



Predictors of Secondary Completion Among Homeless Youth in Three U.S. Cities and the Potential Application of National Policies

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Accepted: 6 February 2022 / Published online: 15 April 2022

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Abstract

Purpose Secondary education completion rates (i.e., high school diploma or General Education Development [GED]) among homeless youth (HY) are low in comparison with their housed peers.

Method Secondary data with a sample of 429 HY was used from a 3-city study using quantitative retrospective interviews with a purposive sample of 601 HY collected from 2010 to 2011 in social service organizations across three U.S. cities (Denver, CO, $n = 201$; Los Angeles, CA, $n = 200$; and Austin, TX, $n = 200$). This study examines risk and resilience factors (i.e., demographics, childhood trauma, transience, mental health diagnosis, incarceration history, employment, and resilience) associated with the completion of secondary education among HY using logistic regression.

Results Secondary completion was positively associated with identifying as female, formal employment, a sense of equanimity, and experiences of childhood emotional abuse. In contrast, secondary completion was negatively associated with a history of incarceration as well as experiences of childhood physical neglect and emotional neglect.

Discussion Recommendations are made for strengthening educational institutions' capacity to provide the comprehensive support services for HY to minimize risk factors and enhance protective factors. Similarly, the authors highlight how cross-sector collaboration, such as those approaches supported through the Workforce Innovation and Opportunity Act and the McKinney-Vento Homelessness Assistance Act, can be leveraged to minimize significant risk factors and promote resilience factors associated with secondary completion.

Keywords Homelessness · Secondary education · Drop-out · Policy · Community-school collaboration

Youth disconnection from education is a longstanding concern of economists, policymakers, and service providers alike. Compared to other wealthy nations, the U.S. proportion of youth disconnected from high school is high (Lewis & Burd-Sharps, 2015). Furthermore, the recent pandemic has influenced the economic stability of U.S. households, increasing the number of cost-burdened families (Joint Center for Housing Studies of Harvard University, 2020) which, in turn, may inflate the already increasing homeless population. In addition to housing insecurity, the spread of COVID-19 moved schools to online instruction, making it more difficult for students experiencing homelessness to both access education and to receive support services

from their schools. The impacts of COVID-19 on children, including social isolation, trauma, and family financial constraints (Golberstein et al., 2020), highlight the importance of studying secondary education completion for youth considered susceptible to disengagement, such as those experiencing homelessness, in order to identify ways that these students can be supported. To this end, the current study examines factors that influence secondary degree completion for youth experiencing homelessness, noting how existing federal policy aimed at serving these youth could be utilized. Two key federal policies aimed at addressing youth disconnection from school, the McKinney-Vento Homeless Assistance Act of 1987 (McKinney-Vento) and the Workforce Innovation and Opportunity Act (formerly the Workforce Innovation Act; WIOA, 2014), are discussed.

Decades of research indicate homelessness is a barrier to youths' engagement in and completion of their secondary education (Gwadz et al., 2009; Masten, et al., 1997; Morton et al., 2018; Tierney et al., 2008). Studies show the number

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of homeless youths doubled over the last decade (Bowers & O'Neill, 2019; Ingram et al., 2017; Morton et al., 2018). Today, approximately 1 in 10 youth age 18-25 and 1 in 30 adolescents age 13-17 experience homelessness unaccompanied by a guardian (Morton et al., 2018). Further, Ingram and colleagues (2017) found that 42% of HY indicated that they had experienced periods of dropping out of school.

Extant literature on theory and interventions for HY is robust, but less is published regarding how federal legislation could be used to minimize significant risk factors and promote resilience factors associated with secondary completion for HY. As policy responses to COVID-19's impact on student engagement are introduced and evaluated, research is needed to investigate how to utilize existing legislation to support vulnerable student populations toward degree completion. To address this need, the current study answered the following research questions: What risk and resilience factors are associated with HY's completion of high school or GED programs? How do these risk and resilience factors correspond with components of federal legislation?

Literature Review

Disconnection from secondary education is the incompleteness of high school or an equivalency program (e.g., General Educational Development [GED]), often influenced by socioeconomic disadvantages. Research on youth disconnected from school has evolved over the last decade to be more holistic, and solutions more community-focused (Kania & Kramer, 2011; Mendelson et al., 2018). Methods for identifying and supporting these youth are consistently being advanced in research. Geospatial methods, including using census data to map trends across space and time, are valuable for illustrating trends and identifying areas that may benefit from intervention (Burd-Sharps & Lewis, 2014; Bolstad, 2016; Lewis & Burd-Sharps, 2015). These methods can be particularly useful for working with youth disconnected from school for social service planning including targeting outreach, benchmarking area-wide progress, and determining community-level risk factors (Wang et al., 2020). For example, studies have illustrated that the Appalachia, Deep South, and Southwest areas experience the highest rates of youth disconnection in the nation (Bray et al., 2016).

In general, those who grow up in lower income households are more likely to be mobile, both voluntarily and by force (Burd-Sharps & Lewis 2018; Desmond et al., 2015), which makes engagement in and completion of secondary education challenging. Along with higher rates of school mobility, HY experience higher rates of grade retention, lower grades

and attendance rates, and less contact with friends than their more stably housed peers (Masten et al., 1993; Masten et al., 2015). In addition, higher rates of transience make it difficult for HY to establish and maintain student-teacher relationships and to build friendships; and, as one study found, HY who did make friends rarely discussed their educational goals with them (Tierney et al., 2008). Both HY who lived with family and those who lived in shelters reported rarely discussing their grades, extra-curricular activities, or career or higher-education goals at home. For these HY, the link between postsecondary education and stability was evident; the link between their secondary education and their future goals was less clear. Some alternative education graduates cite negative relationships with teachers, a lack of oversight of bullying, and hostile peer groups as factors that influence their disconnection from the public school system (Zolkoski et al., 2016). Altogether, this literature suggests that, for HY, support through healthy peer relationships, as well as adult supervision and guidance, influence positive educational outcomes. The application of these supports in the face of public health and safety-related shutdowns are crucial, even in socially-distanced forms.

Overall, HY are at significantly higher cumulative risk levels than their housed peers, challenging their ability to stay enrolled and succeed in school (Masten et al., 2015). However, while studies demonstrate HY report lower rates of employment, there is evidence that some HY may engage in survival behaviors such as prostitution, selling blood or plasma, dealing drugs, stealing, and panhandling to earn income (Ferguson et al., 2011). Unresolved, disconnection from school may be associated with higher rates of adult incarceration (National Reentry Resource Center, 2017), and resulting homelessness into adulthood (Morton et al., 2018). As such, early identification is key to providing HY with the services to which they are entitled to prevent the accumulation of additional risk factors. The last few decades of research highlight how identifying, screening, and coordinating support while avoiding stigma in the process, are crucial to a healthy transition to adulthood (Masten et al., 2015).

Policy Context

Federal legislation, particularly McKinney-Vento, is aimed at providing necessary assistance to help HY stay enrolled in primary and secondary school (42 U.S.C. §§11,431; 42 U.S.C. §§11,434 A). Elements from McKinney-Vento that are aimed at helping HY access education have been reauthorized through the Every Student Succeeds Act in 2015. Several barriers to enrolling in school for HY are addressed through McKinney-Vento, including transportation to school, cooperation between the youth's former and new

school, requirements of a guardian's signature in files, and documentation such as proof of residency and immunization records (Ingram et al., 2017). Although McKinney-Vento has successfully addressed several important barriers, underfunding has left gaps in the implementation process (Miller, 2011). Well-trained and informed liaisons are crucial for creating the supportive infrastructure that McKinney-Vento is designed to deliver. Additionally, unstable and precariously housed families are not always considered in survey statistics and receive services, even though they experience similar barriers (Desmond et al., 2015).

