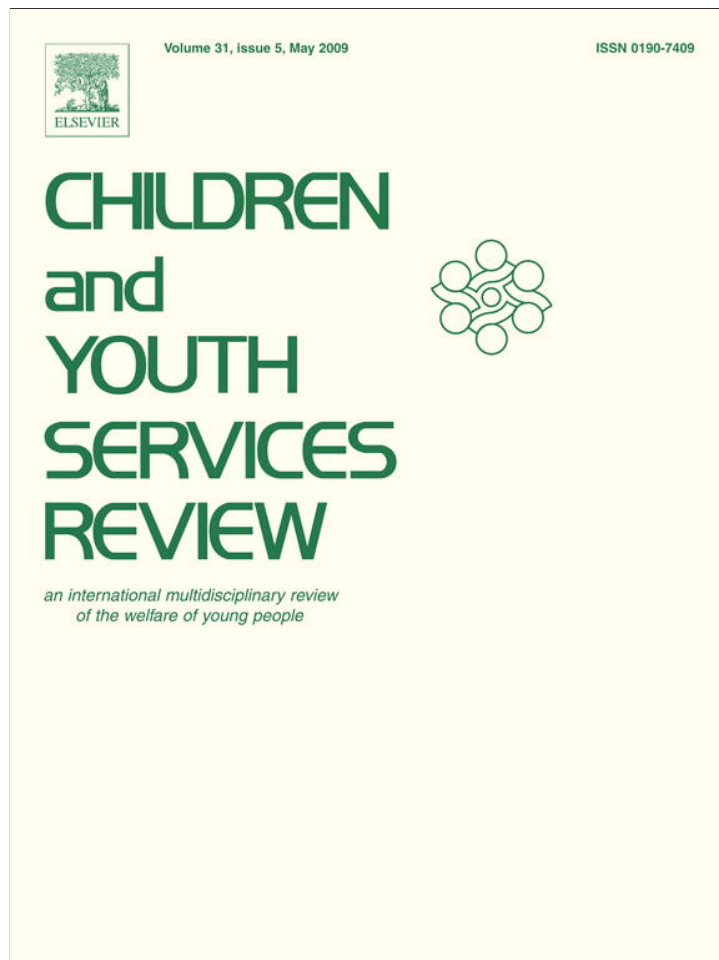


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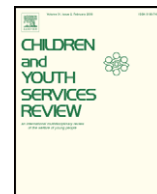
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Lighthouse independent living program: Characteristics of youth served and their outcomes at discharge

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ABSTRACT

This study examined the outcomes of 455 young people who entered the Lighthouse Independent Living Program during the period 2001–2006. On average, clients were admitted shortly before their 18th birthdays, and remained in the program for just under 10 months. At discharge, 60% had completed high school/GED program, 31% were employed, and 33% were independently housed. However, there were significant differences in outcomes across subgroups. Clients who presented with four or more clinical risk factors were less likely to have completed high school/GED program, less likely to be employed, and less likely to be independently housed than those who presented with fewer risk factors. Those staying in the program for less than 6 months were more likely to complete high school, but less likely to be employed and to be independently housed than those remaining in the program longer. Clients entering the program at ages 19–20 years showed significantly better outcomes than younger clients. Female clients were more likely to be living independently at discharge, while no other gender or racial/ethnic group differences in outcomes were found. These descriptive data may provide useful benchmark data for independent living program planning, development, administration, and policy-making purposes.

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1. Introduction

1.1. Challenges facing youth aging-out of foster care

Youth emancipating from foster care face a number of challenges, including completing high school, coping with mental illness and substance abuse, attaining health insurance, finding employment and earning a living wage, securing housing, and completing school (Cook, Fleishman, & Grimes, 1991; Courtney, Piliavin, Grogan-Kaylor, & Nesmith, 2001; Courtney & Hughes-Huering, 2005; Dworsky, 2005; Festinger, 1983; Pecora, Kessler et al., 2005; Roman & Wolfe, 1997; Pecora, Williams et al., 2006).

For example, a recent study of former foster youth from Wisconsin, Iowa and Illinois who were 21 years of age found that: 23% had dropped-out of high school; 18% had experienced homelessness since leaving care; only half were employed, with median annual earnings of less than \$5500; 51% had health insurance, 70% of whom were covered by Medicaid; 71% of the young women had ever been pregnant, with 62% of those having had multiple pregnancies, half of the young men having ever impregnated a female, and more than half of the young women and nearly one-third of the young men having at

least one child; and, 77% of the men and 54% of the women having ever been arrested (Courtney et al., 2007).

1.2. Emergence of independent living

The independent living (IL) field emerged officially in 1986 with passage of the Title IV-E Foster Care Independent-Living Initiative. This Initiative provided \$70 million to states for the development of IL services for youth aging out of the child welfare services (Mech, 1988). The Initiative came out of a groundswell of expressed concerns in the field resulting from studies that were showing high rates of homelessness, public assistance, and incarceration among child welfare youth (Cook, 1988). Some communities had already begun to formally address this issue in previous years, often as pilot programs with no official licensing or standards in place (Mayne, 1988).

Interest in housing assistance and support for emancipating foster youth increased and independent living programs started to experiment with different housing models, such as scattered-site or supervised apartments (Kroner, 1988; Brickman, Dey, & Cuthbert, 1991; DeWoody, Ceja, & Sylvestrer, 1993). Most of the “housing-based” independent living programs (ILPs) were supported by local funds as the Initiative did not allow funds to be used for direct housing costs such as ongoing rental payments. Moreover, the effectiveness of these housing models had not been formally evaluated (Barth, 1990; Waldinger & Furman, 1994).

