

# Predictors of service utilization among homeless former foster youth: Implications for intervention

Journal of Social Work  
2022, Vol. 22(6) 1394–1411

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DOI: 10.1177/14680173221101254  
journals.sagepub.com/home/jsw



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## Abstract

- *Summary:* A high percentage of homeless youth have a history of foster care placement; this population faces high rates of behavioral health problems. No research has focused on the predictors of service use among homeless former foster youth. This analysis seeks to determine what foster care and homeless experiences are associated with service use among this population. Data were collected via convenience sample from 184 homeless former foster youth at a drop-in center in Hollywood, California. A series of logistic regressions were conducted for network engagement behaviors that may be impacted by foster care experiences. Knowledge from prior empirical results form the basis for this analysis.
- *Findings:* Number of foster care placements and age at first foster care placement, overall time spent homeless, age at first homelessness, and being kicked out of housing as a cause of homelessness were associated with decreased service use. Time spent in foster care and homeless experiences during foster care were associated with increased service use.
- *Application:* Results can be used to aid in understanding which foster care and homeless experiences aid or hinder service use. From a policy level, findings from this study can aid child welfare agencies in further understanding which foster care experiences present as risk factors after transition from care.

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**Keywords**

Social work, quantitative research, social support, homelessness, foster care, adolescence

**Introduction**

Current estimates of homelessness in the United States indicate that nearly 2 million unaccompanied youth experience homelessness each year (National Alliance to End Homelessness, 2020). Additionally, research has demonstrated that nearly 30% of homeless adults have a history of foster care (Brandford & English, 2004; Morton et al., 2017; Patterson et al., 2015; Reilly, 2003). Although the majority of research has focused on risk factors among homeless youth and foster youth independently, an emerging inquiry has indicated a number of elevated risk factors for youth with experiences of *both* homelessness and out-of-home placement (Yoshioka-Maxwell & Rice, 2015, 2019; Brown & Wilderson, 2010; Hudson & Nandy, 2012; Narendorf, et al., 2020; Tejada, 2018; Tyler & Schmitz, 2020). With the research suggesting increased risk factors among homeless former foster youth, and in an effort to better understand predictors and outcomes for this population, it becomes imperative that we continue the examination of risk and protective factors common among homeless youth with a history of foster care. One such area that requires additional focus, that affects both risk and protective factors, is service utilization. Service utilization and intervention strategies can aid in reducing negative outcomes for both homeless youth and former foster youth, such as substance use, sex-risk behaviors, unemployment, lack of stable housing, and low connectivity to supportive adults (Morton, et al., 2020; Rashid, 2004; Slesnick et al., 2010). However, no research exists on the experiences that predict service use for homeless former foster youth. Thus, in an effort to more effectively target interventions and services to this population, this study will examine the demographic characteristics and experiences common to foster youth that predict service use among a sample of homeless former foster youth.

**Background**

Research has established a number of risk factors for homeless youth, such as various drug and sex risks, risks associated with network composition and connectivity, engagement in criminal activities, suicide, and mental health problems (Barman-Adhikari et al., 2017; Boyer et al., 2017; Green et al., 2013; Nyamathi et al., 2012; Perlman et al., 2014; Rice et al., 2017; Tucker et al., 2012). Similarly, established risk factors for foster youth and former foster youth encompass a range of experiences and outcomes including sex risk practices, STIs, pregnancy, substance use, criminal involvement, homelessness, poor physical health outcomes, and mental health issues among others (Ahrens et al., 2010; Benjet et al., 2013; Black et al., 2009; Braciszewski & Stout, 2012; Brook et al., 2015; Crawford et al., 2018; Winter et al., 2016; Yen et al., 2009). For homeless former foster youth, the few studies that have explored risk factors and outcomes

among youth with both homeless and foster care experiences have established that this population experiences unique risks, including increased HIV-risk behaviors, substance use, juvenile justice involvement, mental health issues, street victimization, lack of support, social network disruption, and engagement with at-risk social networks (Yoshioka-Maxwell & Rice, 2015, 2019; Brown & Wilderson, 2010; Hudson & Nandy 2012; Narendorf et al., 2020; Tejada, 2018; Tyler & Schmitz, 2020).