Similarly, the Workforce Innovation and Opportunity Act (WIOA) is designed to introduce youth who are disconnected to in-demand skills training and employment opportunities, beginning with support services for completing secondary education. In 2014, WIOA was signed into law as a modernization of the former Workforce Investment Act (WIA) of 1998. Overall, studies suggest that the former legislation, WIA, was helpful for increasing income for adult participants, but there is no evidence of evaluation of the Youth Program (Decker & Burk, 2011), so its effectiveness remains understudied. Its successor, WIOA, aims to build on the WIA Youth Program by addressing barriers encountered in attaining credentials and employment. As of 2020, WIOA began its required reauthorization, which is particularly pertinent given the economic devastation resulting from COVID-19 and its impact on the youth workforce (Farooq, 2020).

WIOA's Youth Program, outlined in Title I of the legislation, provides states with formula funds to offer workforce resources and comprehensive supportive services to those ages 14-24 with barriers to education and employment opportunities. Funding is awarded to local governments that generate and maintain their own youth programs in addition to allocating funding to area non-profit organizations that deliver other comprehensive services. There are 14 elements of the WIOA Youth Program that include measures such as dropout prevention strategies, community service experiences, financial literacy education, paid and unpaid work experiences, leadership development, mentoring, guidance and counseling referrals, entrepreneurial skills training, and other education and training opportunities. One-stop centers were created through this legislation to serve as information hubs for such resources where recipients can receive assistance with navigating and applying to opportunities.

There is a deficiency of economic research dedicated to disconnected youth (Bray et al., 2016), suggesting there may be a shortage of evidence-based knowledge influencing policymaking and economic decision-making regarding HYs' educational and employment opportunities. Some scholars argue that WIOA legislation is drafted to closely align with market-orientated processes and a top-down strategy

that prioritizes corporate needs over and above youth needs (Shin & Ging, 2019). Despite the dearth of evaluative studies, researchers and practitioners can utilize the elements of this legislation to better support HY. To determine which elements of this legislation could minimize major barriers and strengthen resilience characteristics of HY, the authors adopted the risk and resilience framework for this study.

Risk and Resilience Framework

The risk and resilience framework has been identified as a valuable theoretical foundation for research with HY (Armstrong et al., 2018; Ferguson et al., 2015b; Masten et al., 2015; Samuel and Pryce 2008). Risk, or adversity, describes negative life circumstances that typically inhibit adjustment to school, work, or other life domains (Luthar & Cicchetti, 2000). Risk is cumulative and risk factors have bidirectional relationships, compounding each other, and consequently intensifying the impact, placing the individual at increased risk in other life domains (Bianchi et al., 2015). A history in foster care (Hook & Courtney, 2011; Vaughn et al., 2008) or the juvenile justice system (Jagers, 2016) is known to have a negative influence on youths' engagement in school. Additionally, research indicates risk factors for HY's disconnection from school may include a mental health diagnosis (Armstrong et al., 2015), a history of childhood maltreatment (Bender et al., 2015; Jaffee et al., 2018), and higher levels of transience (Masten et al., 2015).

Evidence suggests that mental health conditions in adolescence are associated with poorer education and employment outcomes in adulthood (Hale et al., 2015). Homeless youth face a great deal of stress and trauma, related to both their current situation and their childhood experiences that may have influenced their homelessness. Homeless youth enrolled in college report feeling anxiety, depression, abandonment from parents, and a lack of support from their school (Bowers & O'Neill, 2019). This stress was found to increase the likelihood that HY will utilize unhealthy coping mechanisms. Additionally, caregiver violence exposure and a history of childhood physical mistreatment have been significantly related to depressive symptomology (McGuire-Schwartz et al., 2015) and PTSD (Bender et al. 2014). These youth may be twice as likely to be unemployed and not enrolled in an educational program (Jaffee et al., 2018).

Among adolescents, lower levels of emotional and behavioral engagement in school are associated with substance use and delinquency (Li & Lerner, 2011). Controlling for other risky activity, having been physically abused as a child was found to be a significant risk factor for incarceration for HY (Yoder et al., 2014). Studies indicate incarceration may be associated with an increased risk of disconnection from school and employment into a youth's

future (Jaggers, 2016). While these risk factors negatively influence a youth's engagement in education, one study suggests that youth with greater exposure to risk may also be more likely to benefit from efforts to bolster resilience factors (Ungar, 2012).

Resilience has been defined by Masten (2011) as "the capacity ... to withstand or recover from significant challenges that threaten ... validity, viability, or development" (p. 494). Studies of resilience and coping in HY identified characteristics such as spirituality, supportive relationships, perseverance, determination, independence, and keeping to oneself as means of overcoming adversity (Bowers & O'Neill 2019; Thompson et al., 2016). Previous research also implies employment is associated with resilience and overcoming adversity (Ferguson et al., 2015b), suggesting that legal income generation could be a resilience factor for HY. Using a positive youth development perspective, Zaff and colleagues (2016) demonstrated that youth who did not complete high school nevertheless had adept decision-making skills, implementation strategies for goal achievement, and a conceptualization of how their thoughts and emotions impacted their development. Furthermore, studies suggest that self-efficacy and self-reliance are associated with resilience in disconnected and system-involved youth (Roy et al., 2018; Samuels & Pryce, 2008).

In light of this literature, it is important to consider both the risk and resilience factors associated with youth educational outcomes. Considering only risks can contribute to interventions that attempt to problem-solve, placing too much focus on negative factors in a youth's life (Zimmerman, 2013); whereas relying only on resilience factors may not adequately identify and address barriers inhibiting positive outcomes. The risk and resilience framework has utility across cultures and contexts for understanding adversity and identifying factors that can be supported to overcome challenges, and subsequently create services that address them (Fraser et al., 1999; Ungar, 2012). This framework has been employed by scholars to determine how individual, familial, and environmental factors influence employment outcomes for HY (Ferguson et al., 2015a; Ferguson et al., 2015b; Vaughn et al., 2008). However, few studies have explored how federal policies and their associated funding streams can address significant risk and resilience factors of HY's engagement in school. To address this research gap, this study aims to examine risk and resilience factors associated with HY completion of high school or GED programs and how these risk and resilience factors could be addressed through McKinney-Vento and WIOA. The current study addresses the following research questions: (1) Is there a difference between high school completers and non-completers amongst risk and resilience factors? and (2) Which risk and resilience factors are associated with high

school completion? The hypotheses, respectively, are that (1) there is a difference between high school completers and non-completers on risk and resilience factors, and (2) at least one of the risk and resilience factors have a significant relationship with high school completion.

Method

Sample

This study used secondary data from a cross-sectional study from 2010 to 2011 with 601 HY in three U.S. cities: Los Angeles, CA (n = 200); Austin, TX (n = 200); and Denver, CO (n = 201). In the original study, participating agencies consisted of multi-service, non-profit organizations that offer homeless, runaway, and at-risk young people a comprehensive system of care including street outreach, drop-in center services, and a variety of housing options (e.g., emergency shelter, transitional housing, etc.). Purposive sampling was used to recruit 200 homeless young adults (ages 18-24) using similar methods (201 HY were recruited in Denver). The original sample was drawn from three distinct service programs at the three host agencies: (1) street outreach/drop-in centers (non-residential; 62% of sample); (2) residential short-term and mid-length shelters (30 days to up to 6 years; 34% of sample); and (3) transitional housing (long-term housing; 4% of sample). To participate, HY had to (a) be between the ages of 18-24, (b) have been away from home for at least 2 weeks in the month prior to the interview date, and (c) be willing to and capable of providing written informed consent. Participants were compensated with a \$10 gift card to a local vendor for participating in the interview. From the original sample (N=601), the present study included 429 HY (i.e., 121 HY from Los Angeles, 173 HY in Austin, and 135 HY from Denver who indicated they had completed secondary education or had quit, dropped-out, or were suspended from school. Excluded from the current study were those participants who were currently enrolled in secondary education programs.