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The John Chafee Foster Care Independence Act (Public Law 106–169, 1999), which was passed by Congress in 1999, doubled the funding given to states up to \$140-million and allowed for 30% of these funds to be used for housing. Program models emerged that reflected the fiscal and cost-of-living realities of individual states and communities (Kroner, 2001; White & Rog, 2004). The field became more sophisticated as federal support, communication between programs, focus on special populations and housing models increased and improved (Mech, 2003).

1.3. Brief description of Lighthouse Youth Services, Inc.

Lighthouse Youth Services is a multiservice agency providing social services to children, youth and families in south eastern Ohio. Operating since 1969, Lighthouse is nationally recognized as an innovator in services for families in crisis, for homeless youth and young adults, for youth learning to become self-sufficient, and in foster care for abused or neglected children (www.lys.org).

In 2006, Lighthouse had six service divisions, a budget of \$16-million, and a staff of 300. The revenues the agency received came from purchase of service contracts, local, state and federal grants, foundations and private donations.

1.4. Overview of the Lighthouse Independent Living Program

1.4.1. Guiding principles

The evolution of the Lighthouse Independent Living Program over the past 25 years, and experience working with a wide range of emancipating youth, has established the following guiding principles or beliefs:

- First, foster youth preparing for emancipation need time to adjust to the “real world,” to make decisions on their own, within limits, and to make mistakes while still under the support of caring adults. The analogy of driver's education to independent living applies; namely, that effective independent living training requires some type of transitional living “bridge” period where emancipating youth are able to live more on their own, out in the community, with agency/program supports to “learn by doing”, just as effective driver's training requires youth to spend some time “behind the wheel”, driving out on the roads and practicing maneuverability in parking lots, with a supportive adult occupying the passenger's seat.
- Next, while the average 10-month “bridge” period currently provided to 18 year-old clients is preferred to receiving no such transitional living experience, it is too brief to meet the numerous challenges facing emancipating youth. Consider the considerable level and growing number of years' support and assistance provided by parents to young adults from intact families (Arnett, 2000) – young adults with much less troubled childhoods than emancipating foster youth who have experienced years of childhood abuse and neglect, multiple foster home placements and changes in schools, separation from siblings, etc. For example, two-thirds of 19 year-olds from intact families live with their parents (Current Population Survey (CPS), 2005), and young adults receive an average of \$2200 per year from their parents between the ages of 18 and 34 to supplement wages, pay for college tuition, help with housing costs, etc. (Schoeni & Ross, 2005).
- Finally, risk is part of change (McMillen, 1999). Very few 17 or 18 year-olds are ready to live on their own, be they foster youth or youth from intact families. When set out to do so, they are all but certain to make mistakes, both big and small, and in doing so (hopefully) “learn as they go”. So housing-based independent living programs must be designed to accommodate the full range of mistakes which their clients will make, despite the best efforts of program staff to minimize such mistakes, and to protect clients

from the potential harm or consequences resulting from these mistakes.

1.4.2. Funding

The Independent Living Program currently receives \$65 a day for a youth in a scattered-site apartments, and \$85 a day for other living arrangements such as a shared-home, supervised apartment or out-of-county placement. The program accepts pregnant and parenting youth and receives an additional \$10 a day for a child in the mother's custody.

Per diem revenues cover about 85% of program expenses. The ILP billed Medicaid for mental health services provided for many of its eligible youth. The program also brings in revue from smaller grants and private donations.

1.4.3. Staffing

The ILP has a full-time director, a full-time assistant director and clinical supervisor, six licensed Social Workers (with a BSW or MSW), a full-time mover who transported furniture to/from a central storage facility into and out of clients' apartments, a full-time housing specialist/case-aides and resident managers for the shared homes and supervised apartments. Each social worker typically carries a caseload of 10–12, depending on caseload complexity. All Social Workers are licensed by the State of Ohio. The ILP often hires staff from other Lighthouse programs or students completing field placement requirements at the ILP while pursuing a Social Work degree.

Staff are expected to conduct at least one face-to-face visit and one additional apartment visit per week with each client. High-risk youth are contacted and seen several times a week, or even daily, when necessary. Assigned social workers are responsible for overall case-management and for working with referring agencies to develop a treatment team and support network for each client. There is a Social Worker on-call 24/7/365 for emergencies or crisis counseling.

1.4.4. Clients served

The program serves current dependent foster youth referred by the Hamilton County Children's Services, and delinquent youth referred by the Ohio Department of Youth Services. Most are referred shortly before reaching the age of majority, and when transitional housing with supervised independent living skills training is needed. The program also serves as a placement setting of last resort for harder to place youth with unsuccessful placement histories and those with involved with multiple systems of care (e.g., child welfare, juvenile justice, mental health). In most cases, clients officially emancipate from public care at the time of discharge from program.

1.4.5. Housing placement and support

The scattered-site housing model is utilized as the primary living arrangement (Kroner, 1999). The program pays the security deposit, rent, utilities, and phone bills, and provides furniture and house wares for each client, with clients taking over some of their bills toward the end of their stay in the program. Clients receive \$55 weekly, \$10 of which is placed into savings accounts for their use once they leave the program. The remaining \$45 covers food, transportation and personal care items. Clients may attain additional spending money through competitive employment in the community, outside of the program.

The program mainly uses apartments rented from private landlords. Clients are placed throughout Cincinnati, Ohio, near a bus line. Attempts are made to place youth into apartments that they can likely afford after emancipating from public care. In addition, attempts are made to place youth in areas with which they are familiar, close to school, work and supportive adults. The youth are involved in choosing their housing placements. Lighthouse signs the lease and assumes responsibility for the youth's overall behavior. Clients are allowed to keep their apartments, furniture, supplies and security deposits if they are employed at discharge and have proven to the

landlord that they are responsible. Clients who do not have a stable source of income at discharge receive assistance in finding other living arrangements, including low-income/subsidized housing.

