Exploring Education Outcomes
What Research Tells Us

The body of research on the educational outcomes of students in foster care continues to increase every year. Public and private agencies, universities, and philanthropic organizations have contributed to this increase in data collection and research at the national, regional, state and local levels. Research continues to show a consistent theme: children in foster care face significant barriers to their educational progress, starting from before school begins and extending through postsecondary education. This research has been summarized below in 10 sections:

1. Engage Youth in Their Education
2. Ensure Supportive Adult Advocates
3. Support the Foundation for a Strong Start for Young Children in Care
4. Ensure School Stability and Timely Enrollment
5. Promote Regular School Attendance
6. Support Children by Addressing Trauma to Improve Education Outcomes
7. Meet Children's Special Education Needs
8. Support Appropriate Educational Placements for Students in Congregate Care Settings
9. Support Students to Succeed In and Graduate High School
10. Support Transition, Persistence and Successful Completion of Postsecondary Education

Included with these summaries are detailed endnotes and references for further information about particular studies and research. Readers are encouraged to use the endnotes to access additional information.

Engage Youth in Their Education

Youth engagement is defined as the meaningful, sustained participation and involvement in a youth's environment, and is linked by research to a number of positive social, emotional, and developmental outcomes for youth.[1] Student engagement is operationalized as the relationship between students and their learning environment, such as the school community, adults at school, peers, instruction, and extra-curricular activities. It has been associated by research with reducing adolescent risk behavior, promoting good mental health, increasing persistence in school and with academic success.[2] For foster youth in particular, research identifies school engagement as a protective factor against academically-threatening problem behaviors, with positive school engagement associated with many positive mental and behavioral health outcomes and academic attainment for foster youth.[3,4,5,6] Additionally, federal law requires youth to be meaningfully involved in case and transition planning and court hearings, which include education planning as a critical component.[7]

Ensure Supportive Adult Advocates

Youth in foster care need supportive adults to help them achieve their educational goals. In addition, all students in foster care must have an identified education decision-maker. Students with disabilities particularly need an identified education decision-maker to help ensure specific education rights and protections. Research examining legal education decision-making for students in foster care is limited. Some research indicates that students in foster care are less likely to have an advocate present during their special education meetings.[8] Besides education decision-makers, a growing body of research indicates that having supportive adults and advocates, which can include parents, other family members, foster parents, caseworkers, teachers, children's attorneys, among others, can help students in foster care succeed in their education.[9,10,11,12,13,14]

Support the Foundation for a Strong Start for Young Children in Care

Almost half of the children in foster care are five years of age or younger.[15] As the child welfare field has evolved, we have learned that in many cases, separating young children from their parents can do more damage than providing full wraparound services to keep families together and keep children safe.

Separating these children from their parents, who are often themselves struggling with mental health and substance abuse trauma, is a decision rife with the potential for severe consequences. In addition, parents of children with a high degree of special needs sometimes face placing their children in foster care to access the services they desperately need.

Many infants and young children living in out-of-home care are vulnerable. Many infants in care have been prenatally exposed to alcohol and/or dangerous drugs. Forty percent of children in care under age five are born with low birth weight and/or are premature, which puts them at greater developmental risks, and more than half suffer from serious physical health problems. Developmental delays occur at a rate four-to-five times greater than that of children in the general population.[16] More than half of children in foster care had experienced caregiver violence or caregiver incarceration and almost two-thirds had lived with someone with an alcohol or drug problem. Estimates for children in other nonparental care subgroups were lower than for foster care, but still elevated above those of children living with biological parents.[17,18,19]

Research has consistently found a high need for early intervention and early childhood education services among young children in foster care as a result of their developmental, emotional, and behavioral problems.[20,21,22,23] While data suggest that effective interventions exist to improve the performance of children in foster care when entering kindergarten, several studies indicate that many young children do not receive the early intervention or early childhood education services they need to address problems (See Figure 1).[24,25] Studies show children in foster care

The majority of children in out-of-home care who may qualify for early intervention services are not receiving them.