Measures

Dependent variable

Secondary completion was a dichotomized variable created from a 6-option multiple-choice interview question concerning current school status. *Secondary completion* measures whether a HY completed high school or a GED program (1=*completed secondary education*); or whether they had quit, dropped-out, or were suspended from school (0=*did not complete secondary education*).

Independent variables

Current city was determined by the location of the HY-serving agency where the interview took place. Dichotomous variables were created to indicate whether a HY was in Denver (1=Denver, 0=all others), Los Angeles (1=LA, 0=all others), or Austin (1=Austin, 0=all others). Denver and Los Angeles were included in the model and Austin was used as a reference group. Race and ethnicity were determined by a HY's response to "How would you describe yourself?" Dichotomous variables were created to indicate whether a HY chose white/not Latino (1=white, 0=all others), black/not Latino (1=black, 0=all others), Latino (1=Latino, 0=all others), or one of the remaining three categories: American Indian, Asian, or other (1=Other, 0=all others). Black, Latino, and the other racial categories were included in the model, whereas the white category used as the reference group.

The Resilience Scale (Wagnild and Young 1993) was used to measure *resilience*. This scale is divided into five components: self-reliance, meaning, equanimity, perseverance, and existential aloneness. *Self-reliance* relates to utilizing one's own resources rather than relying on the resources of others. *Meaning* relates to the person's understanding of their own significance or purpose. *Equanimity* is one's ability to stay calm in difficult situations. *Perseverance* is one's resolve to continue in one's efforts despite difficulties. Lastly, *existential aloneness* is one's comfortability in solitude and mental and emotional independence. In total, this scale has 26 questions that ask respondents to rate their level of agreement with each statement on a Likert scale ranging from *Strongly Disagree* (=1) to *Strongly Agree* (=7). Scores for each subscale range from 5 to 35, where higher scores indicate stronger feelings of resilience. Reviews of the Resilience Scale show Cronbach's alpha ranged from 0.72 to 0.94 across different demographic groups (Wagnild, 2009). Cronbach's alpha for this sample was 0.71 for the self-reliance subscale, 0.64 for the meaning subscale, 0.61 for the equanimity subscale, 0.67 for the perseverance subscale, and 0.61 for the existential aloneness subscale.

Childhood trauma was measured through subscales of The Childhood Trauma Questionnaire (CTQ; Kubany et al., 2000). This instrument asks respondents to indicate how often they were in certain traumatic situations before they left home on a scale of *Never* (=1) to *Very Often* (=5). This scale is divided into 5 subscales included in the model: *physical neglect*, *emotional neglect*, *physical abuse*, *emotional abuse*, and *sexual abuse*. Cronbach's alpha for this sample was 0.74 for the physical neglect subscale, 0.85 for the emotional neglect subscale, 0.85 for the emotional abuse subscale, 0.88 for the physical abuse subscale, and 0.97 for the sexual abuse subscale.

Number of moves, or *transience*, was a continuous variable determined by adding the number of cities a HY had lived in since leaving home. A single dichotomous item determined whether a HY had ever been *incarcerated* either in jail or prison (0=no; 1=yes). *Formal employment* was a dichotomous variable representing HY who expressed that they had received money in any of the following legal ways in the last 6 months: working fulltime, working part-time, doing temporary work, selling self-made items, selling personal possessions, collecting bottles or cans, selling blood or plasma, or from an agency or program such as social security (0=no; 1=yes). Another dichotomous variable, *any mental health diagnosis*, was calculated by determining whether a HY met DSM-IVR criteria for any of the following four diagnoses: Antisocial Personality Disorder, Post-traumatic Stress Disorder, a Major Depressive Episode, or a Manic Episode (0=no; 1=yes), assessed using the Mini International Neuropsychiatry Interview (MINI; Sheehan et al., 1998) which demonstrated good reliability (Lecrubier et al., 1997).

Data Analysis

This study used descriptive analyses to illustrate demographic characteristics of the sample of HY participants. Chi-square tests were also conducted to determine whether differences exist between those HY who graduated from high school or a GED program (secondary completers) and those HY who had quit, dropped out, or were suspended from school (secondary non-completers). Next, a forced entry logistic regression model was used to analyze relationships between the binomial dependent variable, *secondary completion*, and the predictor variables. Extant literature on HY along with the risk and resilience framework informed the model used to predict the likelihood of HYs' completion of high school or GED programs. VIF values were less than 10 and tolerance levels were greater than 0.20, suggesting that multicollinearity was not a limitation to the model. Listwise deletion was used to handle missing data. A total of 404 cases were considered in regression analysis. All analyses were conducted using SPSS Version 25. This study received human subjects' approval from the authors' university.

Results

Descriptive Statistics

Table 1 displays the predictor variables' distribution across the dependent variable along with statistics for the total sample. In this sample (N=429), 286 (66.7%) HY had completed high school or a GED program (secondary

completers). The remaining 143 (33.3%) HY indicated they had quit, dropped-out, or were currently suspended from school (secondary non-completers). The average age of the sample was 20.2 years. From this sample, 139 (32.4%) identified as female and 290 (67.6%) identified as male. About 45.8% of HY identified as white, 21.5% identified as black, 15.0% identified as Latino/a, and 17.8% identified as either Asian, American Indian, or another race or ethnicity.

There was heterogeneity amongst HY in different cities. The sample coming from Denver was the most representative of all racial and ethnic groups with 38% of HY identifying as white, 27% identifying as black, and 16% identifying as Latino, and 19% identifying as American Indian, Asian, mixed race, or another race. A higher proportion of HY from Denver had completed secondary education (77%) than those who had not (23%). In Austin, a large proportion (76%) of the HY sample identified as white. This is in contrast with the HY who were interviewed in Los Angeles where a large proportion of HY identified as black (44%). Los Angeles also had the largest proportion of HY who had not completed secondary education (39%).

Since leaving home, HY in this study had moved to about six different cities on average. Non-completers experienced 1.5 more moves on average than their peers who had completed secondary education. A larger proportion of females had completed secondary education than males, with 73.4% of females and 63.4% of males having completed secondary education. Twice the number of completers reported receiving income from formal sources than non-completers. On average, non-completers reported more emotional and physical neglect than completers, but there was no statistically significant difference between reported emotional, physical, or sexual abuse. More than half of the youth sampled (54.5%) had a history of incarceration, 59.8% of whom were non-completers.

Across the full sample, the average *resilience* score was higher than the midpoint score, suggesting HY felt they were resilient individuals overall. HY who had completed secondary education reported approximately the same levels of resilience in all five domains as non-completers. 86% of the entire sample reported symptoms that met the criteria for one or more mental health diagnosis with no statistically significant difference between those who have and have not completed secondary education.