The ILP also has several other living arrangement options, such as the Anna Louise Inn, a boarding home for women, two small semi-supervised shared-homes with live-in staff and two supervised apartment buildings with staff who lived in on-site apartments. Occasionally, for youth with special needs, the program utilizes “Host Homes,” which are essentially boarding homes for one youth, for special situations. Lighthouse Youth Services, of which the ILP is a part, also runs a temporary shelter, which is available to ILP clients for short-term housing and emergencies. These additional options provide a menu of short-term respite and/or alternative living arrangements for those clients temporarily unable to live independently.

Youth are sometimes removed from individual apartments if they fail to progress or continuously violate program or landlord rules. In such circumstances, youth are placed into more supervised settings and then given a chance to earn their way back to their own apartments after demonstrating positive behavioral changes. The program has learned that many youth do better the second or third time they are given a chance to live alone. While being allowed to make and learn from their mistakes, clients are occasionally discharged from the program for continued rules infractions or involvement in illegal activities. Some of these clients are able to return to the program under a Chafee-funded aftercare program.

1.5. Purpose

The purpose of this study is to empirically describe the clients served by the Lighthouse IL Program, the services they received, and the outcomes they achieved at discharge. Included in the description is a comparison of client outcomes across various client sub-groups (i.e., length of stay, client age at admission, risk groups, gender, and racial/ethnic groups). These descriptive data may provide useful benchmark data for IL program planning, development, and administration, as well as for IL policy making.

2. Methods

2.1. Sample and data collection

The sample consisted of all youth ($N=455$) admitted into the Lighthouse Independent Living Program during the six-year period 2001–2006. Experienced Lighthouse staff compiled existing client-level administrative and clinical records from the agency's management information system and paper files, under the direction of the first author. De-identified data were then analyzed by the second author in accordance with procedures approved by the institutional review board at the second author's academic institution.

2.2. Measures

2.2.1. Client characteristics at program entry

Intake/admission measures included year of admission, referral source, prior living arrangement, and length of stay. *Demographic characteristics* included age at admission, gender, and race/ethnicity (defined dichotomously, based on minority status). *Clinical characteristics*, as assessed by Lighthouse staff within 60 days of admission, consisted of one measure of overall functioning, the Global Assessment of Functioning (GAF; *Endicott, Spitzer, Fleiss, & Cohen, 1976*), and a unique self-sufficiency rating score developed by the program and assigned by case managers which ranged from 0 to 130, with higher scores indicating a higher level of knowledge of everyday living skills. The GAF — a single-item measure ranging from 0 (lowest level of functioning) to 100 (highest level of functioning) based upon

overall level of functioning in social, work, and school life domains — is one of the two most commonly used mental health measures of functioning and has been found to have interrater reliability coefficients for use with children and adolescents ranging from .54 to .92 overall, although with somewhat less reliability among trauma-exposed youth (*Blake, Cangelosi, Johnson-Brooks, & Belcher, 2007*). All program social workers were trained in GAF assessment by the agency's clinical director, a licensed psychologist.

Twenty two dichotomous clinical risk factors or barriers/challenges facing foster youth preparing for emancipation were developed by the first author, who served as director of the IL program for nearly 18 years. Two Lighthouse staff then checked all applicable risk factors for each subject, based upon a review of various records, including: (a) intake/admission records (i.e., the Referral Sheet, Social History Form, and Intake Screening Form); (b) treatment records (i.e., Diagnostic Assessment Form, Incident Report, and progress notes; and, (c) discharge records (i.e., Termination Summary Form). A summary of the operational definitions used during this chart abstraction process is provided in *Table 1*. The abstraction process required over 100 total person hours of effort, spread over a five-month period (January through May 2008), and divided between two abstractors. The first abstractor served as Administrative Assistant for the ILP for over 15 years; the second was a licensed clinical social worker (LSW) who had worked at Lighthouse for several years. Cases were split between these two abstractors, with one taking those clients admitted during the period 2001–2004, whose records were archived in paper form, and the taking clients admitted more recently (i.e., during the period 2005–2006), whose records were accessible in electronic form.

Individual risk factor measures were then classified into six, non-mutually exclusive risk factor groups, based upon face validity:

- 1) Mental health and substance abuse risks (i.e., having an ongoing mental health issue, being on psychotropic medication, attempting suicide during the past year, and being chemically dependent)
- 2) Teen parenting risks (i.e., being pregnant or having one or more child(ren))
- 3) Delinquency risks (i.e., committing a felony offense or having two or more misdemeanors during past year, involvement in gang activities, involvement of family or friends in illegal activities, and being violent towards others or committing a sex offense during past several years)
- 4) Learning disability risks (i.e., being diagnosed with a development disability, having limited intellectual abilities, and being unable to read or write)
- 5) Social adjustment risks (i.e., having a chronic history of truancy or school problems, running away from a stable placement during past year, and having no known social supports)
- 6) Other risks (i.e., having chronic medical issues, a history of poor judgment, little or no work experience in the private sector, and avoiding responsibilities as much as possible).

2.2.2. Service receipt while in the program

A service use checklist is completed by IL case managers when clients are discharged from the program. The list contains 38 specific services which clients may have received at any time during their stay in the program. These specific services were classified into four major types: 1) basic and community, 2) direct treatment, 3) skills training, and 4) referral. Basic and community services included food, clothing and shelter assistance, provision of furniture and house wares for clients' apartments, and recreational and community service activities for the youth. Direct treatment services were those delivered by program staff, in contrast to other services which were provided by agency staff from other programs. Skills training included a broad range of life skills (e.g., education, career, activities of daily living) that were taught by program staff, mostly in clients' apartment and employment settings in the community.

Table 1
Chart abstraction coding methodology used in developing risk factor categories.

