.0)</td>
<td>0.0 (0.1)</td>
<td>$\chi^2 = 15.08^{***}$</td>
</tr>
<tr>
<td>Positive Housing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Characteristics score(a)</td>
<td>9.3 (3.0)</td>
<td>10.9 (2.2)</td>
<td>10.9 (3.5)</td>
<td>14.5 (2.1)</td>
<td>$F = 7.74^{***}$</td>
</tr>
<tr>
<td>Negative Housing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Characteristics score(b)</td>
<td>5.3 (4.6)</td>
<td>2.3 (2.3)</td>
<td>4.6 (5.2)</td>
<td>1.0 (1.7)</td>
<td>$F = 9.93^{***}$</td>
</tr>
</tbody>
</table>

\(a\) Positive Housing Characteristics is a summed score from 0 to 17, with higher scores indicating more positive characteristics. \(b\) Negative Housing Characteristics is a summed score from 0 to 11, with higher scores indicating more negative characteristics.

\(p < .05. \quad *** p < .001.\)
Table 3
Clinical Outcomes Between Groups at 3 Months Controlling for Baseline Values

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>1) Independently Housed Without a Voucher (n = 89–96)</th>
<th>2) Independently Housed With a Voucher (n = 91–93)</th>
<th>3) Housed In Another Individual’s Place (n = 58–60)</th>
<th>4) Not Yet Housed (n = 155–170)</th>
<th>Test of Difference ANCOVAa F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing in past 3 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Days in own place</td>
<td>66.3 (33.7)</td>
<td>66.6 (31.3)</td>
<td>8.3 (22.7)</td>
<td>4.1 (16.3)</td>
<td>195.1***</td>
</tr>
<tr>
<td>Days in someone else’s place</td>
<td>3.8 (13.4)</td>
<td>7.2 (19.7)</td>
<td>68.7 (33.8)</td>
<td>12.8 (24.8)</td>
<td>116.7***</td>
</tr>
<tr>
<td>Days in hospital/nursing home</td>
<td>1.5 (6.3)</td>
<td>1.1 (7.7)</td>
<td>1.3 (4.4)</td>
<td>5.4 (15.9)</td>
<td>4.23**</td>
</tr>
<tr>
<td>Days in residential program</td>
<td>5.7 (18.5)</td>
<td>5.0 (15.1)</td>
<td>2.8 (9.8)</td>
<td>30.2 (38.3)</td>
<td>30.31***</td>
</tr>
<tr>
<td>Days in hotel/boarding home</td>
<td>6.9 (21.3)</td>
<td>5.5 (18.9)</td>
<td>1.2 (8.4)</td>
<td>7.4 (21.3)</td>
<td>1.23</td>
</tr>
<tr>
<td>Days homeless</td>
<td>3.7 (12.7)</td>
<td>4.5 (14.5)</td>
<td>4.1 (15.4)</td>
<td>26.8 (35.3)</td>
<td>24.07***</td>
</tr>
<tr>
<td>Days in prison/jail</td>
<td>0.3 (2.8)</td>
<td>0.0 (0.0)</td>
<td>1.4 (9.8)</td>
<td>0.9 (7.9)</td>
<td>0.76</td>
</tr>
<tr>
<td>Income/employment in past month</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Days worked</td>
<td>9.8 (10.3)</td>
<td>6.9 (9.5)</td>
<td>9.7 (9.8)</td>
<td>6.3 (9.1)</td>
<td>3.12*</td>
</tr>
<tr>
<td>Employment income</td>
<td>446.8 (591.5)</td>
<td>220.3 (373.6)</td>
<td>361.2 (441.1)</td>
<td>162.7 (312.1)</td>
<td>147.2***</td>
</tr>
<tr>
<td>Public support income</td>
<td>361.9 (583.8)</td>
<td>410.9 (762.9)</td>
<td>299.3 (652.1)</td>
<td>268.7 (299.8)</td>
<td>2.11</td>
</tr>
<tr>
<td>Other sources of income</td>
<td>88.8 (528.8)</td>
<td>10.6 (43.5)</td>
<td>18.3 (118.6)</td>
<td>16.5 (59.9)</td>
<td>1.97</td>
</tr>
<tr>
<td>Total income</td>
<td>897.4 (808.0)</td>
<td>641.7 (738.2)</td>
<td>678.8 (659.5)</td>
<td>448.0 (363.9)</td>
<td>11.0***</td>
</tr>
<tr>
<td>Addiction Severity Index</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychiatric status</td>
<td>0.2 (0.2)</td>
<td>0.3 (0.2)</td>
<td>0.2 (0.2)</td>
<td>0.3 (0.2)</td>
<td>1.28</td>
</tr>
<tr>
<td>Alcohol use</td>
<td>0.1 (0.2)</td>
<td>0.1 (0.2)</td>
<td>0.1 (0.1)</td>
<td>0.1 (0.2)</td>
<td>1.14</td>
</tr>
<tr>
<td># of days intoxicated, past month</td>
<td>0.9 (3.6)</td>
<td>0.3 (0.1)</td>
<td>0.7 (3.7)</td>
<td>0.9 (3.9)</td>
<td>0.94</td>
</tr>
<tr>
<td>Drug use</td>
<td>0.1 (0.1)</td>
<td>0.1 (0.1)</td>
<td>0.0 (0.1)</td>
<td>0.1 (0.1)</td>
<td>1.68</td>
</tr>
<tr>
<td># of days used drugs, past month</td>
<td>1.8 (5.6)</td>
<td>0.6 (2.7)</td>
<td>0.8 (4.1)</td>
<td>0.8 (5.8)</td>
<td>1.47</td>
</tr>
<tr>
<td>Employment status</td>
<td>0.3 (0.3)</td>
<td>0.2 (0.2)</td>
<td>0.3 (0.2)</td>
<td>0.2 (0.2)</td>
<td>3.51*</td>
</tr>
<tr>
<td>Legal status</td>
<td>0.1 (0.2)</td>
<td>0.1 (0.2)</td>
<td>0.1 (0.2)</td>
<td>0.1 (0.2)</td>
<td>0.11</td>
</tr>
<tr>
<td>Quality of life</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family scale</td>
<td>4.6 (1.5)</td>
<td>4.4 (1.5)</td>
<td>4.7 (1.3)</td>
<td>4.0 (1.5)</td>
<td>6.69***</td>
</tr>
<tr>
<td>Finances scale</td>
<td>3.3 (1.4)</td>
<td>3.3 (1.5)</td>
<td>3.2 (1.4)</td>
<td>2.9 (1.4)</td>
<td>2.09</td>
</tr>
<tr>
<td>Health scale</td>
<td>4.7 (1.1)</td>
<td>4.6 (1.2)</td>
<td>4.5 (1.0)</td>
<td>4.4 (1.1)</td>
<td>1.21</td>
</tr>
<tr>
<td>Leisure scale</td>
<td>4.3 (1.2)</td>
<td>4.4 (1.2)</td>
<td>4.4 (1.2)</td>
<td>3.9 (1.2)</td>
<td>4.60**</td>
</tr>
<tr>
<td>Life Satisfaction scale</td>
<td>4.4 (1.5)</td>
<td>4.4 (1.3)</td>
<td>4.3 (1.3)</td>
<td>3.9 (1.6)</td>
<td>5.11**</td>
</tr>
<tr>
<td>Living Situation scale</td>
<td>4.5 (1.2)</td>
<td>5.2 (0.9)</td>
<td>4.5 (1.1)</td>
<td>4.0 (1.1)</td>
<td>27.01***</td>
</tr>
<tr>
<td>Safety scale</td>
<td>4.2 (1.3)</td>
<td>4.7 (1.1)</td>
<td>4.2 (1.1)</td>
<td>4.0 (1.4)</td>
<td>27.29***</td>
</tr>
<tr>
<td>Friends scale</td>
<td>4.5 (1.2)</td>
<td>4.5 (1.0)</td>
<td>4.5 (1.1)</td>
<td>4.3 (1.1)</td>
<td>1.37</td>
</tr>
</tbody>
</table>