Risk and Protective Factors Associated with Secondary Completion

First, chi-squared and t-tests were used to assess the association between *secondary completion* and risk and protective factors. Results supported the first hypothesis that there is a difference between high school completers and

Table 1 Sample Descriptive Statistics

Characteristic	Com-pleters Mean or %	Non-com-pleters Mean or %	Full Sample Mean or %	<i>t</i> or X^2 (<i>df</i>)
Age	20.2(1.7)	20.0(1.6)	20.2(1.7)	<i>ns</i>
Gender	23.8	8.6	32.4	4.17(1)*
Female	42.9	24.7	67.6	
Male				
Race/Ethnicity (<i>n</i> =428)	29.9	15.9	45.8	<i>ns</i>
white	15.7	5.8	21.5	
black	9.3	5.6	15.0	
Latinx	11.9	5.8	17.8	
American Indian, Asian, or other				
Recruitment city (<i>n</i> =428)	24.2	7.2	31.5	9.59(2)**
Denver	17.2	11.0	28.2	
Los Angeles	25.2	15.2	40.3	
Austin				
Ever incarcerated	32.6	21.9	54.5	10.83(1)***
Yes	34.0	11.4	45.5	
No				
Mental health diagnosis (<i>n</i> =421)	57.2	28.7	86.0	<i>ns</i>
1 or more	9.5	4.5	14.0	
None				
Formal employment	39.2	16.8	55.9	2.72(1)+
Yes	27.5	16.6	44.1	
No				
Number of moves (<i>n</i> =428)	5.8(6.2)	7.3(7.1)	6.3(6.6)	-2.06(251)*
Childhood trauma	13.6(5.7)	15.0(5.3)	14.1(5.6)	-2.357(420)*
Emotional neglect (<i>n</i> =422)	10.6(4.8)	11.6(4.8)	10.9(4.8)	-1.93(422)+
Physical neglect (<i>n</i> =424)	13.9(6.2)	13.3(6.0)	13.7(6.1)	<i>ns</i>
Emotional abuse (<i>n</i> =420)	11.0(5.5)	10.5(5.2)	10.9(5.4)	<i>ns</i>
Physical abuse (<i>n</i> =426)	7.9(5.6)	7.7(5.5)	7.8(5.5)	<i>ns</i>
Sexual abuse (<i>n</i> =424)				
Resilience	28.2(4.5)	28.3(4.8)	28.2(4.6)	<i>ns</i>
Self-reliance (<i>n</i> =424)	27.5(4.7)	27.1(4.8)	27.4(4.7)	<i>ns</i>
Equanimity (<i>n</i> =424)	27.4(4.4)	27.4(4.4)	27.4(4.4)	<i>ns</i>
Meaning (<i>n</i> =421)	27.5(4.5)	27.7(5.1)	27.6(4.7)	<i>ns</i>
Perseverance (<i>n</i> =422)	29.1(4.4)	29.2(4.3)	29.2(4.4)	<i>ns</i>
Existential alone- ness (<i>n</i> =423)				

Note. *N*=429 for full sample unless otherwise indicated, standard deviation listed in parentheses. ****p*≤.001, ***p*<.01, **p*<.05, +*p*<.10.

non-completers on risk and resilience factors. *Secondary completion* was significantly related to HY living in Denver ($X^2(1) = 9.53, p = .002, \phi = -0.14$) and identifying as female ($X^2(1) = 4.17, p < .041, \phi = 0.10$). There was a statistically

significant relationship between HY who had been incarcerated and secondary completion with a small effect ($\chi^2(1) = 10.83, p = .001, \phi = 0.16$).

Logistic regression was used to test the model. The overall model fit was strong ($\chi^2 = 67.32 [df = 21], p = .000$) and supported the hypothesis that at least one of the risk and resilience factors have a significant relationship with high school completion. According to the Nagelkerke R^2 statistic, the model explained approximately 21.4% of the variance in the outcome variable and correctly classified 73.8% of the cases. The model displayed in Table 2 suggests that several factors had statistically significant relationships with HYs' likelihood of completing secondary education. Type I error rates common to hypothesis testing were addressed by identifying the cutoff value for the significance level of each statistically significant result. Regarding resilience factors, HY were 54.6% more likely to complete secondary education if they had recently received income from *formal employment* compared to those did not receive income from formal employment (OR [odds ratio] = 0.454, $p = .002$, 95% CI [0.277, 0.744]), and 8.7% more likely to have completed secondary education for every unit increase on the *equanimity* subscale of resilience (OR = 0.913, $p = .018$, 95% CI [0.847, 0.985]). Living in Denver was associated with a 32.3% increased likelihood of completing secondary education (OR = 0.377, $p = .004$, [0.194, 0.735]). In addition, identifying as female was associated with a 46.1% increased likelihood of completing secondary education (OR = 0.539, $p = .036$, [0.303, 0.961]). Lastly, experiencing *childhood emotional abuse* was associated with a 5.9% increased likelihood of completing secondary education (OR = 0.941, $p = .045$, [0.886, 0.999])

Inversely, risk factors that decreased HYs' likelihood of completing secondary education included a history of *incarceration* (OR = 3.056, $p = .000$, [1.654, 5.647]), and experiencing *childhood physical neglect* (OR = 1.072, $p = .046$, [1.001, 1.147]) or *childhood emotional neglect* (OR = 1.078, $p = .011$, [1.017, 1.143]). Those who had been *incarcerated* were almost 206% less likely than those never incarcerated to have completed secondary education. Likewise, those who had reported higher levels of *childhood physical neglect* and higher levels of *childhood emotional neglect* were 7.2% and 7.8% less likely to have completed secondary education respectively.

Discussion

This study extends evidence of the risk and resilience framework to understand some of the significant factors associated with obtaining a high school diploma or GED among HY. To determine how existing legislation aimed

Table 2 Predictors of Secondary Completion Among Homeless Youth (HY)

	OR	SE	p	95% Confidence Interval
Age	0.922	0.080	0.306	[0.789, 1.077]
Gender	0.539*	0.294	0.036	[0.303, 0.961]
Race/Ethnicity	0.658	0.396	0.290	[0.303, 1.429]
black ^a				
Latinx ^a	0.905	0.378	0.792	[0.431, 1.900]
Other ethnicity ^a	0.913	0.373	0.807	[0.440, 1.894]
Recruitment city	1.113	0.370	0.772	[0.539, 2.297]
Los Angeles ^b				
Denver ^b	0.377**	0.340	0.004	[0.194, 0.735]
Number of moves	1.008	0.021	0.690	[0.968, 1.050]
Ever incarcerated	3.056***	0.313	0.000	[1.654, 5.647]
Mental health diagnosis	0.803	0.355	0.536	[0.400, 1.610]
Formal employment	0.454**	0.252	0.002	[0.277, 0.744]
Childhood trauma				
Emotional neglect	1.078*	0.030	0.011	[1.017, 1.143]
Physical neglect	1.072*	0.035	0.046	[1.001, 1.147]
Emotional abuse	0.941*	0.031	0.045	[0.886, 0.999]
Physical abuse	0.946 ⁺	0.033	0.093	[0.886, 1.009]
Sexual abuse	1.025	0.026	0.344	[0.974, 1.079]
Resilience	1.053	0.045	0.252	[0.964, 1.149]
Self-reliance				
Equanimity	0.913*	0.038	0.018	[0.847, 0.985]
Perseverance	1.024	0.039	0.553	[0.948, 1.106]
Existential aloneness	1.027	0.040	0.507	[0.949, 1.112]
Meaning	1.025	0.038	0.512	[0.951, 1.105]

Note. ^acompared to those HY who identified as white/not Latinx. ^bcompared to those HY who live in Austin. *** $p < .001$ ** $p < .01$, * $p < .05$, ⁺ $p < .10$.

at supporting these populations could minimize risk and promote resilience factors among HY, this study explored associations between completing secondary education and risk and resilience predictor variables. The findings suggest several factors, related to both risk and resilience, were associated with HYs' completion of high school and GED programs.

Resilience Factors

Previous research indicates that strengthening resilience factors in HY disconnected from school and employment can be effective in interventions (Ferguson, 2007). In the present study, several resilience factors were significantly associated with secondary completion. Having recent *formal employment* was statistically significant in both the chi-square and regression analyses. This finding reinforces research evidence that workforce participation is associated with increased resiliency (Jaffee et al., 2018). This also may be related to previous findings suggesting that HY with formal employment were more likely to acquire housing (Ferguson et al., 2014). It is possible that workforce participation

provides needed income to facilitate both housing stability and secondary completion. Work experiences are a priority of federal workforce programs and comprise one of the 14 elements of WIOA's Youth Program. These experiences can include internships, job shadowing, on-the-job training, and summer employment. As such, it seems that WIOA's Youth Program can address *formal employment* as a resilience factor.