Risk factor categories and items	Operational definition and data source(s)
<i>Motivation and health</i>	
Has little or no work experience in the private sector	Short periods of multiple jobs, as indicated on Termination Summary Form
Has history of poor judgment	Indicated on Interview Screening Form, Diagnostic Assessment Form, and/or Termination Summary Form
Avoids responsibilities as much as possible	Overall record indicated that youth accepted little to no responsibility in most or all areas of life
Has chronic medical issues	One or more illnesses requiring on-going medical care or affecting youth's functioning was noted in medical history or diagnosed during treatment (e.g., diabetes, asthma, high blood pressure)
<i>Mental health and substance abuse</i>	
Has chronic mental health issues	Any diagnosed mental health problem, as indicated on Referral Sheet or on Diagnostic Assessment Form
Is on psychotropic medication	Indicated on Referral Sheet or on Diagnostic Assessment Form
Is chemically dependent	Mentioned on the Diagnostic Assessment Form; OR residential treatment within last 3 years; OR progress notes indicated daily living affected by use of illicit drug(s)
Has made a suicide attempt in last year	Indicated on Interview Screening Form, Diagnostic Assessment Form, or Incident Report
<i>Socialization</i>	
Has chronic history of truancy or school problems	Clearly identified on Social History and/or Interview Screening Form(s)
Has runaway from a stable placement in the last year	Indicated in Social History and/or Interview Screening Form(s) at intake; OR progress notes while in program
Has no known social supports	Minimal contact with family indicated throughout records
<i>Delinquency</i>	
Has been violent toward people in last several years	Any indication of fighting or domestic violence, either at home or at school, indicated in records
Has friends/family members involved in illegal activities	Indicated in Social History; OR mention of recent family involvement in progress notes
Has had more than two misdemeanors in last year	Impression gathered through review of Social History
Has committed a felony offense in last year	Indicated in Social History or Interview Screening; OR through Incident Report; OR referred by Ohio Department of Youth Services
Has committed a sex offense in last several years	Indicated on Referral Sheet, Social History, or Interview Screening
Has been involved in gang activities	Clearly stated in Social History
<i>Teen parenting</i>	
Has a child, has more than one child	Indicated on Referral Sheet, Interview Screening, or Termination Summary
Is pregnant	(Same as above)
<i>Learning disability</i>	
Has limited intellectual abilities	Low IQ listed, very low grade level for age, or Individual Education Plan, as indicated on Referral Sheet, Interview Screening, or in progress notes
Has a diagnosed developmental disability	Clearly indicated in Diagnostic Assessment; including: Autism, Asberger, and pervasive developmental disabilities
Cannot read or write	Clearly indicated within the clinical records

Data sources: Referral Sheet, Social History, and Intake Screening Form (upon entry into the program); Diagnostic Assessment Form, Incident Report, and Progress Notes (while in the program); and, Termination Summary Form (at discharge).

2.2.3. Outcomes at discharge from the program

Three dichotomous measures included 1) whether the youth had completed high school or the equivalent (i.e., received either a high school diploma or GED), 2) whether the youth was employed or had completed a vocational training program, and 3) whether the youth was living independently in his/her own place (i.e., renting an apartment or a private room in a house) at the time of discharge. It should be noted that Hamilton County generally emphasizes discharging youth from care as soon after their 18th birthday as possible. Unlike other states where youth are able to remain in care until the age of 21, such as Illinois, most youth in this study were therefore discharged before their 19th birthday.

2.3. Data analysis

Independent samples *t*-tests, Chi-square tests, and analysis of variance (ANOVA) tests were used to examine possible differences in service use and outcomes between client sub-groups of interest. First, *t*-tests and chi-square tests were used to compare continuous and dichotomous service utilization measures, respectively, between clients without any risk factors and those with any risk factors (Table 4). Chi-square tests were also used to compare client outcome measures with two dichotomous client characteristic measures — gender and race/ethnicity (i.e., minority vs. non-minority) (Table 6).

ANOVA was used to compare client outcome measures and three four-level ordinal measures of client characteristics (sub-groups) of interest; namely, risk factor categories (Table 5) and length of stay and age at admission (Table 6). Tukey pair wise comparisons were

included in these ANOVA analyses to compare outcomes between risk factor category, length of stay, and age of entry sub-groups.

3. Results

3.1. Client characteristics

3.1.1. Intake/admission characteristics

During the 6-year period examined, an average of 76 youth entered the program each year, an average of just over six new clients each month, on average. Most (82%) of these youth are referred by public agencies in Hamilton County, Ohio, primarily from the Department of Children's Services. Forty percent come to the program from foster care homes, 19% from group homes, and 41% from other living arrangements (Table 2). Once admitted, clients stayed in the program an average of 292 days, or 9.6 months, in the program. Twenty percent of clients stayed less than 3 months, nearly half (48%) stayed between 3 and 12 months, and another 28% stayed between one to two years in the program. Less than 5% of the clients remained in the program for longer than two years (Table 2).

3.1.2. Demographic and clinical characteristics

The mean age of admission into the program was 17.9 years, and ranged from 16 to 20 years of age. Eighty-seven percent of clients entered the program at 17 or 18 years of age. More than half of the clients served were female (56%) and 70% belonged to a racial or ethnic minority, mostly (64%) African-American (Table 2). Clients' overall levels of functioning as measured by the Global Assessment of

Table 2
Description of clients (N = 455).