Among the tools researchers and clinicians have utilized to reduce instances of risk behaviors and poor outcomes for this population, a number of services and interventions have been identified for both homeless youth and foster youth. Research on service use among homeless youth has primarily focused on demographic characteristics common to homeless youth utilizing services (Barman-Adhikari & Rice, 2014; Garcia & Courtney, 2011; Ha et al., 2015; Tyler et al., 2012), types of services commonly used among homeless youth (Kort-Butler & Tyler, 2012), outcomes for homeless youth utilizing services (Crosby et al., 2018), and reasons for service use (Evans et al., 2014). For foster youth and former foster youth, research has focused on documenting the types of services used or received (Courtney et al., 2011; Havlicek et al., 2013; Munson et al., 2020) and understanding service use needs among youth transitioning out of care (Dworsky & Courtney, 2009). Although research has been established on outcomes and predictors of services use for homeless youth, to date, no research has focused on understanding predictors of service use, particularly for those youth who have experiences with homelessness and the child welfare system. The lack of information present on the predictors of service use for this population creates a missed opportunity where interventions and service use are concerned. With the high rate of homelessness within the former foster youth population, and with the established research on the importance of service use among both homeless youth and foster youth, a need exists to establish factors that lead to variation in service use among homeless former foster youth. The present study will examine youths' foster care experience, as well as the current homeless experiences, that are associated with service use. Additional information on the predictors of use will aid us in better understanding the effectiveness of service utilization as a mitigating tool for risk among homeless former foster youth.

## **Methods**

### *Sampling*

As fully described in Yoshioka-Maxwell & Rice (2019), data were collected from 184 homeless former foster youth at a drop-in center in Hollywood, California using the risk-behavior questionnaire modeled after the YouthNet Study, which broadly examined social networks and addressed mental and behavioral health issues among homeless youth in Los Angeles. Data for the current analysis were collected during two- to four-week intervals over three periods (two summers and one winter) from 2015 to 2016. Foster care experiences were measured through the Foster Care Experiences Assessment, a qualitative assessment created by Yoshioka-Maxwell in 2014 to gather information on the range of experiences among former foster youth both during and

after placement. This qualitative survey, conducted through semi-structured interviews with 20 homeless former foster youth, was later coded and turned into a quantitative survey used for quantitative analysis of foster care experience.

All clients receiving services at the respective agency during data collection periods were eligible for screening. Inclusion criteria included receipt of services by the drop-in center as well as a history of out-of-home care with the child welfare system. All clients receiving services through the drop-in center were already considered homeless as defined by McKinney-Vento (McKinney-Vento Homeless Assistance Act of 1988), per the policy of the drop-in center, which includes definitions of homelessness related to unstable housing situations in addition to literal houselessness. Recruitment was conducted for approximately 2–4 weeks; during that time, recruiters were present at the agency to approach youth for the duration of service provision hours. Youth new to the agency first completed the agency's intake process before beginning the study to ensure they met the eligibility requirements for the agency (and, thus, the study). A consistent set of two research staff members were responsible for all recruitment to prevent youth from completing the survey multiple times within each data collection period.

Signed voluntary informed consent was obtained from each youth, with the caveats that child abuse and suicidal and homicidal intentions would be reported. Informed consent was obtained from youth 18 years and older, and informed assent was obtained from youth 14–17 years old. The Institutional Review Board (IRB) at a large university on the West Coast of the United States waived parental consent, as homeless youth younger than 18 years are unaccompanied minors who may not have a parent or adult guardian who could give consent. Interviewers received approximately 40 h of training, including lectures, role-playing, mock surveys, ethics training, and training in emergency procedures. The study consisted of two parts: a computerized self-administered survey and a social network interview. Two phases of data collection were included to gather two types of data. In the self-administered questionnaire, behavioral health and foster care experience questions were asked of the participants. For the purpose of this analysis, only the self-administered questionnaire data was used, although the description of the methods for the full study can be found in Yoshioka-Maxwell & Rice (2019).

