

Prevalence of Risk and Protective Factors for Homelessness among Youth in Foster Care

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Many youths transitioning out of foster care display resilience, particularly given the myriad challenges they have faced and had to overcome in their lives. Yet the risk of homelessness among youth in foster care remains high. As we seek to develop evidence-based interventions to support their transition into adulthood, there is a need to understand different profiles of youth that may

both elevate and reduce their risk for future experiences of homelessness. Using administrative data from a large county with metropolitan cities, suburban communities, and rural areas, Latent Class Analysis (LCA) was used to identify groups in terms of their profile for risk and protective factors associated with homelessness. These groups include youth with runaway histories, youth with histories in

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the juvenile justice system, and youth with histories of homelessness. The implications of the findings for the development of services to address the differing needs of youth are discussed.

Nearly 18,000 youth exit foster care each year through emancipation, which is aging out of the system between the ages of 18 and 21 (U.S. Department of Health and Human Services, 2019). Although some youth display remarkable resiliency during this transition to becoming independent, and achieve successful outcomes as they enter adulthood, it should be acknowledged that this is a time of increased risk of homelessness for these youth, along with other adverse outcomes (Dworsky et al., 2013).

While there are no precise figures of the number of youth in foster care who become homeless, the following studies provide some estimates. According to a study by Bender, Yang, Ferguson, and Thompson (2015), over one third of youth seeking homeless services in Denver, Austin, and Los Angeles had a history of foster care involvement. Courtney and colleagues (2018) found that among youth in foster care in California, nearly 25% of 21-year-olds had experienced homelessness, defined as being in a “homeless shelter or in a place where people were not meant to sleep because they had no place to stay for one night or longer” (p. 20). Among this same sample of youth, over 33% had engaged in couch surfing for a place to stay. Another study conducted by Dworsky and colleagues (2013) found that between 31% and 46% of youth aging out of foster care in the Midwest had been homeless at least once by the age of 26, as compared to about 4% of all youth aged 18 to 26. While these studies give us a statewide/regional perspective, information on a national level also underscores the significant number of youth who have experienced homelessness. Kelly (2020) examined data from the National Youth in Transition Database and found that 29% of youth with foster care histories at age 21 had experienced

homelessness. With the onset of the COVID-19 pandemic in 2020, unemployment has soared nationally and with it, concerns continued to mount about the risk for homelessness.

The problem of housing instability and homelessness among youth formerly involved in child welfare is recognized as a significant problem by the federal government (U.S. Department of Health and Human Services, 2017). Homelessness impacts on the physical, psychological, and economic well-being of youth, and has led to efforts to support the development of interventions to eliminate homelessness among these individuals (U.S. Department of Health and Human Services, 2018).

The research for this study was used to support the development of a risk and protective instrument that was designed to screen and assess the impact of a foster care intervention intended to reduce the risk for homelessness. While much has been learned about the association between various risk and protective factors and homelessness among youth with foster care histories, it is critical to understand how these factors intersect to elevate or reduce risks among subgroups of youth. In particular, the U.S. Department of Health Human Services (2013) has identified there may be different needs for older youth, particularly youth in foster care aged 14-17 and those aged 18-21. These data are important because they may indicate that different age groups have different types of intervention needs.

Increased understanding of the potential presence of subgroups of youth with differing configurations of homeless risk and protective factors can improve our ability to target service delivery. While much is known about the association between various risk and protective factors and homelessness among youth with child welfare histories, the understanding of the presence of subgroups of youth with differences in the configuration of risk and protective is needed. Latent Class Analysis (LCA), is a type of finite mixture modeling technique that is used to identify a set of mutually exclusive and exhaustive subgroups (or latent classes) of individuals based on the intersection of multiple observed indicators or characteristics (Vermunt & Magidson, 2004).

In this study, LCA was used to identify potential subgroups of youth based on risk and protective indicators.