	Percentage (%) or mean	Frequency (N) or standard deviation (SD)
<i>Intake/admission characteristics</i>		
Year of admission		
2001	14.9	68
2002	20.0	91
2003	17.4	79
2004	13.4	61
2005	18.9	86
2006	15.4	70
Average no. admissions per yr.	–	76
Referral source		
Hamilton County	82.6	376
Other source	17.4	79
Prior living arrangement		
Foster care	40.0	182
Group home	18.7	85
Other arrangement	41.3	188
Length of stay		
<3 mos.	19.8	87
3–6 mos.	13.4	59
6–12 mos.	34.5	152
12–24 mos.	28.4	125
24–32 mos.	3.9	17
Mean no. days	292	205
<i>Demographic characteristics</i>		
Age at admission		
16 years	6.4	29
17 years	54.8	247
18 years	32.4	146
19 years	5.5	25
20 years	0.9	4
Mean age (years)	17.9	0.7
Gender (female)	56.3	256
Racial/ethnic minority		
African-American	64.4	293
<i>Clinical characteristics</i>		
GAF at intake (0–100) (n = 392)	60.9	10.3
Self-sufficiency rating at intake (0–130) (n = 375)	76.7	24.0
Risk factor categories		
Motivation and health (any)		
Has little or no work experience in the private sector	56%	254
Has history of poor judgment	42%	192
Avoids responsibilities as much as possible	35%	159
Has chronic medical issues	17%	78
Mental health and substance abuse (any)		
Has chronic mental health issues	13%	57
Is on psychotropic medication	49%	221
Is chemically dependent	47%	213
Has made a suicide attempt in last year	17%	78
Socialization (any)		
Has chronic history of truancy or school problems	10%	46
Has runaway from a stable placement in the last year	5%	24
Has no known social supports	47%	213
Delinquency (any)		
Has been violent toward people in last several years	41%	186
Has friends/family members involved in illegal activities	17%	76
Has had more than two misdemeanors in last year	11%	48
Has committed a felony offense in last year	41%	186
Has committed a sex offense in last several years	27%	123
Has been involved in gang activities	11%	52
Teen parenting	10%	46
Has a child, has more than one child	8%	37
Is pregnant	6%	26
	1%	3
	18%	84
	16%	71
	5%	21

Table 2 (continued)

	Percentage (%) or mean	Frequency (N) or standard deviation (SD)
<i>Clinical characteristics</i>		
Risk factor categories		
Learning disability	10%	47
Has limited intellectual abilities	7%	30
Has a diagnosed developmental disability	4%	20
Cannot read or write	1%	5
No. risk factor categories		
None	33%	151
One	5%	23
Two	11%	49
Three	18%	84
Four	24%	108
Five	9%	40
Six	0%	0

Functioning (GAF) scale averaged 61, with 60 being the cut-point between the young adults having “some difficulty” (61–70) and “moderate difficulty” (51–60) in social, occupational, and/or school functioning (DSM-IV-TR, 2000). Self-sufficiency ratings at intake averaged 77, or squarely in the mid-range of the 130-point rating scale. Two-thirds of clients presented with one or more risk factors, 10% facing identified learning disability issues to 56% facing motivational and health care issues (Table 2).

3.1.3. Receipt of services

Overall, clients received an average of 6.8 individual services. Over half (56%) of clients received mental health, substance abuse, educational and/or vocation service from other providers and agencies, two-thirds (64%) received life skills training from program staff, three-fourths (77%) received direct treatment services, and 87% received basic services, most notably basic support in the form of food, clothing, and shelter. Nearly 40% of clients received all four types of services while in the program (Table 3).

Basic services utilization rates were greater among clients having one or more risk factors than those without any risk factors (94% vs. 86%, $p < .01$). Surprisingly, no significant differences were found in either skills training or referral to services provided by other agencies between any risk factor and no risk factor client groups. Although any risk factor clients received a greater number of direct treatment services (2.7 vs. 2.0, $p < .01$), the difference was not statistically significant (83% vs. 75%, $p = .07$). Any risk factor clients were, however, more likely to receive multiple types of services (3.1 vs. 2.8, $p < .05$), than those without any risk factors (Table 4). Subsequent analyses comparing the number of types of services received among clients represented with zero, one to two, three, and four to six types of risk factors indicated that the above differences were mostly attributable to clients without any risk factors receiving fewer direct treatment services than clients having four or more types of risk factors (2.0 vs. 3.0, $p < .05$), and fewer types of services overall (2.8 vs. 3.1, $p < .05$) (data not shown). Thus, clients with one, two, or three types of risk factors appeared to receive comparable types of services during their stay in the program.

3.1.4. Outcomes at discharge

3.1.4.1. Overall. At the time of discharge, 60% of clients had completed high school or obtained their GED, 31% were employed or had completed a vocational training program, and one-third (33%) were living independently, either by themselves or with a friend, in their own apartment, room, or house (Table 5).

3.1.4.2. Relationship between risk factors and outcomes. Surprisingly, clients with one or two types of risk factors had better outcomes in the areas of employment and independent housing (54–55%) than clients

Table 3
Types of independent living services provided to clients (N = 433 discharged clients).

	%/Mean	N/SD	Rank
<i>Types of services</i>			
Basic services (any)	92%	397	
Basic support (food, clothing)	82%	355	1
Furniture provision	68%	295	2
Recreational activities	32%	138	7
Community service activities	5%	20	32
No. other svcs	1.9	1.0	
Direct treatment (any)	81%	349	
Group counseling	18%	78	12
Respite services	13%	57	16
Tutoring	12%	52	17
Medication administration/monitoring	11%	48	18
Sexuality/STD prevention	11%	48	19
Psychiatric services	11%	46	20
Psychiatric liaison	10%	44	21
Family planning	10%	42	22
Family counseling	7%	30	24
Lighthouse Community School	5%	22	29
Substance abuse	4%	18	33
Sex offender	4%	18	34
Child care	3%	15	35
Sexual abuse prevention	2%	10	37
Other counseling/intervention	54%	233	3
Other educational/employment	45%	194	5
Other health care	29%	127	8
No. treatment svcs	2.5	2.5	
Skills training (any)	67%	292	
Employment skills	54%	232	4
Diagnostic assessment/testing	24%	104	9
Parenting skills	16%	71	13
Vocational training	16%	70	14
GED preparation/testing	8%	36	23
Violence prevention	5%	21	31
No. skills training svcs	1.2	1.2	
Referral services provided by another program (any)	59%	256	
Outside mental health	20%	85	10
GED	19%	81	11
Optical	15%	67	15
Respite	7%	30	25
Substance abuse information	6%	26	26
Legal	6%	25	27
Early intervention	5%	23	28
Child care	5%	22	30
Substance abuse	3%	13	36
Parent mental health	1%	6	38
Other	38%	164	6
No. referral svcs	1.3	1.5	
<i>No. types of services received (0–4)</i>			
One	5.3	24	
Two	29.2	133	
Three	22.0	100	
Four	38.7	176	
Total no. services received (0–38)	6.8	5.2	