| VOLUNTARY KINSHIP CARE | FORMAL KINSHIP CARE | NONRELATIVE KINSHIP CARE |

96.50% | 89.70% | 77.90%

3.50% | 10.30% | 22.10%

IFSP (CHILDREN 0-2)
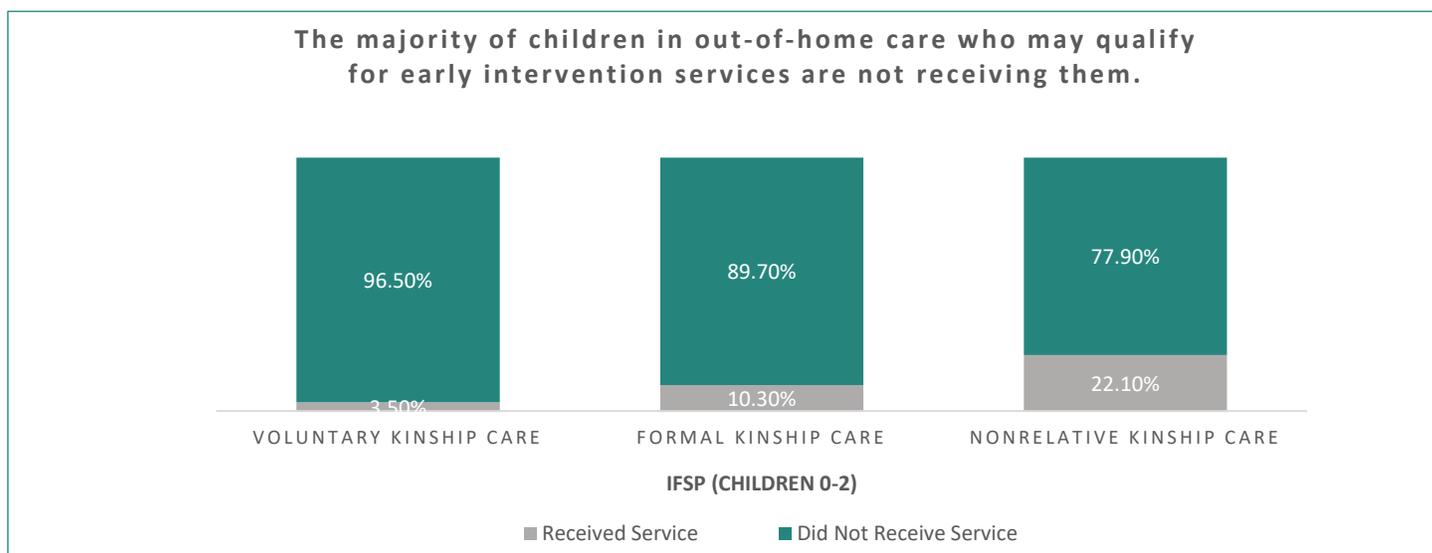
■ Received Service ■ Did Not Receive Service

Figure 1: Of all children who may qualify for early intervention services, percentage who receive those services and percentage who do not receive those services by their foster care placement (Casanueva, Smith, Ringeisen, Dolan, Testa, & Burfeind, 2020); Data are from NSCAW-II.

as a group are less likely to be enrolled in Head Start than eligible, low-income children,[26,27] or to participate in other high-quality early childhood education programs.[28,29] Even when children in care receive high-quality early childhood education, some data suggest they continue to have academic and social difficulties indicating the need for continued support into their K-12 years in addition to earlier intervention.[30,31] Recent research, however, shows that even though children enter care having experienced adverse events, some are resilient despite these conditions.[32]

Ensure School Stability and Timely Enrollment

School-age children in foster care commonly experience several living placement moves while in out-of-home care[33,34] (see Figure 2). School changes are also a significant problem for children and youth in foster care. Numerous studies have found that children in foster care frequently experience school changes.[35] [36,37,38] These school changes often occur when children are first removed from home, and when they move from one foster care living arrangement to another.[39,40] The rate of school mobility for children in foster care is greater than for their non-foster care peers.[41,42] Black and Hispanic students in foster care are more likely to experience school changes than their white peers in foster care.[43] LGBTQ youth in care also experienced more living placement changes than their heterosexual peers.[44] Negative effects of school mobility on academic achievement include lower scores on standardized tests[45,46,47,48,49,50,51] and greater risk of dropping out.[52,53,54] In multiple national studies, placement

stability results in better graduation outcomes,[55] with one study finding that youth who had even one fewer change in living arrangement per year were almost twice as likely to graduate from high school before leaving foster care.[56] Placement security contributes to a positive future orientation for youth in foster care and higher levels of school engagement,[57] while children who experience frequent school changes may have trouble developing and sustaining supportive relationships with teachers or with peers.[58,59] Supportive relationships and a positive educational experience can contribute to developing resilience and are vital for healthy development and overall well-being.