* Controlling for baseline values of dependent variables.

*p < .05. **p < .01. ***p < .001.
When analyses were repeated using data from all 3 years, results were similar in that Participants Independently Housed Without a Voucher continued to have significantly higher employment income than all other groups over time, although there was no difference in days worked. In addition, those Independently Housed Without a Voucher also had higher income from other sources than those Independently Housed With a Voucher and those Not Yet Housed, and had higher public support income than those Housed at Another Individual’s Place and those Not Yet Housed. Contrary to 3-month findings, those Independently Housed With a Voucher had more days in their own apartment over time than those Independently Housed Without a Voucher and those Not Yet Housed had significantly higher ASI Psychiatric, Alcohol, and Drug scores than all other groups over 3 years.

Discussion

This study sought to investigate how homeless clients who obtained independent housing without a voucher differed from those who had used a voucher, from those living in another individual’s place, and from those not housed at all. We mainly wanted to describe how some clients obtained independent housing without a voucher. Results showed that many participants (57% randomly assigned to treatment without a voucher) were able to obtain independent housing without using a voucher by 3 months although this proportion was significantly lower than among those who had used a voucher. The success of this group appears to be associated with the fact that they worked more days and reported higher employment income than those who used a voucher. Higher employment income was also found for this group over the 3 years of the study. Although this was an observational study, baseline status of participants were controlled for statistically and there were no differences in clinical outcomes that may have accounted for differences in employment outcomes. Therefore, these data suggest the possibility that using vouchers may reduce incentives for employment (Drew et al., 2001; Resnick et al., 2003).