Additionally, *equanimity* was a significant predictor of completion in the regression analysis. *Equanimity*, or self-composure, has been described as experiencing inner "balance and harmony" (Wagnild, 2013, p. 152). HY with higher levels of self-composure also report higher levels of self-efficacy and academic achievement (Lee et al., 2014). For HY attending secondary school, McKinney-Vento allows funds to be used for the provision of educational assistance, mentoring, summer programs, and other emergency support relevant to the youth's successful completion of their education, and such support could help with the feeling of security and composure for HY. WIOA's Youth Program also has several avenues for bolstering skills related to *equanimity* including leadership development opportunities, adult mentoring, and guidance and counseling referrals.

Further, those HY who had reported being subject to high levels of *emotional abuse* were more likely to complete secondary education. This association may be due to the nature of resilience: that a person grows from experiencing difficulties, becoming stronger from the experience. To support HY who experience emotional abuse, McKinney-Vento offers support services such as violence prevention counseling. This association also brings to the forefront families' influence on HYs' secondary completion. Evidence suggests that parental expectations and support are strong predictors of youths' accomplishments (Fan & Chen, 2001; McCoy & Bowen, 2015; Zhan & Sherraden, 2003). This finding suggests that WIOA youth programming could consider more activities that involve a youth's family in the process of completing their secondary degree programs. One longitudinal study found that family cohesion had a significant impact on youths' behaviors, identity, and self-worth (Jagers et al., 2015). For HY and other youth who may not have connections to immediate family that would have an impactful influence, enlisting the support of extended family members, close friends, and caseworkers could supplement so that the youth has an adult who believes they can accomplish their goals. Self-confidence and self-image are shaped by the feedback a person perceives to get from their environment, so ensuring that youth receive positive and encouraging messages is paramount to their development of a healthy self-concept (Huang, 2011).

In contrast, measures of a mental health conditions and most subscales of resilience were not significant predictors

of secondary completion. These results diverge from literature supporting the link between psychosocial measures and enrollment (Bowers & O'Neill, 2019; Roy et al., 2018; Samuels & Pryce, 2008) but support other literature concluding that such personal attributes are not significantly related to completion (Rosen et al., 2019). These discrepancies may be due to varying measurement of psychosocial variables and study sampling, or they might point out differences between factors that help youth enroll in school compared to those factors that help them complete schooling.

Risk Factors

Identifying risk factors is beneficial for determining circumstances that could be improved through intervention (i.e., screening for homelessness and childhood trauma). In line with existing literature, *incarceration* was associated with a lower likelihood of completing secondary education. Research indicates up to 38% of youth who commit criminal offenses end up dropping out of high school (controlling for race), a rate more than 30% higher than their noninstitutionalized peers (National Center for Education Statistics, 2019). To compound this risk, previous research has found that HY with histories of *childhood physical abuse* were twice as likely to be imprisoned than those who were not physically abused (Ferguson et al., 2014). *Physical abuse* was not found to be significantly associated with completion, but nevertheless was present to some degree for 79.3% of the sample and may influence completion due to the compounding nature of risk factors. To address disconnection in detained youth, WIOA grants provide funding to states for correctional education, either via the correctional facilities themselves or local educational agencies (National Reentry Resource Center, 2017).

Additionally, experiences of *childhood physical neglect* were associated with a lower probability of completing secondary education. This is consistent with findings that negative family relationships can impede the development of HY in emerging adulthood (Tierney et al., 2008), possibly limiting development of self-sufficiency skills useful in adulthood. On the contrary, some research has found that youth who experience *childhood physical neglect* may be more likely in some cases to attempt to become self-sufficient, particularly through employment, because they had fewer social supports (Hook & Courtney, 2011). This tension also highlights the nature of resilience, the pattern in which a person becomes stronger as they confront challenges. Effects of *childhood physical neglect* may be directly addressed through referrals to counseling by a WIOA provider or school personnel through McKinney-Vento. In addition to assisting with employment, avenues of boosting self-sufficiency skills could include financial literacy training and

adult mentoring, both of which are elements of youth programming supported through WIOA.

Two predictors in the model that were not significantly associated with secondary degree completion, but are potentially influential, were *transience* and *current homelessness*. *Transience* was identified as a significant risk factor in the bivariate chi-square analysis, but not regression analyses. Nonetheless, previous studies have identified transience and current homelessness as important influences on the resilience of HY (Ferguson et al., 2011; Ferguson et al., 2014) and warrant further study.

Finally, an unexpected finding appeared within tests with the resilience subscales. Aside from *equanimity*, the other four subscales were associated with a lower probability of completing secondary education in the regression analysis. This association was weak and may reflect a sampling bias, or it may be that those who did not complete secondary education needed to employ more resilience due to traumatic experiences (Luther et al., 1993; Zolkoski et al., 2016). It may be that those HY who have not completed schooling are more actively calling upon their resilience or are building upon their resilience. It is noteworthy that *equanimity* is the only dimension that appears higher in secondary education completers, suggesting that HY who have completed secondary education may subsequently feel more stable or that HYs' impression of stability is an important factor in aiding the completion of secondary education.

Limitations

Findings should be considered in light of this study's limitations. First, this study represents characteristics of this sample of HY at only one timepoint. There are limitations to temporal inferences, such as high school or GED completion, based on cross-sectional data. Characteristics such as number of moves and resilience can vary over time, whereas high school and/or GED completion can take 4 or more years. Data collection relied on purposive sampling from three drop-in centers with their own city and site distinctions. The trends in enrollment are, in part, related to the location and composition of recruitment facilities, which may influence the association between racial and ethnic identity and completion of secondary education. Even though, at the time of publication, the dataset used in these analyses are 10 years old, research can still gain insight on factors influencing secondary completion. Second, the study was only conducted in English with service-seeking HY, thus excluding non-English-speaking and non-service-seeking HY who commonly face additional challenges to secondary education completion. Third, responses to the subscales of the *Resilience Scale* were not normally distributed; rather, they were multi-modal with some subscales also having negative

skews. Due to their non-normal distribution, further analysis is needed to determine the impact of resilience more broadly on completion of secondary education. Fourth, the dependent variable was limited in several ways. Those who were currently enrolled in secondary education ($n=172$) were excluded from the study who may have been included in either the completers' or non-completers' groups at another point in time. Lastly, the CTQ asks about household activity exclusively, not considering traumatic experiences that happen in schools, but research does indicate that peer victimization may be a moderator between homelessness and mental health challenges (Armstrong et al., 2018). Future research should consider both victimization that occurs at home as well as other settings such as in school.

Implications

Resilience literature highlights the importance of both reducing negative influences and capitalizing on the resources that people have, targeting areas of vulnerability and building upon strengths, when designing interventions (Fraser et al., 1999; Luthar & Cicchetti, 2000). In schools, vocational training programs, and WIOA one-stop centers alike, routine staff training for and assessment of students for housing stability are warranted for early detection of challenges and needs along with routine assessments for learning difficulties (Belfield et al., 2012; Masten et al., 2015). These findings should be considered when developing and improving workforce and education policies that fund programs to enhance educational, training and employment outcomes.

Additional steps such as implementing trauma screenings or psychosocial instruments may be useful in identifying potentially influential risk factors (e.g., abuse and neglect) when youth are meeting with McKinney-Vento liaisons, completing their registration process with WIOA providers, and one-stop and other partner centers who receive referrals from WIOA centers. These instruments are surveys, typically only one-page in length and available in academic scholarship or professional psychological databases. Additionally, supportive services such as leadership and individual life skills trainings curricula should consider focusing on strengthening significant resilience factors such as self-composure (*equanimity*).