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School enrollment delays can occur when a child changes schools upon first entering foster care, or when the child's living arrangement changes while in foster care.[60] These delays can negatively impact attendance and have other harmful effects, such as students having to repeat courses previously taken, schools failing to address the special education needs of students, and students being enrolled in inappropriate classes.[61] Federal law now requires immediate enrollment even without typically required records, and creates state and local education agency points of contact to address barriers students in foster care face, including enrollment barriers.[62]
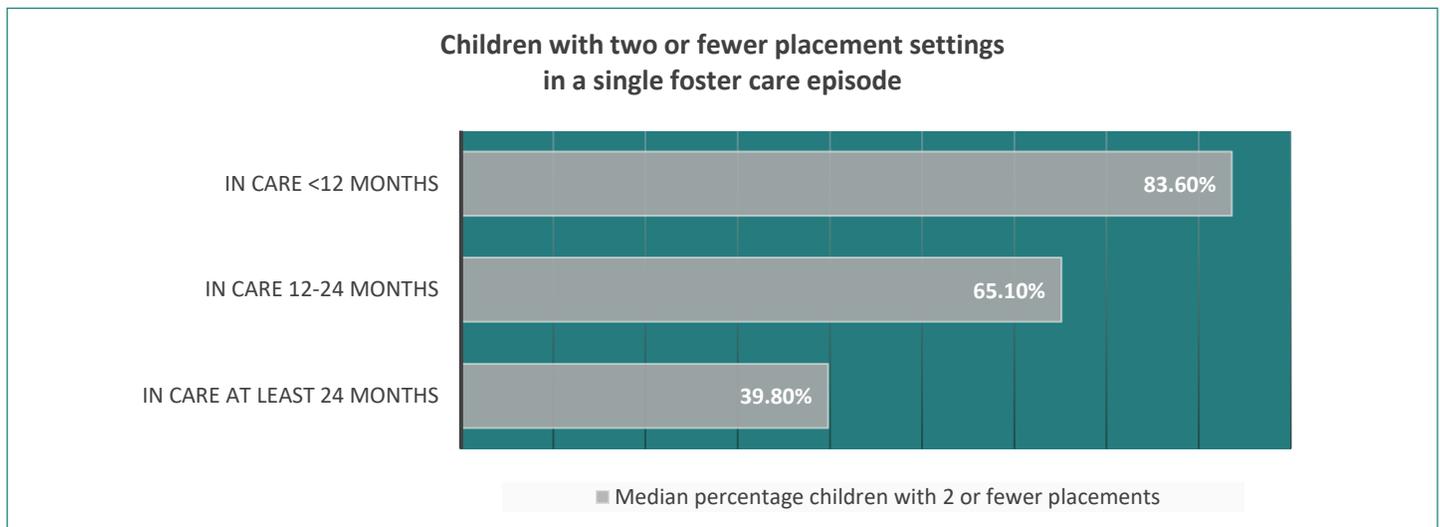
Children with two or fewer placement settings in a single foster care episode

IN CARE <12 MONTHS	83.60%
IN CARE 12-24 MONTHS	65.10%
IN CARE AT LEAST 24 MONTHS	39.80%

■ Median percentage children with 2 or fewer placements

Figure 2: AFCARs Data from Child Welfare Outcomes Report to Congress, 2019.

Promote Regular School Attendance

Studies show that children who enter foster care have often missed many school days[63,64] and that once in foster care, children and youth often have higher school absence rates than their non-foster care peers.[65,66,67,68,69,70] The extent to which children experience absences from school appears to be influenced by the child's age, their pre-foster care experiences, and their experiences while in care. Children who have early placement stability show less absenteeism than other children in foster care.[71,72] A growing body of research documents the behavioral problems that children and youth in foster care experience—issues that impact their prospects for academic success—in the form of disciplinary infractions and other offenses.[73] Children and youth in foster care experience school suspensions and expulsions at higher rates than their non-foster care peers.[74,75,76,77,19] Educational experts believe that failure to address the needs of children in foster care leads to behavioral problems at school.[78,79]

Support Children by Addressing Trauma to Improve Education Outcomes

Research suggests that between half and two-thirds of all children are exposed to one or more adverse childhood experiences (ACEs) that can be trauma-inducing,[80] and that this can be even more common for children of color.[81] Not surprisingly, children in foster care have experienced ACEs,[82,83] with the effects of childhood maltreatment that remain unaddressed potentially impacting their mental health and manifesting in behavioral and academic problems.[84,85,86] From medical centers to courts to child welfare systems, several evidence-supported and evidence-based approaches to address trauma have proven effective. These approaches include trauma-informed systems (approaches that shape organizations to be more trauma sensitive) and trauma-specific treatment interventions (implemented at the individual level to address trauma and its symptoms).