Literature Review

While much of the attention in the literature has focused on risk factors for homelessness, there are some studies that identify protective factors that help to guard against homelessness for youth in foster care. Research has found, for instance, that many youth in foster care develop a sense of self-reliance (Samuels & Pryce, 2008), and the majority of these youth express optimism about their futures (Courtney et al., 2001). Shpiegel (2016) examined the phenomenon of resiliency among youth in foster care, as measured by six domains: educational attainment, avoidance of teen pregnancy, homelessness, mental illness, substance use, and criminal involvement. The study suggested that stable, long-term placements for youth are an important factor in competent functioning in the transition to adulthood.

Having strong social supports, through either formal or informal support, also can serve as a protective factor against homelessness for youth who are transition age (Rutman & Hubberstey, 2016). Mentors can provide one source of such support. According to Collins, Spencer, and Ward (2010), having a mentor was significantly associated with fewer episodes of homelessness after age 18. Hokanson, Neville, Teixeira, Singer, and Berzin (2019) also explored the importance of relationships in building resiliency among youth transitioning out of foster care, whether those relationships were with families of origin, foster parents, or social workers. Social workers in particular were noted as being a source of support and genuine caring, and also offered essential advice and direction as the youth navigated their way into adulthood. Support also can come from remaining in foster care past age 18, as being in foster care at age 19 (Prince et al., 2019) or age 21 (Kelly, 2020) has been found to be a protective factor in reducing homelessness.

Quite a number of studies have examined the factors that place youth in foster care at a higher risk of becoming homeless. Dworsky and Courtney (2009) found that the odds of youth aging out of the foster care system becoming homeless by age 19 were higher among the following: (a) youth in foster care who have run away multiple times; (b) youth who had been placed in a group care setting; (c) youth who had been physically abused before entering foster care; (d) youth who had engaged in delinquent behaviors; and (e) youth who had not felt close to a biological parent or grandparent. These findings were confirmed by Dworsky and colleagues (2013), whose work also suggested that running away while in foster care and frequent placement changes are associated with an increase in the risk of becoming homeless. Moreover, Yoshioka-Maxwell and Rice (2019) found that youth who experienced homelessness before being discharged from foster care were more prone to high-risk behaviors.

The association between having a greater number of foster care placements and a heightened risk for homelessness has been well documented in the literature (Shah et al., 2017; Berzin et al., 2011; Tyler & Schmitz, 2013; Fowler et al., 2009; Stott, 2012; Stott & Gustavsson, 2010). Courtney, Charles, Okpych, Napolitano, and Halsted (2014) analyzed the extent of placement changes and found that over a quarter of youth in foster care had been in at least five foster homes while in care. This type of placement instability has been cited as hindering youth from developing strong ties to caregivers or developing supportive relationships with other adults, as well as limiting youths' ability to connect with resources in the community, all of which can contribute to the risk for homelessness (Dworsky et al., 2013).

Other risk factors contributing to homelessness among youth in foster care include low educational attainment (Berzin et al., 2011), reduced financial resources and insecure attachments to adults (Tyler & Schmitz, 2013), and substance abuse or dependence problems (Siegel et al., 2016). In addition, having symptoms of a mental health disorder, as well as a history of childhood physical abuse, also contributed to

the risk of becoming homeless (Dworsky et al., 2013). Furthermore, housing instability among youth in foster care has been associated with emotional and behavioral problems, physical and sexual abuse, criminal conviction, and dropping out of high school (Fowler et al., 2009).

Three contextual factors are believed to contribute to the risk for homelessness among youth in foster care: having experienced prior adversity, lacking social support, and having insufficient housing supports (Prince et al., 2019). Prior adversity, for example, could include maltreatment during childhood and exposure to complex trauma (Beyerlein & Bloch, 2014). Bender and colleagues (2015) discovered that youth in foster care who were homeless were highly likely to meet the criteria for mental health disorders, including post-traumatic stress disorder (PTSD). A lack of social support could arise from placement disruptions, as mentioned above. Prince and colleagues (2019) provide evidence that the risk of homelessness among these youth can be lowered when expenditures on housing support services is increased.

Method

Data Source

In order to understand risk and protective factors for homelessness among youth in foster care, a sample of 625 youth was collected by compiling a list of all youth ages 9-16 that were in foster care in 2008 and 2009. This longitudinal dataset, which is not publicly available, was derived from a large county with metropolitan cities, suburban communities, and rural areas. This study received approval from the Institutional Review Board (IRB).