Social support and access to resources are important factors for HY completing their education (Bowers & O'Neill, 2019). Getting information on where support services are located and how to obtain them is challenging for HY. Social services often are fragmented, requiring HY to disclose their status to many people before they can receive assistance. Educational institutions largely do not have the capacity or resources to provide the comprehensive support services that HY require over the course of a credential or

degree program. As such, previous research has pointed to the value of cross-sector collaboration, like that commonly utilized by WIOA providers, in promoting resilience in both HY and other housed disconnected youth (Aykanian, 2018; Ferguson et al., 2014; Hallett & Freas, 2018; Lawson & Lawson, 2013; Luthar & Cicchetti, 2000; Masten, 2011).

Resilience is not mentioned in McKinney-Vento, WIA, WIOA or subsequent final rulings. The elements and activities that make up McKinney-Vento and WIOA's Youth Program, however, have the potential to promote resilience in practice via positively framed goals, tracking positive behavior and outcomes, utilizing multiple approaches depending on context, and collaboration amongst service providers (Masten, 2011; Shin & Ging, 2019; WIOA, 2016). Other variables such as smaller student-to-teacher ratios, teacher training in socioemotional health and behavioral management strategies, and strong student-teacher relationships may help prevent student disconnection from school and professional training programs (Quin, 2017; Zolkoski et al., 2016). Parental participation programs also convey positive results; however, evidence for these programs tends to be exclusively with primary schools (Jeynes, 2012). These findings support previous research indicating that efforts to strengthen parental participation and enhance familial support among HY and other disconnected youth might boost their likelihood of completing secondary education. Programs that involve parents by reading with their student, checking their homework, and communicating or collaborating with the teacher are associated with higher student achievement. Future research should consider how youth living with families, particularly those unstably and precariously housed, could be supported with familial or other adult involvement. Other literature has pointed to outreach programs as a mechanism for bolstering resilience in HY (Gupton, 2013). Caseworkers, group home staff, and mentors are the main channels through which many HY receive information about education and career planning, so ensuring that they are aware of the various support structures available for HY may be impactful.

McKinney-Vento has been valuable for systematically identifying and tracking youth struggling with homelessness. Scholars suggest that this may be a good model to implement in the postsecondary education system as well (Hallett & Freas, 2018), especially given that few postsecondary educational institutions have mechanisms in place for tracking homelessness in their student population (Gupton, 2018). States are able to set aside up to 15% of their WIOA Title I funds to special initiatives and practices relevant to their area. Local governments, nonprofits, and academic institutions all could have the capacity to gather population-level data to determine which special populations and specific needs influence their community.

Geospatial analysis, which could be as straightforward as considering demographic information and public benefit utilization rates across a district, can be used to identify special populations and initiatives in efforts to appropriate funds (Mody et al., 2020; Wang et al., 2020). In addition, Sorensen (2019) explains how other technology can be utilized at low costs to help schools identify students who are at risk for dropping out. As technology and our ability to access and analyze large data advance, so too should our methods for planning service provision. The economic cost of post-hoc support programs far exceeds the cost of proactive dropout prevention and re-engagement strategies for disconnected youth (Belfield, 2014).

Conclusion

The findings from this study support previous research suggesting that youths' ability to overcome adversity may be more significantly related to facilitative and supportive conditions (e.g., stable housing, formal employment) than to individual factors (e.g., coping strategies, mental health diagnosis, self-esteem and self-efficacy; Ungar, 2012). Variables related to a youth's life conditions are largely beyond their control, especially if they are minors and if they experience homelessness. As such, the provision of supportive environmental conditions from schools and social support agencies may be most effective in minimizing the impacts of the disadvantages faced by some HY (Zolkoski et al., 2016). Additionally, taking stock of a HY's family's mental health and providing referrals for appropriate services could help support the youth (McGuire-Schwartz et al., 2015). Further, results in this study should be considered alongside literature suggesting that a youth's expectations are more significant predictors of secondary completion than their academic achievement (Bates & Anderson, 2014; Rosen et al., 2019; Tierney et al., 2008), indicating the importance of supportive environments.

Overall, this study's findings suggest that McKinney-Vento and WIOA do address some important risk and resilience factors associated with completion of secondary education. There are some factors that schools, shelters, youth-serving organizations, and employment one-stop centers should consider screening for and addressing that are not mentioned in the legislation. These factors include histories of neglect and abuse, family emotional support, and equanimity. Prior to COVID-19, the number of youths disconnected from school and work nationwide declined over the previous decade (Ingram et al., 2017). In light of increasing numbers of youth who are now out of work and out of school, economic and educational recovery requires

adaptation and evidence-based assistance on the part of service providers for HY.

Declarations

Conflict of Interest We have no known conflict of interest to disclose.