*Online, self-administered questionnaire.* Participants privately entered answers into the computer as they read questions on the computer screen or listened to the questions being read to them. Preprogrammed skip patterns advanced participants to the next appropriate question after a response was entered.

## Measures

*Sociodemographic variables.* Age, race, gender, and sexual orientation were obtained through self-report measures. Age was calculated by coding the youths' reported birth dates into an age based on the date of their interview. Racial categories included American Indian/Alaska Native, Asian, Black/African American, Native Hawaiian or other API, White, Latino/Hispanic, and mixed race. Due to the low numbers of American Indian/Alaska Native, Asian, and Native Hawaiian or other API, those

categories were coded into an “other” category. For the purpose of the logistic regressions performed in this analysis, race was further dichotomized into “Black/African American” and “all other races” due to the frequency distribution of the race categories (Black/African American = 1, All other races = 0). Questions pertaining to gender included the following options: male, female, transgender (male to female), and transgender (female to male). Due to the low number of transgender participants, all responses related to gender were coded into male or female, depending on the gender with which participants identified (male = 1, female = 0). Variables pertaining to sexual orientation included homosexual, queer, bisexual, heterosexual, and questioning/unsure. Due to the response rates across the orientations, sexual orientation was coded into “heterosexual” and “LGBTQ” (heterosexual = 1, LGBTQ = 0). All reference categories were selected solely on the basis of frequency.

*Foster care variables.* A number of foster care experience variables were chosen to describe basic experiences in foster care placements. Age at first foster care placement was measured on a seven-point scale, ranging from placement at birth to placement at age 17 (1 = at birth, 2 = 1 year or younger; 3 = 2–3 years old, 4 = 4–6 years old, 5 = 7–10 years old, 6 = 11–13, 7 = 14–17 years old). Time spent in placement was measured through a six-point scale, ranging from less than a year to 15 or more years. Age at exit from foster care was measured on a four-point scale and included the categories of five years or younger, 6–11 years old, 12–17 years old, and under 18 years old generally. Number of foster care placements was measured through a five-point scale, ranging from one or two placements to 20 or more placements. Type of placement included kinship care, foster care, group home, juvenile detention, psychiatric hospital, and camp. These options were not mutually exclusive but meant to capture the range of placements that a person may have throughout their placement history. Reason for placement included physical abuse, sexual abuse, neglect, parental drug problems, truancy, suicide attempt, personal drug use, parental psychiatric problems, placement at birth, and other. Finally, general feelings regarding foster care were obtained. All foster care variables selected were chosen based on their importance in previous literature or the frequency of discussion in the qualitative interviews.

*Homelessness variables.* Basic information regarding individuals’ homelessness experiences including overall time spent homeless measured in months and years, and age at first homelessness, measured in participant age. Timing of homelessness was asked to gauge timing of homelessness either before leaving foster care (before age 5, between 6–11 years old, between 12–18 years old) or after leaving foster care (as a minor, as an adult). Time currently spent homeless was measured through a six-point scale, ranging from less than a year to 14–18 years. Time spent homeless over the lifetime was measured through a six-point scale ranging from less than a year to 11–13 years.

*Service utilization variables.* Service utilization questions were selected based on the range of services available to youth in local service agencies. These questions are aided by the Pollio & Thompson articles regarding service utilization (see Pollio et al. 1997 and Pollio

et al., 2006). For all of the service use questions, youth were asked what services they had utilized with any service provider in the past month, ranging on a six-point scale including “every day or almost every day,” “a couple of times a week,” “once a week,” “a few times a month,” “once this month,” and “not at all this month.” Services in question included going to places to get free food or meals, going to places to get free clothes, going to places for housing/shelter, going to places for medical or health care services, going to places to get care while the individual was pregnant or while their partner was pregnant, going to places to get condoms or birth control, going to places to get help with finding a job, writing a resume, applying for a job, learning job skills, etc., going to places for counseling or therapy, going to places for tutoring, help with school, help with applying to school, etc. All questions were accompanied by the aforementioned answer choices, with the exception of prenatal services, which also included a seventh answer choice: “I was not pregnant/my partner was not pregnant.” For the purpose of the analysis, and as a result of the distribution of the data, service use variables were dichotomized to represent the use of any services or no service use (any service use = 1, no service use = 0).