Youth were between the ages of 14 and 21 in 2013 and were selected based on guidance from the United States Department of Health and Human Services, Children's Bureau (2013) to understand foster care youth at risk of homelessness. These cases were matched with their CIN numbers (Medicaid Client Identification Numbers) and demographic information. Those CIN numbers were used to gather information

from various sources, such as the Child Care Review System (CCRS), Multistate Foster Care Data Archive (FCDA), New York State Office of Children and Family Services (OCFS) Data Warehouse, Welfare Review and Tracking System (WRTS), and Homeless Management Information System (HMIS). These various databases provided data used in this analysis. A summary of the descriptive characteristics of the youth by age group are provided in Table 1.

Table 1*Descriptive Characteristics*

	Age 14-17		Age 18-21	
	<i>n</i>	%	<i>n</i>	%
Gender				
Male	79	59.8%	286	58.0%
Female	53	40.2%	207	42.0%
Race/Ethnicity				
Latino	31	23.8%	112	23.1%
White	11	8.5%	73	15.1%
African American	87	66.9%	299	61.6%
Asian	1	0.8%	1	0.2%
Termination of Parental Rights				
Yes	51	38.6%	44	8.9%
No	81	61.4%	449	91.1%
Experienced Homelessness				
Yes	21	15.9%	86	17.4%
No	111	84.1%	407	82.6%
Age Entered Foster Care				
Before 12	103	79.2%	113	23.1%
After 12	27	20.8%	377	76.9%
Ever Runaway				
Yes	12	9.1%	107	21.7%
No	120	90.9%	386	78.3%
Justice System Involvement				
PINS	19	14.4%	74	15.0%
Juvenile Delinquent	28	21.2%	76	15.4%
None	85	64.4%	343	69.6%

Table 1 (Continued)

Descriptive Characteristics

	Age 14-17		Age 18-21	
	<i>n</i>	%	<i>n</i>	%
Last Placement				
Institution	20	20.8%	215	48.2%
Group Residence	14	14.6%	66	14.8%
Group Home	6	6.3%	71	15.9%
Certified Foster Home	21	21.9%	36	8.1%
Foster/Adoptive Home	21	21.9%	22	4.9%
Other	14	14.5%	36	8.1 %
Discharged to Parent				
Yes	76	57.6%	440	89.2%
No	56	42.4%	53	10.8%

Measures

Sample Characteristics Variables

Gender

In the administrative data, gender was limited to males and females.

Ethnicity

In the administrative dataset, ethnicity was grouped into four categories: African American, Asian American, Latino, and White.

Termination of Parental Rights

With respect to termination of parental rights, youth were identified as either having their parents’ rights terminated or not.

Potential Risk Factors

History of Homelessness

For youth's history of homelessness, youth were dichotomized into one of two groups based on whether or not they had a homelessness episode.

Age at Entering Foster Care

The chronological age when youth entered care has been found to be associated for both the reason children enter care and extent to whether permanence is achieved (Neil et al., 2019). A binary variable was created: 1 = less than 12 years of age; 2 = greater than 12 years of age. Both existing literature and consultation with staff from the Administration for Children and Families, Children's Bureau informed the use of this cutoff.

Runaway History

For this dichotomous variable, the absence of a history of running away from placement was the reference category.

Juvenile Delinquent History

To address juvenile delinquent history, the variable was dichotomous with one category indicating that the youth had a juvenile delinquent history and/or had been identified as needing supervision, and the other category not having this history.

Potential Protective Factors

Last Placement

This variable identified the youth's last placement before discharge. Among the possibilities were group home, foster/adoptive family, and supervised independent living program. If a youth was returned to parent or if their last placement was a foster or adoptive home, this was considered a protective factor. For this dichotomous variable, the reference category was not experiencing unification with a parent or placement in a foster or adoptive home.

Discharge Reason

This variable detailed the reason that the youth was discharged from foster care. Examples of the categories for discharge reason were: return to natural parent, release to relative, adoption, to enter penal or correctional institution, or adulthood attained.