References

- Armstrong, J. M., Owens, C. R., & Haskett, M. E. (2018). Mental health of homeless youth: Moderation by peer victimization and teacher support. *Child Psychiatry & Human Development*, 49(5), 681–687. <https://doi.org/10.1007/s10578-018-0790-z>
- Aykanian, A. (2018). Service and policy considerations when working with highly mobile homeless youth: Perspectives from the frontlines. *Children and Youth Services Review*, 84, 9–16. <https://doi.org/10.1016/j.childyouth.2017.11.014>
- Bates, L. A., & Anderson, P. D. (2014). Do expectations make the difference? A look at the effect of educational expectations and academic performance on enrollment in post-secondary education. *Race and Social Problems*, 6(3), 249–261. <https://doi.org/10.1007/s12552-014-9126-1>
- Belfield, C. R. (2014). *The Economic Burden of High School Dropouts and School Suspensions in Florida*. Los Angeles, CA: The Center for Civil Rights Remedies at The Civil Rights Project. <https://escholarship.org/content/qt8cj0n19m/qt8cj0n19m.pdf>
- Belfield, C. R., Levin, H. M., & Rosen, R. (2012). *The Economic Value of Opportunity Youth*. Corporation for National and Community Service and The White House Council for Community Solutions. <https://eric.ed.gov/?id=ED528650>
- Bender, K., Begun, S., DePrince, A., Haffejee, B., & Kaufmann, S. (2014). Utilizing Technology for Longitudinal Communication With Homeless Youth. *Social Work in Health Care*, 53(9), 865–882. <https://doi.org/10.1080/00981389.2014.925532>
- Bender, K., Brown, S. M., Thompson, S. J., Ferguson, K. M., & Langenderfer, L. (2015). Multiple victimizations before and after leaving home associated with PTSD, depression, and substance use disorder among homeless youth. *Child Maltreatment*, 20(2), 115–124. <https://doi.org/10.1177/1077559514562859>
- Bianchi, R., Schonfeld, I. S., & Laurent, E. (2015). Burnout–depression overlap: A review. *Clinical Psychology Review*, 36, 28–41. <https://doi.org/10.1016/j.cpr.2015.01.004>
- Bolstad, P. (2016). *GIS Fundamentals: A First Text on the Geographic Information Systems* (5th ed.). XanEdu
- Bowers, P. H., & O'Neill, M. (2019). The lived experience of being a homeless college student: A qualitative interpretive meta-synthesis (QIMS). *Journal of Children and Poverty*, 1–17. <https://doi.org/10.1080/10796126.2019.1629580>
- Bray, J., Depro, W., McMahon, B., Siegle, D., & Mobley, M. (2016). Disconnected geography: A spatial analysis of disconnected youth in the United States. *Journal of Labor Research*, 37(3), 317–342. <https://doi.org/10.1007/s12122-016-9228-1>
- Burd-Sharps, S., & Lewis, K. (2014). *One in Seven: Ranking youth disconnection in the 25 largest metro areas*. Brooklyn, NY: Measure of America of the Social Science Research Council. <http://hdl.voced.edu.au/10707/305342>
- Burd-Sharps, S., & Lewis, K. (2018). *More than a Million Reasons for Hope: Youth Disconnection in America Today*. Measure of America of the Social Science Research Council. <https://measureofamerica.org/youth-disconnection-2018/>
- Bureau of Labor Statistics (2018). *55.0% of 16- to 24-year-olds employed in July 2018*. <https://www.bls.gov/opub/2018/55-percent-of-16-to-24-year-olds-employed-in-july-2018.htm>
- Bureau of Labor Statistics (2019). *College Enrollment and Work Activity of Recent High School and College Graduates – 2018*. *News Release, USDL-19-0697*. <https://www.bls.gov/news.release/hsgsec.nr0.htm>
- Decker, P. T., & Berk, J. A. (2011). TEN YEARS OF THE WORK-FORCE INVESTMENT ACT (WIA): INTERPRETING THE RESEARCH ON WIA AND RELATED PROGRAMS. *Journal of Policy Analysis and Management*, 30(4), 906–926. <http://www.jstor.org/stable/23019009>
- Desmond, M., Gershenson, C., & Kiviat, B. (2015). Forced relocation and residential instability among urban renters. *Social Service Review*, 89(2), 227–262. <https://doi.org/10.1086/681091>
- Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, 13(1), 1–22. <https://doi.org/10.1023/A:1009048817385>
- Farooq, A. (2020). Congress should invest in our nation's workforce development system. *The Press Enterprise*. <https://www.pe.com/2020/10/03/congress-should-invest-in-our-nations-workforce-development-system/>
- Ferguson, K. (2007). Implementing a social enterprise intervention with homeless, street-living youth in Los Angeles. *Social Work*, 52(2), 103–112. <https://doi.org/10.1093/sw/52.2.103>
- Ferguson, K., Bender, K., & Thompson, S. J. (2014). Social estrangement factors associated with income generation among homeless young adults in three U.S. cities. *Journal of the Society for Social Work and Research*, 5(4), 461–487. <https://doi.org/10.1086/678921>
- Ferguson, K., Bender, K., & Thompson, S. J. (2015a). Gender, coping strategies, homelessness stressors, and income generation among homeless young adults in three cities. *Social Science and Medicine*, 135, 47–55. <https://doi.org/10.1016/j.socscimed.2015.04.028>
- Ferguson, K. M., Bender, K., & Thompson, S. J. (2015b). Risk and resilience factors associated with formal and informal income generation among homeless young adults in three US cities. *Youth & Society*, 50(3), 351–376. <https://doi.org/10.1177/0044118X15600722>
- Ferguson, K., Bender, K., Thompson, S., Xie, B., & Pollio, D. (2011). Correlates of street survival behaviors in homeless young adults in four U.S. cities. *American Journal of Orthopsychiatry*, 81(3), 401–409. <https://doi.org/10.1111/j.1939-0025.2011.01108.x>
- Fraser, M. W., Galinsky, M. J., & Richman, J. M. (1999). Risk, protection, and resilience: Toward a conceptual framework for social work practice. *Social Work Research*, 23(3), 131–143. <https://doi.org/10.1093/swr/23.3.131>
- Golberstein, E., Wen, H., & Miller, B. F. (2020). Coronavirus disease 2019 (COVID-19) and mental health for children and adolescents. *JAMA pediatrics*, 49(4), 431–437. <https://doi.org/10.1001/jamapediatrics.2020.1456>
- Gwadz, M. V., Gostnell, S., Smolenski, C., Willis, B., Nish, D., Nolan, T. C. ... Ritchie, A. S. (2009). The initiation of homeless youth into the street economy. *Journal of Adolescence*, 3(2), 357–377. <https://doi.org/10.1016/j.adolescence.2008.01.004>
- Hallett, R. E., & Freas, A. (2018). Community College Students' Experiences with Homelessness and Housing Insecurity. *Community College Journal of Research and Practice*, 42(10), 724–739. <https://doi.org/10.1080/10668926.2017.1356764>
- Hook, J. L., & Courtney, M. E. (2011). Employment outcomes of former foster youth as youth: The importance of human, personal, and social capital. *Children and Youth Services Review*, 33(10), 1855–1865. <https://doi.org/10.1016/j.childyouth.2011.05.004>
- Huang, C. (2011). Self-concept and academic achievement: A meta-analysis of longitudinal relations. *Journal of School Psychology*, 49(5), 505–528. <https://doi.org/10.1016/j.jsp.2011.07.001>