## *Analysis*

One of the main objectives of this analysis was to explore some of the predictors of service use among homeless former foster youth. Because the general descriptive statistics of homeless former foster youth have been previously established (Yoshioka-Maxwell & Rice, 2019), for this analysis, descriptive statistics for this population were only provided for foster care demographics. All assumptions for logistic regression have been tested and are adequate, such as level of measurement, issues around multicollinearity, and independence of variables, among others. Initially, correlations and bivariate logistic regressions were conducted for service use and homeless and foster care experiences. Once this was established, a series of multivariate logistic regressions were conducted for service utilization that may be impacted by homelessness and foster care experiences. Logistic regression was chosen to help determine the association between homelessness, foster care experiences, and service use generally, as opposed to levels of service use (number of times a month). These models were built through the use of foster care and homelessness variables previously established as impactful for this population (Yoshioka-Maxwell & Rice, 2015, 2019). For the foster care experience models, individual models were tested for time spent in foster care, number of foster care placements, age at first foster care placements, time spent in foster care, “first homelessness experience before foster care,” and foster care exit age, placement type, and reason for placement with types of services used. For the homelessness variables, age at first homelessness, cause of homelessness, time spent currently homeless, and lifetime spent homeless were also tested. These models controlled for age, race, gender, and sexual orientation. All homelessness and foster care variables were chosen based on previous literature’s establishment of risk and protective factors associated with specific experiences, such as time spent in foster care, number of foster care placements, age at exit from foster care, and time spent homeless. All analyses were conducted using SAS 9.4.

## Results

### Demographics

Basic demographic statistics were run for sociodemographic, foster care, homelessness, and HIV-risk behavior variables. As demonstrated in Table 1, the average age of the sample was 21.11 years ( $SD = 1.95$ ), with the majority of youth reporting their race as Black/African American (47.37%), followed by Mixed race (21.05%). White and Latino youth represented 12.87% of the sample independently. The majority of youth reported being male (67.63%) and heterosexual (70.41%), with 15.38% reporting their sexual orientation as bisexual, and 8.28% as homosexual.

Where foster care demographics were concerned, Table 2 depicts that the majority of youth reported being placed in foster care between 14–17 years old (21.47%), 2–3 years old (20.25%), or 11–13 years old (17.79%), while reports of time spent in the foster care system covered a broad time span, with 22.98% reporting being in placement for 15 or more years, and 20.50% reporting being placed for less than a year. Over half of the

**Table 1.** Basic sample demographics ( $n = 184$ ).

	All youth ( $n = 184$ )		
	$n$ (%)	Mean	SD
<b>Age</b>		21.99	1.95
<b>Race</b>			
American Indian/Alaska Native	8 (4.68)		
Asian	1 (.58)		
Black or African American	81 (47.37)		
Native Hawaiian or other API	1 (.58)		
White	22 (12.87)		
Latino/Hispanic	22 (12.87)		
Mixed Race	36 (21.05)		
<b>Gender</b>			
Male	117 (67.63)		
Female	48 (27.75)		
Transgender—male to female	7 (4.05)		
Transgender—female to male	1 (.58)		
<b>Sexual orientation</b>			
Homosexual	14 (8.28)		
Queer	3 (1.78)		
Bisexual	26 (15.38)		
Heterosexual	119 (70.41)		
Questioning/Unsure	7 (4.14)		