Analytic Strategy

Preliminary Analyses

Using SPSS 25.0, descriptive analyses were carried out to focus on examining the prevalence of risk and protective factors between the two age groupings. LCA analyses were carried out using Mplus 8.4 (L. K. Muthén & Muthén, 1998-2017).

Latent Class Analysis

LCA was used to identify potential subgroups of youth based on different profiles of risk and protective factors. LCA, like Factor Analysis (FA), examines associations among indicators of a latent (unobserved) variable. The difference is that FA is (indicator) centered and looks for

correlations among them. The goal of FA is to use information about the correlations among indicators to create a latent variable that accounts for the observed associations among the indicators or variables. The item-centered approach of FA contrasts with the person-centered approach taken by LCA (Porcu & Giambona, 2017). LCA uses the variables to classify individuals into mutually exclusive groups or classes (Porcu & Giambona, 2017). In this study, LCA allows for the identification of distinct subgroups of youth based on the risk and protective variables used.

The benefit of using the person-centered LCA is that it examines the underlying classes in which youth had similar patterns of risk and protective factors in each class. This study used termination of parental rights, runaway history, juvenile delinquent history, history of homelessness, last placement, and discharge reason to identify the unobserved latent classes. The exploratory LCA was conducted with one to four latent classes using LCA guidelines (Collins & Lanza, 2010). Substantive theory and statistical model fit information was used to determine the final number of classes. While a detailed discussion of the technical aspect of the estimation of LCA model is beyond the scope of this article, key aspects of the model estimation will be discussed. Readers who would like additional information on the technical aspect of LCA model estimation can consult Muthén (2008). The maximum likelihood estimation with robust (MLR) was used to estimate model parameters providing standard errors that are robust to non-normality (Muthén & Muthén, 1998-2017). A combination of criteria was used to guide the decision on the number of classes (Nylund et al., 2007). Statistical model fit indexes that were used included the Akaike's information criterion (AIC), Bayesian information criterion (BIC), loglikelihood (LogL) and entropy statistics (Nylund et al., 2007). Generally smaller AIC, BIC, LogL are associated with a better fitting model (Nylund et al., 2007). Additionally, both the Lo-Mendell-Rubin likelihood ratio test (LMR LRT) and the bootstrap likelihood ratio test (BLRT) were used to compare the improvement in fit between nested

models (i.e., statistically comparing k-1 and k class models; Lo et al., 2001; Nylund et al., 2007).

To further explore characteristics of youth in the identified classes, the relationship between the youth’s age, gender, the number of substantiated CPS allegations, number of moves while in care and percentage of youth who had their parental right terminated was examined. Equality tests of means across groups using posterior probability-based multiple imputations was carried out.

Results

Risk and Protective Factors Descriptive

Among youth aged 14-17 and 18-21, the most frequently occurring protective and risk factors are displayed in Table 2.

Table 2

Frequently Occurring Protective and Risk Factors for Youth Ages 14-17 (n =158) and 18-21 (n = 467)

	14-17 years old	18-21 years old
Protective Factors		
Returned to parents/relative	68%	63%
Last placement foster/adoptive home	22%	22%
Risk Factors		
Three or more moves	57%	43%
Two or more times in/out of care	32%	29%
Juvenile delinquency history	21%	12%
In need of supervision	14%	14%
Last placement institution	*	35%
Runaway/AWOL history	*	22%

**Note: These variables were not factors in the analysis.*

Potential Risk Factors

Both youth ages 14-17 and those ages 18-21 had a number of experiences that have the potential to reduce (risk factor) or promote (protective factor) future housing stability. Both groups had a high percentage of youth who had experienced three or more moves while in foster care and had two or more moves in and out of foster care. Approximately 57% of youth 14-17 years old and 43% of youth aged 18-21 had experienced three or more moves while in foster care. About one third of youth in either age group had two or more moves in and out of foster care. Other risk factors found in both groups were youth with histories in the juvenile justice system (21% for youth aged 14-17 and 12% for those aged 18-21) and the need for supervision following justice system involvement (14% for both age groups). Lastly, data for youth 18-21 years old indicated that 22% had a runaway history. See Table 2.