without any risk factors (31–35%) (Table 5). Clients with one or two risk factor types also did better than those with four or five risk factor types on all three outcomes, along with clients with three risk factors for employment. The only significantly better outcome found among clients without any risk factors was in comparison to those with four or five types of risk factors in the area of employment (35% vs. 19%, $p < .05$).

It is possible that clients with one or two risk factors outperformed other clients because they were “dysfunctional enough” to draw the attention of program staff and resources, while being “healthy enough”, and possibly motivated enough, to take advantage of their likely “final chance” to get their lives together before being discharged from the child welfare system. While the only statistically significant difference in service utilization between risk factor category groups was a tendency for those without any risks to receive fewer types of services than clients with four or more risk factor categories, the

Table 4
Types of independent living services provided to select client risk factor groups.

Type of service	No risk factors		Any risk factors		Chi-sqr.	t	p
	%/Mean	N/SD	%/Mean	N/SD			
Any basic	86	115	94	282	8.8	–	**
No. basic svcs.	1.7	1.0	1.9	0.9	–	2.1	*
Direct treatment	75	101	83	248	3.4	–	ns (.07)
No. treatment svcs.	2.0	2.3	2.7	2.6	–	2.6	**
Skills training	65	87	69	205	0.6	–	ns
No. skills svcs.	1.1	1.1	1.3	1.2	–	1.7	ns
Referral	55	74	61	182	1.2	–	ns
No. referral svcs.	1.1	1.4	1.3	1.5	–	1.4	ns
No. svc. types (0–4)	2.8	1.0	3.1	1.0	–	2.5	*

* $p < .05$; ** $p < .01$; ns $p > .05$.

rudimentary nature of the dichotomous service utilization measures at any time while in the program precludes ruling-out (or in) the possibility that clients with one or two risk factor categories may have received a greater level of services while in care. Regardless, even for this “most successful” group, nearly one-fourth had not completed high school and nearly half were unemployed and did not have an affordable place to live on their own at the time of leaving the program. Many youth enter the ILP one to two years educationally behind their peer group, and are not able to stay in care long enough to graduate. It is the program's hope that Ohio will eventually be able to keep cases open until the age of 21, providing these youth with more time to complete high school.

Among risk factor groups, teen parents (mothers) appeared less likely to complete high school (45%) and more likely to be independently housed (46%), yet comparably employed (24%) compared with other risk factor category clients (Table 5). Although high in absolute terms, the 55% drop-out rate among teen parents is less than the 70% rate reported by the Robin Hood Foundation (1996), perhaps due to their benefiting from a longer average length of stay in the program (401 days vs. 266 days for non-parents, $p < .001$) and, ironically, a lower IL program drop-out rate (20% vs. 40% for non-parents, $p < .01$). Again, extending foster care to the age of 21 would likely provide teen mothers with a better chance to complete high school graduation or GED completion requirements. Outcomes for the remaining risk factor groups appeared to be surprisingly similar, with high school completion rates ranging from 52–59%, employment rates from 23–28%, and independent housing rates from 26–29% (Table 5).

3.1.4.3. Other factors. Four other factors believed to possibly influence client outcomes included program length of stay, age of admission, gender, and race/ethnicity. Clients remaining in the program for

Table 5
Comparison of client outcomes by risk factor category groups.

Risk factors	Client outcomes					
	Completed h.s.		Employed		Independ. housed	
	%	N	%	N	%	N
All clients	59.9	254	31.0	136	33.0	150
No. risk factor categories						
Zero categories (A)	62.3	81	34.6	47	31.1	47
One to two categories (B)	77.1	54	54.9	39	54.2	39
Three categories (C)	58.8	47	26.2	22	35.7	30
Four or more categories (D)	50.0	72	18.9	28	23.0	34
Tukey pairwise comparisons	B > D		A > D; B > A, C, D		B > A, D	
Risk factor categories						
Motivation and health	55.7	137	24.0	61	29.1	74
Mental health and substance abuse	57.0	122	26.2	58	28.1	62
Socialization	52.4	108	22.5	48	29.1	62
Delinquency	58.6	106	25.9	48	28.5	53
Teen parenting	45.0	36	24.1	20	46.4	39
Learning disability	58.7	27	27.7	13	25.5	12

Table 6
Comparison of client outcomes by length of stay in program, age of entry, gender, and race/ethnicity.