**Table 2.** Basic foster care demographics ( $n = 184$ ).

	All youth ( $n = 184$ ) $n$ (%)
<b>Age at placement</b>	
At birth	23 (14.11)
Under 1	9 (5.52)
2–3 years old	33 (20.25)
4–6 years old	15 (9.20)
7–10 years old	19 (11.66)
11–13 years old	29 (17.79)
14–17 years old	35 (21.47)
<b>Time spent in placement</b>	
Less than 1 year	33 (20.50)
2–4 years	32 (19.88)
5–7 years	35 (21.74)
8–10 years	13 (8.07)
11–14 years	11 (6.83)
15 or more years	37 (22.98)
<b>Age at exit from placement</b>	
Under 18 years old	79 (56.43)
12–17 years old	37 (26.43)
6–11 years old	13 (9.29)
5 years old or younger	11 (7.86)

participants (56.43%) reported transitioning out of care before the age of 18, with the next highest group being 12–17 years old (26.43%).

Table 3 demonstrates that youth reported neglect (38.15%), physical abuse (30.06%), and parental drug problems (31.79%) as the reasons for placement in foster care. Housing situation immediately following transition from foster care varied widely, with 16.25% reporting living with family members, 17.50% reporting living with their family of origin, and 17.50% reported immediate homelessness. Additionally, 33.54% of the sample reported 1–2 placements, and 22.36% reported 3–4 placements. Still, 16.15% of the sample reported 10 or more placements, and 15.53% reported 20 or more placements. The majority of youth reported spending time in foster homes (65.41%), with equal percentages of youth reporting placements in kinship care and group homes (13.21%).

Where homelessness demographics are concerned, Table 4 demonstrates that on average, youth had been homeless for 2.27 years ( $SD = 2.74$ ), with their age at first homeless experience being 16.52 years. 73.33% of youth considered themselves “homeless.” Where first homeless experiences were concerned, 37.75% reported first becoming homeless after leaving foster care, and as an adult, while 30.46% reported their first homeless experience being before they left foster care, age 12–18. They



**Table 3.** Basic foster care demographics ( $n = 184$ ).

	All youth ( $n = 184$ ) $n$ (%)
<b>Number of FC placements</b>	
1–2	54 (33.54)
3–4	36 (22.36)
5–9	20 (12.42)
10 +	26 (16.15)
20 +	25 (15.53)
<b>Type of placement</b>	
Kinship	21 (13.21)
Foster home	104 (65.41)
Group home	21 (13.21)
Juvenile detention	5 (3.14)
Emergency shelter	6 (3.77)
Psychiatric hospital	1 (.63)
Camp	1 (.63)
<b>Placement reason</b>	
Physical abuse	52 (30.06)
Sexual abuse	25 (14.45)
Neglect	66 (38.15)
Parental drug problems	55 (31.79)
Truancy	18 (10.40)
Suicide attempt	5 (2.89)
Personal drug use	16 (9.25)
Parental psychiatric problems	29 (16.76)
Placed at birth	20 (11.56)
Other	23 (13.29)

reported that their time spent homeless over the course of their lifetime was 3–4 years (26.80%), followed by 5–7 years (22.88%).

### *Service utilization*

For service utilization, Table 5 indicates that service use varies widely according to service. For overall service use, 94.02% reporting using services to get food, 91.85% reported using services to get clothing, 85.33% reported using shelter services, 75.54% reported using health services, 52.73% reported using prenatal services, 64.13% reported using services to obtain condoms, 81.52% reported using employment services, 81.52% reported using therapy services, 64.13% reported using school services, and 59.24% reported using legal services.