Potential Protective Factors

Both groups had a high percentage of youth who had experienced three or more moves while in care and had two or moves in or out of care. Approximately 57% of youth aged 14-17 and approximately 43% of youth aged 18-21 experienced three or more moves. Approximately one third of youth in either age group had two or more moves in and out of care. Other risk factors found in both groups were juvenile delinquency experiences and the need for supervision. Lastly, for youth aged 18-21, approximately 20% had a runaway history. See Table 2.

LCA Risk and Protective Factors

Using Mplus 8.4 LCA analysis, the following question was addressed: Are there different groups of youth that have different profiles of potential risk factors for experiencing homelessness? Equality tests of the mean age and number of substantiated CPS allegations across the

profile groups were also carried out. Due to the size of the sample, the 14-17 and 18-21-year-old groups had to be combined for this analysis. The estimation of the LCA model with both the protective and risk factors was problematic. Focusing on four variables found to be associated with the risk of homelessness, LCA was used to empirically identify subgroups (or classes) based on the profile of risk factors. The four variables were: entering foster care after the age of 12; having a runaway history; having a history of homelessness; and having histories in the juvenile justice system or need for supervision history. The best log-likelihood value was not replicated; therefore, the solution may not be trustworthy due to local maxima. Increasing the number of random starts, which often addresses this problem, was not successful. The LCA model with only the four risk factors provides stable solutions. Table 3 contains multiple criteria used to evaluate models with two to five latent classes. Smaller AIC, BIC, and adjusted BIC values were found when the number of classes increased. These results suggested greater fit as the number of classes increases; however, the bootstrapped likelihood ratio test for the three-class model was deemed significantly ($p < .001$) better than the two-class model. Additionally, the four-class model was not deemed significantly ($p = .244$) better in fit than the three-class model. The model fit statistical information along with consideration of the ability to interpret the profile, which follows, lead to a focus on the results of the three-class model.

LCA Results

Table 4 provides a summary of the three classes, or groupings of youth that were identified. This table is the probability of the risk factors for each of the classes. Finally, below is a detailed discussion regarding the description of each of the classes.

Runaway History Group contains the largest percentage of youth in the sample, at 81.8% ($n = 511$). Those who had run away and had a history of homelessness dominated the risk factors for this group.

Table 3
Fit Statistics for Latent Class Solutions

Classes	LogL(HO)	AIC	BIC	Adj. BIC	LMR LRT _p	BIRT _p	Entropy	Smallest Class (%)
2	-1930.105	3815.886	3873.577	3832.304	<.001	<.001	.845	5.20
3	-1894.943	3791.976	3880.731	3817.234	<.001	<.001	.791	15.4
4	-1875.988	3791.692	3911.512	3825.790	.244	.256	.713	8.80
5	-1868.846	3794.498	3945.38	3837.48	.116	.121	.730	8.96

Note. AIC = Akaike information criterion; BIC = Bayesian information criteria; LogL = loglikelihood
 LMR LRT_p = Lo-Mendell-Rubin likelihood ratio test, p-value ; BLRT = bootstrap likelihood ratio test p-value.
 Bold numbers indicate fit statistics for the identified latent class model.

Table 4

*Three-Latent Class of Homelessness Risk Factors
Probability of the Presence of Each Risk Factor for Each Group
(N = 625)*

	Latent Class Groups		
	JD/Needing Supervision (n = 92; 14.8%)	Homelessness History with multiple Risk Factors (n = 511; 81.8%)	Homelessness History (n = 29; 3.4%)
Homeless History	.62	.86	.99
Age entry care (12 +years)	.07	.41	.13
Runaway History	.60	.88	.00
JD/person in need of superv.	1.0	.66	.00

Risk factor probabilities >.5 bolded.

Greater than 80% of the group had run away (88%) and had a history of homelessness (86%). A large percentage (41%) of the youth in this group had entered foster care after the age of 12, which is far greater than in either the Juvenile History Group or Homeless History Group.

Juvenile History Group contains approximately 14.8% (n=92) of the sample. All of the youth in this class had a juvenile delinquent history and/or had been identified as needing supervision. Approximately 60% of the youth had run away from a placement, as well as had a history of homelessness. Few youth in the group (7%) entered foster care after the age of 12.