About a third of the participants who obtained independent housing without a voucher had others living with them. The HUD-VASH programs studied here only allowed single participants in voucher housing, so we can only speculate that some of those living independently without a voucher may have elected not to use the voucher because they wanted others to live with them. It is also likely that many participants living independently without a housing subsidy had others live with them to help pay the rent.

Participants who used vouchers lived in housing with the highest rent; however, because of their subsidies, they did not report paying as much of their own income toward the rent as those who obtained independent housing without a voucher. Participants who used vouchers likely had more housing options and were probably able to pick housing that was more expensive because it was subsidized. Perhaps, as a result, participants who used vouchers reported the highest subjective quality of life with respect to their living situation than all other groups at 3 months and reported higher satisfaction with their housing. In contrast, participants who obtained independent housing without a voucher reported paying the highest rent, and reported fewer positive characteristics and more negative characteristics of their housing than all other groups. Those living independently without a voucher likely had fewer housing options and seemed to have had to choose housing of lower quality because they had to pay more of the rent themselves. However, among these two groups living independently, there were no differences in the number of days housed, days homeless, or days in institutions.

Besides those in independent housing, about a third of participants were living in another individual’s place at 3 months, most often with a family member and paid very little rent. Participants living in another individual’s place also spent just as many days housed as participants in the two groups who obtained independent housing. There are few homeless services that formally provide assistance in helping adults live with others or that promote “doubling up,” despite findings that shared housing is more economical and does not appear to have adverse health effects (Ahrentzen, 2003; Ying-
In contrast, participants who were not yet housed had the most days homeless, most days in a hospital, and most days in a residential treatment program as compared to other groups.

There were no differences in psychiatric, substance abuse, or legal outcomes between groups at 3 months. This was surprising as it was expected those with better clinical outcomes were the ones most likely to be able to obtain independent housing without a voucher; an expectation that proved not to be the case at least in the first 3 months although data over all 3 years shows that participants who were not housed had higher psychiatric, substance abuse, and work problems over time than all other groups.

On quality of life measures, participants not housed, unsurprisingly, reported the lowest quality of life in various domains, including family, leisure, overall life satisfaction, and living situation than all other groups. Participants who were living independently either with or without a voucher reported higher overall life satisfaction than those who were not housed, supporting previous findings that many clients desire independent housing (e.g., Tanzman, Wilson, & Yoe, 1992; Tsai, Bond, Salyers, Godfrey, & Davis, 2010).

Future research is needed to expand the findings of the current study. It is clear from the initial study of HUD-VASH and many others that supported housing with rental subsidies effectively increases the likelihood of exiting from homelessness and these models deserve public support and should be expanded. At the same time, further research is needed on whether housing subsidies discourage individuals from working and on ways to counter employment disincentives. One study found that a supported employment intervention both increased rates of working and reduced days of homelessness although the effects were small (Rosenheck & Mares, 2007). It is reasonable to conclude that at least some individuals are restricted by the income regulations of voucher programs not to seek employment and that others become less motivated to seek privately funded housing.

Several limitations require comment. The current study was observational and thus cannot determine causal relationships. There may have been baseline differences we did not measure and control for. Since many participants who obtained independent housing without vouchers were living with others, further research is needed to examine whether such sharing could work in voucher programs. For example, the HUD-VASH program has begun providing vouchers for families (Consolidated Appropriations Act, 2008), but related outcomes have not been empirically studied. In addition, without qualitative data, we cannot identify the specific processes, attitudes, assets, and motivations whereby clients without vouchers were able to obtain independent housing.

### Practice Implications

Services that assist clients with employment, such as supported employment, should be offered in conjunction with supported housing services. Homeless clients may be able to obtain independent housing without rental subsidies through employment income. Even among clients who do use rental subsidies, supported employment services may counter disincentives for employment and inform clients of opportunities for work. Clients should also not be discouraged from living with others. Although most supported housing programs focus on clients living alone independently, there may be no difference in clinical outcomes or quality of life when clients live with others while saving money on rent. Clinicians should not assume clients want to live alone; but they need to consider client preference and long-term feasibility when helping clients with housing.

### Conclusions

Data presented in this study suggest that “natural” resources can be used by some homeless adults to obtain independent housing through employment and shared housing. Although experimental studies have clearly shown that supported housing with rental subsidies is effective and deserves policy support, data presented here suggest that homeless adults with mental illness can marshal personal resources to exit from homelessness without vouchers in what may be, for some, a more recovery-oriented approach.

### References

Ahrentzen, S. (2003). Double indemnity or double delight? The health consequences of shared hous-