**Table 4.** Homelessness characteristics among former foster youth ( $n = 184$ ).

	<i>n</i> (%)	All youth ( $n = 184$ )	
		<i>Mean</i>	<i>SD</i>
<b>Time homeless</b>		2.27	2.74
<b>Age at first homelessness</b>		16.52	4.00
<b>Do you consider yourself homeless</b>	121 (73.33)		
<b>First homeless experience</b>			
Before leaving FC—before 5 years old	11 (7.28)		
Before leaving FC—6–11 years old	15 (9.93)		
Before leaving FC—12–18 years old	46 (30.46)		
After leaving FC—as a minor	22 (14.57)		
After leaving FC—as an adult	57 (37.75)		
<b>Time homeless—current</b>			
Less than 1 year	58 (38.67)		
1–2 years	31 (20.67)		
3–4 years	32 (21.33)		
5–7 years	23 (15.33)		
8–10 years	1 (.67)		
11–13 years	3 (2.00)		
14–18 years	2 (1.33)		
<b>Time homeless—lifetime</b>			
Less than 1 year	30 (19.21)		
1–2 years	28 (18.30)		
3–4 years	41 (26.80)		
5–7 years	35 (22.88)		
8–10 years	6 (3.92)		
11–13 years	4 (2.61)		

## Regressions

Logistic regressions for service utilization and homeless and foster care experiences were run, controlling for age, race, gender, and sexual orientation. Table 6 indicates that youth were significantly less likely to use health services as number of foster care placements increased (OR = .73, CI = .64, .96) and significantly more likely to use health services the longer time youth spend in foster care (OR = 1.24, CI = 1.01, 1.53). For prenatal services, youth were significantly less likely to use prenatal services as the number of foster care placements increased (OR = .59, CI = .46, .77), significantly more likely to use prenatal services with longer time spent in foster care (OR = 1.40, CI = 1.14, 1.71), and significantly less likely to use prenatal services with an older age at foster care exit (OR = .52, CI = .33, .82). For condom use, youth were significantly less likely to use services to obtain condoms the longer time they spend homeless (OR = .88, CI = .78, .99). For school service use, youth were significantly less likely to use school services as their

**Table 5.** Service utilization variables ( $n = 184$ ).

	All youth ( $n = 184$ ) $n$ (%)
<b>Services used</b>	
Food	173 (94.02)
Clothing	169 (91.85)
Shelter	157 (85.33)
Health Services	139 (75.54)
Prenatal Services	87 (52.73)
Condoms	118 (64.13)
Employment Services	150 (81.52)
Therapy	150 (81.52)
School	118 (64.13)
Legal Services	109 (59.24)

age at first homelessness increased (as youth were older at time of first homelessness) ( $OR = .70$ ,  $CI = .52, .93$ ), significantly less likely to use school services with more foster care placements, significantly more likely to use school services the longer they spent in foster care ( $OR = 1.20$ ,  $CI = 1.00, 1.44$ ), and significantly more likely to use school services if they experienced homelessness during their time in foster care ( $OR = 2.29$ ,  $CI = 1.20, 4.37$ ). Lastly, for legal services, youth were significantly less likely to use legal services when their cause of homelessness was due to being kicked out of their housing ( $OR = .91$ ,  $CI = .83, .99$ ), significantly less likely to use legal services with increased number of foster care placements ( $OR = .79$ ,  $CI = .62, .99$ ), and significantly more likely to use legal services if they spent time homeless during foster care ( $OR = 1.88$ ,  $CI = 1.00, 3.54$ ).

## Discussion

Overall, several themes have emerged from this analysis within both foster care and homeless experiences. Several foster care and homeless experiences were predictive of decreased service utilization, and two foster care experiences were predictive of increased service utilization. Of the foster care experiences, a number of foster care placements and age at first foster care placement were associated with decreased service use, whereas homeless variables such as overall time spent homeless, and age at first homeless experience, were associated with decreased use. Additionally, results indicated that time spent in foster care and homeless experiences during foster care was associated with increased service use. No consistent set of control variables was associated with service use. Where service use was concerned, health services, prenatal services, services to get condoms, legal services, and school services were the services significantly impacted by these predictors. Several of the results can be tied to findings from prior research. A higher number