Homeless History Group contains the smallest percentage of youth, 3.4% (n=29). A history of homelessness was the predominant risk factor associated with this group of youth. Nearly all of the youth (99%) in this group had a history of homelessness. None of the youth had

run away and/or had a juvenile delinquent history and/or been identified as needing supervision. Thirteen percent of the youth in this group entered foster care after the age of 12.

Table 5 provides the results of the comparison of the three groups on demographic characteristics and variable associated with their involvement in the child welfare system. The three groups differ little on some key demographic variables, including age, and minority status, with a slightly larger difference on gender. Additionally, the groups show little difference on some variables related to their involvement with the child welfare system, including the number of substantiated CPS allegations and the number of times the youth was moved while in foster care.

Table 5

Equality Tests of Means across Group

	Mean(SE)		
	Group #1	Group #2	Group #3
Age	20.34(.21) _a	19.73(.10) _a	20.11(.42)
Gender (Male)	44.1% (.06)	40.6%(.02)	55.6% (.13)
Minority status	85.1%(.05)	86.2% (.02)	86.6% (.09)
Substantiated CPS allegations	1.61 (.27)	1.58 (.10)	1.89 (.79)
Moves of times in care	2.93(.33)	3.24(.13)	3.05(.64)
Termination of parental rights	95.0% _a	82.5% _{ab}	96.2% _b

Note. Equality tests of means across groups using posterior probability-based multiple imputations with 2 degrees of freedom. Means in the row sharing the subscripts are significantly different from each other.

Limitations

The major limitation of this study is that it used administrative data that hindered the researchers' ability to operationalize the variables

being studied. The researchers had to rely on how the county defined each of the variables, as well as what variables were available for use in the study. In addition, since administrative data were used, there was limited access to protective factors in the dataset. This study only was able to include discharge status and last placement before discharge as potential protective factors. As such, return to parent or foster adoptive home was found to be a protective factor that prevented homelessness. Ideally, other protective factors would have enriched this study further. In addition, the variables selected for study were based on previous research of factors that predict homelessness. Therefore, a limitation is that this study does not predict future homelessness in this sample, or account for association of any of the risk factors for homelessness (e.g., multiple moves). However, this study can help future researchers understand important risk and protective factors.

This study was conducted in one large county in New York State. It represents large cities, suburban communities, and rural areas. However, this county may be different than other areas in the United States; therefore, results are not generalizable to other localities.

Discussion

The LCA results revealed that youth tended to fall into one of three groups: youth with histories in the juvenile justice system, youth with a history of running away from placement, and youth with a history of homelessness. By far, the largest group was youth with a history of running away. These youth were also highly likely to have been homeless at some point and were more likely than the other two groups to have entered foster care after the age of 12. The results also show an interconnection between the experiences of the youth in the runaway group and the juvenile justice group. Youth with histories in the juvenile justice system showed similarly high rate of having run away from placement, as well as a high rate of homelessness. By contrast, those in

the group with a history of homelessness (which was a small percentage of the total sample) did not show a corresponding history in the juvenile justice system or having run away from placement.

For both age groups (14-17 and 18-21), there was consistency in the type of risk and protective factors that were present. In this sample, the extent to which these factors were associated with future homelessness was not determined. Previous research, however, does support the strong association between these factors and future homelessness, as discussed below.

Of particular note, many of the youth had experienced multiple moves while in foster care. There was an average of three moves in foster care for youth in all three groups, with those having a runaway history having the highest average number of moves. These findings are analogous to that of Courtney and colleagues (2014), where multiple moves were considered the norm, with a quarter of youth having five or more placements. Multiple moves in foster care had one of the strongest associations with future homelessness, indicating how disruptive this could be for the youth, not only while they were still in foster care, but for the future as well. This is a risk factor that all groups had but it did not distinguish them in terms of other factors related to future homelessness. However, it is important to note that these findings are consistent with prior research, including Dworsky and Courtney (2013) and Shah and colleagues (2017), among a number of others, and further underscore the importance of addressing multiple moves in foster care.