Length of stay in program												
	A		B		C		D		ANOVA			Pairwise comparisons
	<6 months		6.0–11.99 months		12.0–17.99 months		18+ months		df	f	p	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD				
Completed high school	0.74	0.44	0.49	0.50	0.59	0.50	0.52	0.51	3	7	***	A>B,D
Employed	0.12	0.33	0.35	0.48	0.41	0.49	0.55	0.50	3	16	***	A<B–D; B<D
Living independently	0.12	0.33	0.43	0.50	0.45	0.50	0.51	0.50	3	17	***	A<B–D
Age at admission into program												
	A		B		C		D		ANOVA			Pairwise comparisons
	16.0–16.99 years		17.0–17.99 years		18.0–18.99 years		19.0+ years		df	f	p	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD				
Completed high school	0.40	0.50	0.57	0.496	0.63	0.48	0.89	0.31	3	5	**	A–C<D
Employed	0.35	0.49	0.25	0.435	0.35	0.48	0.54	0.51	3	4	**	B<D
Living independently	0.28	0.45	0.31	0.462	0.34	0.47	0.59	0.50	3	3	*	B,C<D
Gender						Race/ethnicity						
	Male		Female		Chi-sqr.	p	Minority		Caucasian		Chi-sqr.	p
	%	N	%	N			%	N	%	N		
	Completed high school	62	118	58			136	0.9	ns	58		
Employed	31	59	31	77	<0.1	ns	33	100	28	36	1.1	ns
Living independently	25	50	39	100	9.8	**	32	101	36	49	0.8	ns

* $p < .05$; ** $p < .01$; *** $p < .001$; ns $p > .05$.

longer than 6 months were more likely to be employed and more likely to be independently housed, but less likely to have completed high school, compared with those who left within 6 months of admission (Table 6). This may be explained by the fact that some clients enter the program for a limited time with the expressed purpose of finishing their final year of high school. As one might expect, clients who entered the program at ages 19 or 20 generally had better outcomes than younger clients who entered at ages 16–18. Older clients were more likely to have completed high school, more likely to be living independently than 17 and 18 year-old clients, and were more likely to be employed than 17 year-old clients (Table 6). No significant differences in outcomes were found among younger age groups (i.e., 16, 17, and 18 year-olds). The only significant difference in outcomes found among gender or racial/ethnic groups was that female clients were more likely to be living independently at discharge than male clients (39% vs. 25%, $p < .01$) (Table 6).

4. Discussion

This study is among the first to empirically describe a housing-based independent living program, the characteristics of emancipating foster youth clients served in the program, and primary treatment outcomes for these youth upon leaving the program. In doing so, all three outcome evaluation domains of program structural characteristics, program process characteristics, and case outcomes (Courtney, 1993) have been described, to the extent possible using existing administrative and clinical data routinely collected by program and agency staff over a six-year period. These data are believed to fairly accurately describe the program characteristics, and the socio-demographic characteristics and clinical risk factors of the clients served by the program. Primary treatment outcomes at the time of discharge are also believed to be fairly accurately documented through these data, but are limited in scope (e.g., examine only three, dichotomously measured outcomes pertaining to educational attainment, employment, and housing), and fail to address longer-term outcomes post-discharge. Descriptive data on the treatment process are the least specific and are perhaps more suspect to unknown validity than program structure or outcomes data examined.

Thus, this study adds to the existing scholarly literature which empirically describes specific independent living program models of practice. Scannapieco, Schagrin, and Scannapieco (1995) described the Baltimore County Department of Social Services Independent Living Program, and the 44 youth served during the five-year period 1988–1993, and found that 50% had completed high school, 52% were employed, and 36% were living independently at the time of discharge (which averaged 19 years of age). Mallon (1998) described the Life Skills Program developed by Green Chimneys, a non-profit child serving agency contracting with the New York City Administration for Children's Services, and the 46 youth served during the six-year period 1988–1994, and found that 74% had completed high school, 79% were employed, and 61% were living independently (including sharing an apartment with another) at the time of discharge (which averaged 21 years of age). Most recently, a report by the Administration on Children & Families (ACF, 2008) described the Community College Foundation's Life Skills Training (LST) Program, operating out of Los Angeles County, California. Among the 222 youth randomly assigned to the LST treatment group, 60% had completed high school and 45% were employed at age 19. Among these, and other statewide studies (e.g., Lindsey & Ahmed's, 1999 study of the Independent Living Program in various counties in North Carolina), and regional/multi-program studies (e.g., Georgiades's, 2005 study of Florida's Miami-Dade and Monroe Counties IL Programs), the current study is the first description of a larger-scale housing program reported on in the published child welfare literature.

The client outcomes data reported in this study, as in previous studies, may be viewed from a strengths-based or deficits-based perspective, while providing comparative or benchmark data for future studies and policy-making and program development. High school completion, employment, and independent housing rates for the overall sample at 19 years of age (on average) at discharge of 60%, 31%, and 33%, respectively, demonstrate both accomplishment and room for improvement. Moreover, the variability observed in these overall rates by risk factor groups, age at admission, and length of stay among clients in this particular housing model of independent living suggests the need for additional model-specific structure, treatment, and outcomes data collection and reporting, and also additional research to better understand outcomes variability between client

sub-groups and program models. The three studies mentioned above and this study are somewhat like four very different types of fruit, precluding the possibility of “comparing apples to apples” client outcomes across these studies.

While rigorous evaluations of specific independent living models of practice are most certainly needed to determine the efficacy and effectiveness of any given model, the many challenges and high costs of conducting such evaluations suggest the need to “make do” with smaller-scale, empirically descriptive studies, such as this, which could be conducted relatively easily and at low cost for most any established independent living program. Additional “mid-level”, quasi-experimental and/or longer-term outcomes evaluation studies for specific practice models are also clearly needed to fill the gap between small-scale descriptive studies and rigorous randomized clinical trial studies. The dearth of published empirical data on even the most basic descriptive level for specific models of independent living practice addressing all three evaluation domains – program structure, treatment process, and client outcomes – suggests both great need and opportunity to advance the independent living field within child welfare.