**Table 6.** Service utilization logistic regressions with homelessness and foster care experiences (n = 184).

	Health (n = 184) OR (95%CI)	Prenatal (n = 184) OR (95%CI)	Condom (n = 184) OR (95%CI)	School Help (n = 184) OR (95%CI)	Legal (n = 184) OR (95%CI)
<b>Homeless experiences</b>					
Age at first homelessness	.87 (.64, 1.18)	.98 (.74, 1.28)	.95 (.73, 1.24)	<b>.70 (.52, .93)*</b>	.83 (.64, 1.09)
Cause of homelessness	.95 (.87, 1.05)	.97 (.88, 1.06)	.93 (.85, 1.01)	.96 (.88, 1.04)	<b>.91 (.83, .99)*</b>
Time spent currently homeless	1.10 (.83, 1.47)	1.30 (.98, 1.72)	1.00 (.78, 1.28)	1.22 (.93, 1.59)	1.05 (.81, 1.36)
Lifetime homelessness	.90 (.79, 1.02)	1.00 (.87, 1.14)	<b>.88 (.78, .99)*</b>	.92 (.82, 1.04)	.93 (.82, 1.05)
<b>Foster care experiences</b>					
Number of FC placements	<b>.73 (.56, .96)*</b>	<b>.59 (.46, .77)***</b>	.81 (.64, 1.02)	<b>.67 (.52, .86)**</b>	<b>.79 (.62, .99)*</b>
Age at first FC placement	.93 (.78, 1.11)	.95 (.80, 1.12)	.93 (.79, 1.09)	.91 (.77, 1.07)	.97 (.83, 1.14)
Time spent in FC	<b>1.24 (1.01, 1.53)*</b>	<b>1.40 (1.14, 1.71)**</b>	1.02 (.85, 1.22)	<b>1.20 (1.00, 1.44)*</b>	1.05 (.88, 1.25)
Homelessness during FC	1.20 (.60, 2.42)	1.33 (.69, 2.56)	1.39 (.74, 2.62)	<b>2.29 (1.20, 4.37)**</b>	<b>1.88 (1.00, 3.54)*</b>
Age of FC exit	.78 (.52, 1.17)	<b>.52 (.33, .82)**</b>	.79 (.55, 1.14)	.70 (.48, 1.03)	.82 (.57, 1.19)
Placement type	1.08 (.73, 1.60)	1.07 (.75, 1.51)	1.38 (.95, 2.01)	1.21 (.84, 1.74)	1.21 (.85, 1.71)
Reason for placement	1.00 (.87, 1.16)	1.07 (.93, 1.22)	1.10 (.96, 1.26)	1.02 (.89, 1.16)	1.03 (.91, 1.18)

\*p < .05, \*\*p < .01, \*\*\*p < .001.  
FC = foster care.

of foster care placements has been repeatedly shown to present as a risk factor for former foster youth (Shah et al., 2017; Stott, 2012), findings that are supported by the current study among former foster youth currently experiencing homelessness. In the current analysis, higher number of placements was associated with less health, prenatal, and legal service use, and among the homeless experience variables, longer lifetime homeless was associated with a decreased in services to obtain condoms, a risk factor that has been substantiated previously in the literature (Yoshioka-Maxwell et al., 2015). New findings from the current analyses indicate trends among the foster care experiences, where both length of time spent in foster care and homeless experiences during foster care, seem to promote service use. An important aspect to note is that this finding suggests that overall years spent in foster care, not necessarily number of placements, is associated with increased service use. Additional novel findings indicate that placement into foster care at an older age, age of first homeless experience, and being kicked out of housing are all associated with decreased service use.

Significant findings from these analyses are important for a number of reasons. Primarily, because research has established the importance of service use for at-risk youth, those experiences that decrease use should be closely examined in order to determine what barriers to service use exist. Higher numbers of foster care placements have already been established as a risk factor for former foster youth, thus, reducing the number of placements becomes important to mitigate said risk. Additionally, for those youth who have high numbers of placements, service use should be heavily emphasized by child welfare services, in an attempt to promote service use among those youth with many placements. Furthermore, being placed at an older age also appears to reduce service use, a potential effect of having less interaction with service agencies over the course of their lives and indicating that foster youth placed at older ages should be targeted for increased access to services. And while this study has identified certain barriers to service use, it would be helpful to include a broader range of experiences into the equation. For example, past experiences with service use may also impact future use, such as feelings of not being respected, supported, and judged or services that are not youth-friendly or timely in delivery. Among homeless experiences, several experiences were associated with reduced service use, but may not be able to be mitigated by the time youth have already experienced homelessness, such as age at first homeless experience. Thus, for those homeless former foster youth, better understanding the barriers to service use may be of primary importance, as well as increasing accessibility.