Other findings related to risk and protective factors were also consistent with the literature. For example, risk factors for homelessness associated with having histories in the juvenile justice system and the need for supervision were supported by findings from Fowler and colleagues (2009) and Dworsky and Courtney (2009). In addition, the risk factor of having a runaway history was also expounded by Dworsky and Courtney (2009, 2013), and that of having a homelessness history was underscored by Yashioka-Maxwell and Rice (2019).

Although the present study had limited access to protective factors—just discharge to foster or adoptive homes or return to parent—there still was some overlap found with the literature. The results of this study showed that youth who had been in a foster or adoptive home prior to discharge or had been returned to parents were less likely to become homeless, suggesting that moves toward permanency had a positive impact on the youth. This finding is consistent with Shpiegel (2016), who noted the connection between stable placements and resiliency among youth in foster care, as well as Hokanson and colleagues (2019), who found that relationships with families and foster parents helped to build the youths' resilience. Although these findings are significant, more research is needed on other protective factors that may reduce homelessness, as this topic has been understudied.

Youth transiting out of foster care are not homogeneous as it relates to the experiences that might place them at risk for problematic transitions into the independence. Accordingly, those youth found in each of the identified groups (i.e., the juvenile justice, runaway, and homelessness histories groups) are likely to need a different configuration of services to prepare them for their transition to independence. Replication of the classification is needed, along with consideration of which interventions need to be provided throughout the youth's transition into independence that will promote their positive development.

References

- Bender, K., Yang, J., Ferguson, K., & Thompson, S. (2015). Experiences and needs of homeless youth with a history of foster care. *Children and Youth Services Review, 55*, 222-231.
- Berzin S., Rhodes, A. & Curtis, M. (2011). Housing experiences of former foster youth: How do they fare in comparison to other youth? *Children and Youth Services Review, 33*(11), 2119-2126.
- Beyerlein, B. A., & Bloch, E. (2014). Need for trauma-informed care within the foster care system: A policy issue. *Child Welfare, 93*(3), 7.
- Collins, L. M., & Lanza, S. T. (2010). *Latent class and latent transition analysis: With applications in the social, behavioral, and health sciences*. Wiley.

- Collins, M., Spencer, R., & Ward, R. (2010). Supporting youth in the transition from foster care: Formal and informal connections. *Child Welfare, 89*(1), 125–143.
- Courtney, M., Charles, P., Okpych, N., Napolitano, L., & Halsted, K. (2014). *Findings from the California youth transitions to adulthood study (CaYOUTH): Conditions of foster youth at age 17*. Chapin Hall at the University of Chicago.
- Courtney, M., Okpych, N., Park, K., Harty, J., Feng, H., Torres-Garcia, A., & Sayed, S. (2018). *Findings from the California Youth Transitions to Adulthood Study (CaYOUTH): Conditions of youth at age 21*. Chapin Hall at the University of Chicago.
- Courtney, M., Piliavin, I., Grogan-Kaylor, A. & Nesmith, A. (2001). Foster youth transitions to adulthood: A longitudinal view of youth leaving care. *Child Welfare, 80*(6), 685-718.
- Dworsky, A. & Courtney, M. (2009). Homelessness and the transition from foster care to adulthood among 19 year old former foster youth. *Child Welfare, 88*(4), 23-56.
- Dworsky, A., Napolitano, L., & Courtney, M. (2013). Homelessness during the transition from foster care to adulthood. *American Journal of Public Health, 103*(S2), 318-323.
- Fowler, P., Henry, D., Schoeny, M., Landsverk, J., Chavira, D., & Taylor, J. (2013). Inadequate housing among families under investigation for child abuse and neglect: Prevalence from a national probability sample. *American Journal of Community Psychology, 52*(1–2), 106–114.
- Fowler, P., Toro, P., & Miles, B. (2009). Pathways to and from homelessness and associated psychosocial outcomes among adolescents leaving the foster care system. *American Journal of Public Health, 99*(8), 1453-1458.
- Hokanson, K., Neville, S.E., Teixeira, S., Singer, E., & Berzin, S.C. (2019). ‘There are a lot of good things that come out of it at the end’: Voices of resilience in youth formerly in foster care during emerging adulthood. *Child Welfare, 97*(6), 233–249.
- Kelly, P. (2020). Risk and protective factors contributing to homelessness among foster care youth: An analysis of the National Youth in Transition Database. *Children and Youth Services Review, 108*, 1-8.
- Lo, Y., Mendell, N. R., & Rubin, D. B. (2001). Testing the number of components in a normal mixture. *Biometrika, 88*(3), 767-778. doi:10.1093/biomet/88.3.767
- Muthén, B. (2008). Latent variable hybrids: Overview of old and new models. In G. R. Hancock & K. M. Samuelsen (Eds.), *Advances in latent variable mixture models* (pp. 1-24). Information Age Publishing, Inc.