- Ingram, E. S., Bridgeland, J. M., Reed, B., & Atwell, M. (2017). *Hidden in Plain Sight: Homeless Students in America's Public Schools*. Civic Enterprises. <https://eric.ed.gov/?id=ED572753>
- Jaffee, S. R., Ambler, A., Merrick, M., Goldman-Mellor, S., Odgers, C. L., Fisher, H. L., ... and ... Arseneault, L. (2018). Childhood maltreatment predicts poor economic and educational outcomes in the transition to adulthood. *American Journal of Public Health*, 109(9), 1142–1147. <https://doi.org/10.2105/AJPH.2018.304587>
- Jagers, J. W. (2016). Predicting Adult Criminality Among Louisiana's Urban Youth: Poverty, Academic Risk, and Delinquency. *Journal of the Society for Social Work & Research*, 7(1), 89–117. <https://doi.org/10.1086/685089>
- Jagers, J. W., Church, W. T., Tomek, S., Hooper, L. M., Bolland, K. A., & Bolland, J. M. (2015). Adolescent development as a determinant of family cohesion: A longitudinal analysis of adolescents in the Mobile Youth Survey. *Journal of Child and Family Studies*, 24(6), 1625–1637. <https://doi.org/10.1007/s10826-014-9966-8>
- Joint Center for Housing Studies of Harvard University (2020). *The State of the Nation's Housing: 2020*. Presidents and Fellows of Harvard College. <https://www.jchs.harvard.edu/state-nations-housing-2020>
- Jeynes, W. (2012). A meta-analysis of the efficacy of different types of parental involvement programs for urban students. *Urban Education*, 47(4), 706–742. <https://doi.org/10.1177/0042085912445643>
- Kania, J., & Kramer, M. (2011). Collective Impact. *Stanford Social Innovation Review*, 36–41. https://ssir.org/articles/entry/collective_impact
- Kubany, E. S., Leisen, M. B., Kaplan, A. S., Watson, S. B., Haynes, S. N., Owens, J. A., & Burns, K. (2000). Development and preliminary validation of a brief broad-spectrum measure of trauma exposure: the Traumatic Life Events Questionnaire. *Psychological Assessment*, 12(2), 210–224. <https://doi.org/10.1037/1040-3590.12.2.210>
- Lawson, M. A., & Lawson, H. A. (2013). New conceptual frameworks for student engagement research, policy, and practice. *Review of Educational Research*, 83(3), 432–479. <https://doi.org/10.3102/0034654313480891>
- Leclercq, Y., Sheehan, D., Weiller, E., Amorim, P., Bonora, I., Sheehan, K., & Dunbar, G. (1997). The MINI international neuropsychiatric interview. A short diagnostic structured interview: Reliability and validity according to the CIDI. *European Psychiatry*, 12(5), 224–231. [https://doi.org/10.1016/S0924-9338\(97\)83296-8](https://doi.org/10.1016/S0924-9338(97)83296-8)
- Lee, W., Lee, M., & Bong, M. (2014). Testing interest and self-efficacy as predictors of academic self-regulation and achievement. *Contemporary Educational Psychology*, 39(2), 86–99. <https://doi.org/10.1016/j.cedpsych.2014.02.002>
- Lewis, K., & Burd-Sharp, S. (2015). *Zeroing In on Place and Race: Youth disconnection in America's cities*. Measure of America of the Social Science Research Council. <http://measureofamerica.org/youth-disconnection-2015/>
- Li, Y., & Lerner, R. M. (2011). Trajectories of school engagement during adolescence: implications for grades, depression, delinquency, and substance use. *Developmental Psychology*, 47(1), 233–247. <https://doi.org/10.1037/a0021307>
- Luthar, S. S., & Cicchetti, D. (2000). The construct of resilience: Implications for interventions and social policies. *Development and Psychopathology*, 12(4), 857–885. <https://doi.org/10.1017/S0954579400004156>
- Masten, A. S. (2011). Resilience in children threatened by extreme adversity: Frameworks for research, practice, and translational synergy. *Development and Psychopathology*, 23(2), 493–506. <https://doi.org/10.1017/S0954579411000198>
- Masten, A. S., Sesma, A. Jr., Si-Asar, R., Lawrence, C., Miliotis, D., & Dionne, J. A. (1997). Educational risks for children experiencing homelessness. *Journal of School Psychology*, 35(1), 27–46. [https://doi.org/10.1016/S0022-4405\(96\)00032-5](https://doi.org/10.1016/S0022-4405(96)00032-5)
- Masten, A. S., Fiat, A. E., Labella, M. H., & Strack, R. A. (2015). Educating homeless and highly mobile students: Implications of research on risk and resilience. *School Psychology Review*, 44(3), 315–330. <https://doi.org/10.17105/spr-15-0068.1>
- McCoy, H., & Bowen, E. A. (2015). Hope in the social environment: Factors affecting future aspirations and school self-efficacy for youth in urban environments. *Child and Adolescent Social Work Journal*, 32(2), 131–141. <https://doi.org/10.1007/s10560-014-0343-7>
- McGuire-Schwartz, M., Small, L. A., Parker, G., Kim, P., & McKay, M. (2015). Relationships between caregiver violence exposure, caregiver depression, and youth behavioral health among homeless families. *Research on Social Work Practice*, 25(5), 587–594. <https://doi.org/10.1177/1049731514553921>
- The McKinney–Vento Homeless Assistance Act. 42 U.S.C. § 401 (1987).
- Mendelson, T., Mmari, K., Blum, R. W., Catalano, R. F., & Brindis, C. D. (2018). Opportunity youth: insights and opportunities for a public health approach to reengage disconnected teenagers and youth. *Public Health Reports*, 133(Suppl. 1), 54S–64S. <https://doi.org/10.1177/1049731514553921>
- Miller, P. M. (2011). An Examination of the McKinney-Vento Act and Its Influence on the Homeless Education Situation. *Educational Policy*, 25(3), 424–450. <https://doi.org/10.1177/0895904809351692>
- Morton, M. H., Dworsky, A., Matjasko, J. L., Curry, S. R., Schluter, D., Chávez, R., & Farrell, A. F. (2018). Prevalence and correlates of youth homelessness in the United States. *Journal of Adolescent Health*, 62(1), 14–21. <https://doi.org/10.1016/j.jadohealth.2017.10.006>
- National Center for Education Statistics (2019). Status Dropout Rates. The Condition of Education. <https://nces.ed.gov/programs/coe/indicator-coj.asp>
- National Reentry Resource Center (2017). *The Workforce Innovation and Opportunity Act: What Corrections and Reentry Agencies Need to Know*. <https://csgjusticecenter.org/nrrc/publications/the-workforce-innovation-and-opportunity-act-what-corrections-and-reentry-agencies-need-to-know/>
- Quin, D. (2017). Longitudinal and contextual associations between teacher–student relationships and student engagement: A systematic review. *Review of Educational Research*, 87(2), 345–387. <https://doi.org/10.3102/0034654316669434>
- Rosen, J. A., Warkentien, S., & Rotermund, S. (2019). Stopping Out versus Dropping Out: The Role of Educational Resilience in Explaining On-Time Completion of High School. *American Journal of Education*, 125(2), 259–287. <https://doi.org/10.1086/701248>
- Samuels, G. M., & Pryce, J. M. (2008). “What doesn’t kill you makes you stronger”: Survivalist self-reliance as resilience and risk among youth aging out of foster care. *Children and Youth Services Review*, 30(10), 1198–1210. <https://doi.org/10.1016/j.childyouth.2008.03.005>
- Sheehan, D., Lecrubier, Y., Sheehan, K., Amorim, P., Janavs, J., Weiller, E., & Dunbar, G. (1998). The Mini-International Neuropsychiatric Interview (MINI): The development and validation of a structured diagnostic psychiatric interview for DSM-IV and ICD-10. *Journal of Clinical Psychiatry*, 59(20), 22–33
- Shin, J., & Ging, L. (2019). “Producing Human Capital”: A Critical Discourse Analysis of Title II of the Workforce Innovation and Opportunity Act (WIOA). *Adult Education Quarterly*, 63(3), 163–183. <https://doi.org/10.1177/0741713619834663>
- Sorensen, L. C. (2019). “Big Data” in Educational Administration: An Application for Predicting School Dropout Risk. *Educational Administration Quarterly*, 55(3), 404–446. <https://doi.org/10.1177/0013161X18799439>
- Tierney, W. G., Gupton, J. T., & Hallett, R. E. (2008). Transitions to Adulthood for Homeless Adolescents: Education and Public

- Policy. *Center for Higher Education Policy Analysis, University of Southern California*. <https://eric.ed.gov/?id=ED503645>
- Ungar, M. (2012). Researching and theorizing resilience across cultures and contexts. *Preventive Medicine*, 55(5), 387–389. <https://doi.org/10.1016/j.ypmed.2012.07.021>
- Vaughn, M. G., Shook, J. J., & McMillen, J. C. (2008). Aging out of foster care and legal involvement: Toward a typology of risk. *Social Service Review*, 82(3), 419–446. <https://doi.org/10.1086/592535>
- Wagnild, G. M. (2013). Development and Use of the Resilience Scale (RS) in Middle Aged and Older Adults. In S. Prince-Embury, & D. H. Saklofske (Eds.), *Resilience in Children, Adolescents, and Adults: Translating Research Into Practice* (pp. 151–160). Springer
- Wagnild, G. M. (2009). *The resilience scale user's guide: for the US English version of the resilience scale TM and the 14-Item resilience scale TM (RS-14 TM)*. The Resilience Center. <https://www.resiliencecenter.com/products/publications-including-the-true-resilience-book/resilience-scale-users-guide/>
- Wagnild, G. M., & Young, H. (1993). Development and psychometric evaluation of the Resilience Scale. *Journal of Nursing Measurement*, 1(2), 165–178
- Wang, C., Mody, E. H., Hunting, D., Hoyt, J., & Ferguson, K. M. (2020). Data-driven outreach to opportunity youth using population data and Geographic Information System technology. *Journal of Social Work*, 1–22. <https://doi.org/10.1177/1468017320911371>
- Workforce Innovation and Opportunity Act (WIOA). 29 U.S.C. §3101 (2014).
- Workforce Innovation and Opportunity Act (WIOA); Joint Rule for Unified and Combined State Plans, Performance Accountability, and the One-Stop System Joint Provisions; Final Rule. Vol. 81 No.161. August 19, 2016 (to be codified at 20 CFR pt. 676, 677, and 678; and 34 CFR pt. 361 and 463 on October 18 (2016).
- Zaff, J. F., Aasland, K., McDermott, E., Carvalho, A., Joseph, P., & Pufall Jones, E. (2016). Exploring positive youth development among young people who leave school without graduating high school: A focus on social and emotional competencies. *Qualitative Psychology*, 3(1), 26–45. <https://doi.org/10.1037/qup0000044>
- Zhan, M., & Sherraden, M. (2003). Assets, expectations, and children's educational achievement in female-headed households. *Social Service Review*, 77(2), 191–211. <https://doi.org/10.1086/373905>
- Zimmerman, M. A. (2013). Resiliency theory: A strengths-based approach to research and practice for adolescent health. *Adolescent Health: Editorial*, 40(4), 381–383. <https://doi.org/10.1177/1090198113493782>
- Zolkoski, S. M., Bullock, L. M., & Gable, R. A. (2016). Factors associated with student resilience: Perspectives of graduates of alternative education programs. *Preventing School Failure: Alternative Education for Children and Youth*, 60(3), 231–243. <https://doi.org/10.1080/1045988X.2015.1101677>

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