Although no homeless experiences were associated with increased service use, there are foster care experiences that seem to promote use. Longer time spent in foster care was associated with increases in a number of services. One potential reason for this may be because youth who have spent a longer time in foster care have had more experience with various services and service agencies and may be more knowledgeable and comfortable seeking services once homeless. Thus, continued promotion of services for youth in out-of-home care should be continued and may require more emphasis for those youth who are in placement for shorter periods of time. Finally, experiences of homelessness during foster care were also associated with increased service use. And while the connection may not appear as direct, the reason for the association may also

be related to the number and types of services youth experienced during periods of homelessness. Although homelessness during foster care should be explored as an issue of its own, it may also be viewed as protective in some way, as it becomes associated with increased use at a later point in their lives.

## Limitations

A number of limitations exist for the analyses conducted. First, the data represent a cross-sectional analysis of homeless youth from Los Angeles. The cross-sectional nature of these data indicates that causality cannot be implied. Further, homeless youth in Los Angeles, do not necessarily represent the characteristics of youth across the country, and foster care experiences, while having many factors in common, do vary across counties and states. Where service use is considered, while service options are a good representation of the service options provided city-wide, they are by no means an exhaustive list of available services for homeless youth, nor does it represent an exhaustive list of homeless or foster care experiences. Furthermore, youth sampled for this study represent a sample of homeless former foster youth already utilizing services at a drop-in center (since a service provider is also the sampling location), this study does not necessarily represent service use outcomes for all homeless youth, or homeless former foster youth, merely those who are already service-using youth. Finally, while all data were gathered through self-report measures, and subject to a number of biases, this analysis is more concerned with youths' perception of experiences, rather than information that may be more consistent with their placement records.

## Conclusions

Primarily, these data indicate that there are a number of homeless and foster care experiences that are associated with levels of service use. Where possible, this information can aid in promoting, or at least understanding, experiences that lead to increased service use, while reducing experiences that lead to decreased service use among youth still in foster care. Among those experiences that cannot be altered, this information becomes even more important, as it aids both social workers and service agencies in targeting youth who may be more or less inclined to use services. Service use may also be promoted through the use of knowledge of past experiences to aid in the accessibility of services for particular youth who may be less inclined to use services. Overall, implications from these results can be used to target individuals who may need assistance connecting with service providers, as well as understanding which foster care and homeless experiences aid or hinder service use. From a policy level, findings from this study can aid child welfare agencies in further understanding which foster care experiences present as risk factors after transition out of care. Additional information gathered about those foster care experiences that serve as risk factors can focus child welfare efforts on mitigating those risks while under care. Future studies should continue to disentangle the interplay between foster care experiences and homelessness, in an effort to improve outcomes for foster youth, but also to reduce some of the risk associated with homelessness among this

population. Additional analysis is needed to better understand the reason for lack of service use and could aid service providers in assisting homeless former foster youth in receiving services that may be essential for the overall health and well-being of their lives.

## Ethics

Ethical approval was granted by The Institutional Review Board (IRB) at the University of Southern California. Signed voluntary informed consent was obtained from each youth, with the caveats that child abuse and suicidal and homicidal intentions would be reported. Informed consent was obtained from youth 18 years and older, and informed assent was obtained from youth 14–17 years old. The Institutional Review Board (IRB) at the University of Southern California waived parental consent, as homeless youth younger than 18 years are unaccompanied minors who may not have a parent or adult guardian who could give consent.

## Funding

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the National Institute of Mental Health, (grant number F31MH112251).

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