- Muthén, L. K., & Muthén, B. O. (1998-2017). *Mplus User's Guide* (Eighth ed.) Muthén & Muthén.
- Nylund, K. L., Asparouhov, T., & Muthén, B. O. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural Equation Modeling, 14*(4), 535-569.
- Porcu, M., & Giambona, F. (2017). Introduction to latent class analysis with applications. *The Journal of Early Adolescence, 37*(1), 129-158. doi:10.1177/0272431616648452
- Prince, D., Vidal, S., Okpych, N., & Connell, C. (2019). Effects of individual risk and state housing factors on adverse outcomes in a national sample of youth transitioning out of foster care. *Journal of Adolescence, 74*, 33-44.
- Rutman, D., & Hubberstey, C. (2016). Is anybody there? Informal supports accessed and sought by youth from foster care. *Children and Youth Services Review, 63*, 21-27.
- Samuels, G. & Pryce, J. (2008). "What doesn't kill you makes you stronger": Survivalist self-reliance as resilience and risk among young adults aging out of foster care. *Children and Youth Services Review, 30*(10), 1198-1210.
- Shah, M., Liu, Q., Eddy, J.M., Barkan, S., Marshall, D., Mancuso, D., ... Huber, A. (2017). Predicting homelessness among emerging adults aging out of foster care. *American Journal of Community Psychology, 60*, 33-43.
- Shpiegel, S. (2016). Resilience among older adolescents in foster care: The impact of risk and protective factors. *International Journal of Mental Health Addiction, 14*(1), 6-22.
- Siegel, A., Benbenishty, R., & Astor, R. A. (2016). A comparison of adolescents in foster care and their peers in high school: A study of substance use behaviors and attitudes. *Journal of Child & Adolescent Substance Abuse, 25*(6), 530-538.
- Stott, T. (2012). Placement instability and risky behaviors of youth aging out of foster care. *Child Adolescent Social Work Journal, 29*, 61-83.
- Stott, T. & Gustavsson, N. (2010). Balancing permanency and stability for youth in foster care. *Children and Youth Services Review, 32*, 619-625.
- Tyler, K. & Schmitz, R. (2013). Family histories and multiple transition among homeless young adults: Pathways to homelessness. *Children and Youth Services Review, 35*(10), 1719-1726.
- U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2013). *Planning grants to develop a model intervention for youth/young adults with child welfare involvement at-risk of homelessness*. Author.

- U.S. Department of Health and Human Service, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2018). *Building partnerships to support stable housing for child welfare-involved families and youth*. Author. Retrieved from https://www.childwelfare.gov/pubPDFs/bulletins_housing.pdf
- U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2019). Adoption and Foster Care Analysis and Reporting System (AFCARS). August 2019. No. 26. Author. Retrieved from <https://www.acf.hhs.gov/sites/default/files/cb/afcarsreport26.pdf>
- U.S. Department of Health and Human Services, Administration for Children and Families, Children's Bureau. (2017). Efforts by child welfare agencies, local communities, and Federal agencies to end family and youth homelessness (ACYF-CB-IM-17-03). Author. Retrieved from <https://www.acf.hhs.gov/cb/resource/im1703>
- Vermunt, J. K., & Magidson, J. (2004). Latent class analysis. In *The Sage Encyclopedia of Social Sciences Research Methods* (pp. 549–553). Sage Publications.
- Yoshioka-Maxwell, A., & Rice, E. (2019). Exploring the relationship between foster care experiences and HIV risk behaviors among a sample of homeless former foster youth. *AIDS and Behavior*, 23(3), 792–801.

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