While providing potentially useful descriptive data to researchers, policy makers, funders, program developers and managers, etc., the findings should be considered in light of three major limitations. First, the validity and reliability of the measures used are largely unknown, including risk factor classification data, GAF and self-sufficiency measures, and even, to a lesser extent, outcomes data. These data were compiled retrospectively from various administrative and clinical records, over a six-year period, and are believed to be accurate based primarily on the considerable experience of program staff, relatively advanced management information system, and longevity of the Lighthouse Independent Living Program. Next, the validity and utility of the service utilization data are particularly questionable. While the dichotomous measurement of various types of independent living services is the approach recommended by the Children's Bureau in the recently issued National Youth in Transition Database (NYTD) federal regulations (ACF, 2008), ideally service utilization measures would include some level or frequency data to distinguish a youth who received a single session of educational tutoring, vs. the youth who received 30 tutorial sessions, for example. Third, the descriptive and bivariate client sub-group comparisons presented here are unadjusted – i.e., not statistically adjusted for potentially confounding differences in client characteristics or use of services. While beyond the scope of this descriptive study, a more detailed multivariate examination of client characteristics associated with outcomes at discharge is planned for a later date. Finally, the external validity, or generalizability, of these findings is limited, given the uniqueness of the Lighthouse model, the close working relationship of the agency with the various public systems of care operating in Hamilton County, Ohio, the highly developed housing continuum of care available to independent living clients, etc. While early efforts are currently underway to “export” the Lighthouse model to other locales, the extent to which the model can be feasibly implemented outside of Hamilton County is not yet known.

The findings of this study raise numerous questions for communities considering developing independent living housing programs for their emancipating foster youth. One such question is how long should the average length of stay be? The fact that counties and the State of Ohio, like many other States, are under financial pressure to discharge youth soon after their 18th birthdays due to budget limitations, while at the same being reluctant to accept the risk and liability of placing minors in public care into their own apartments out in the community, explains Hamilton County's compromise position of typically placing youth into the Lighthouse Program just a few months before their 18th birthday, providing them with about 10 months of “hands-on” skills training while living in their own apartments, and then discharging them before their 19th birthday.

While longer lengths of stay appear to be related to improved outcomes in the areas of employment and independent housing, extending average lengths of stay would likely result in smaller numbers of youth served each year, assuming no increases in public funding for independent living at the county or state levels. Such increases may be more likely, though, in light of the recent passage of The Fostering Connections to Success and Increasing Adoptions Act (H.R. 6893, 2008), which will expand federal Title IV-E reimbursements to states providing out-of-home placements during the ages 18–21 years bridge period.

A second key question is which foster youth sub-group(s) should be placed into independent living housing programs? The risk factors data reported herein suggest that Hamilton County places youth with many different types of needs into the Lighthouse ILP, including youth with no demonstrable “special” risk factors to those having five different types of risk factors. Many of the more troubled youth entered the program with no previous histories of success in school or at work. They were placed (and accepted) into the program as an option of last resort for the county and other referring agencies to provide these more challenged youth with some practical skills for a few months until they were discharged from public care. Decreasing the admission of the highest risk youth (i.e., those with four or more clinical risk factor categories) would most likely produce better program outcomes overall. However, Lighthouse has felt that providing services to “last chance” youth is more important than improving overall client outcomes. After all, it is the high-risk youth who are most in need of services and supports. And Hamilton County has been willing and able to fund such efforts, for many of these high-risk youth, over the years. Yet other counties or states developing housing programs may decide to be more selective in targeting certain client sub-groups, such as teen parents, delinquent youth, or youth with mental health problems.

A third question is how to involve the public mental health system in meeting the mental health needs of emancipating foster youth? With nearly half of the Lighthouse clients having documented mental health issues, it seems likely that an important piece of the emancipation puzzle for those youth is the assumption of case management, medication management, and other basic services typically provided by the adult community mental health system after youth are discharged from the child welfare system. For example, Lighthouse is currently involved in a pilot project funded by the local county's mental health system, drawing from the experiences of others around the country who are serving this population (Davis & Vander Stoep, 1997; Clark & Davis, 2000) that is showing some promise in this area. The program connects youth in custody with an adult mental health system case-manager who takes over the case when the youth turn 18 and custody is terminated. Housing is provided throughout the transition process. Other counties or states may have other ways of addressing this issue, but somehow the mental health needs of emancipating youth with mental health problems ought to be assessed and addressed during the bridge period to independence.

Finally, the findings of this study raise four important questions which may be examined in future research. First, what are the causes of low high school completion rates and high independent housing rates among teen parents (moms)? Dropping-out of high school portends a difficult future and life for teen parents and their children, alike (Robin Hood Foundation, 1996). Extending the length of stay for teen mothers may relieve some of the pressure to find a paying job and allow them to focus on acquiring parenting skills and completing high school. Next, to what extent did clients experience multiple moves or placements within Lighthouse's continuum of housing? Providing youth with a second or third chance in a different living arrangement may result in better outcomes. Having a better understanding of which client sub-groups spent the majority of their time in the program in various levels of care/various types of housing settings

may help to inform the question of which types of clients can be reasonably served by other independent living housing programs, which may have fewer, comparable, or greater alternative housing options available than does Lighthouse. Third, why did nearly two out of five clients drop-out of the program early (i.e., before accomplishing the individualized goals developed with their independent living program case manager)? The addition or extension of aftercare services may provide greater opportunity to serve those who drop-out of the program, only to return at a later date for assistance, as many do. Finally, is scattered-site housing the most effective housing model for 17–18 year-old youth preparing for independence, given the current 10-month average length of stay in the program? There is limited research that looks at the outcomes for youth exiting foster care from different living arrangements (Mech, 1994), but additional research is needed in this area.

4.1. Conclusion

The Lighthouse Independent Living Program, which started out in 1981 as a pilot project that many did not expect to succeed, is now an established part of the Hamilton County Children's Services system of care for youth aging out of foster care. The county supports the ILP as it has seen many youth do well in the program and knows that its youth have to leave care often before they are developmentally ready. The descriptive findings presented in this paper are offered to help inform and encourage the development of housing programs for emancipating foster youth in other counties in Ohio, and possibly other locales in other states, by including a fairly detailed description of the structure, treatment, and outcomes domains of the program over the past six years of operation.

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