Meet Children's Special Education Needs

Studies consistently show that significant percentages of children in foster care have special education needs and/or receive special education services.[87,88] Several studies show children and youth in foster care are between 2.5 and 3.5 times more likely to receive special education services than their non-foster care peers.[89,90] Research also suggests children in foster care who are in special education tend to change schools more, are placed in more restrictive educational settings, and have poorer quality education plans than their non-foster care peers in special

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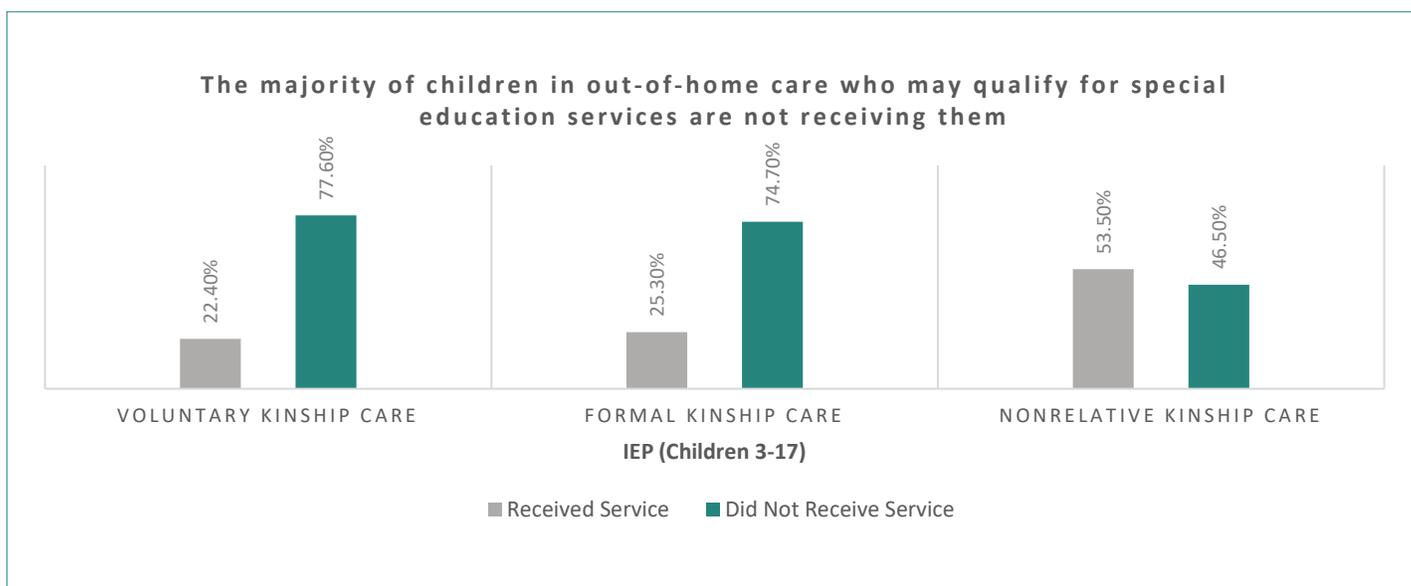|	Received Service	Did Not Receive Service
VOLUNTARY KINSHIP CARE	22.40%	77.60%
FORMAL KINSHIP CARE	25.30%	74.70%
NONRELATIVE KINSHIP CARE	53.50%	46.50%

IEP (Children 3-17)

Figure 3: Of all children who may qualify for special education services, the percentage who receive those services and percentage who do not receive those services by their foster care placement (Casanueva, Smith, Ringeisen, Dolan, Testa, & Burfeind, 2020); Data are from NSCAW-II.

education.[91] Some studies conducted with caregivers and school liaisons indicate that children in foster care need more intensive educational and support services to succeed in school.[92,93]

While screening youth in foster care for special education needs increases the chance that youth receive needed services, studies have found that children in foster care may not be receiving the special education services they potentially need (see Figure 3).[94,95,96]

Support Appropriate Educational Placements for Students in Congregate Care Settings

Rather than family and nonrelative foster care placements, some youth within the child welfare system are placed in congregate care, which can include residential treatment centers or group homes. These placements are considered to be more restrictive.[97,98] Various studies have examined the appropriateness of congregate care placement for foster youth, with data indicating that youth residing in congregate care often have behavioral issues, higher justice system involvement, and academic challenges.[99,100,101] Exacerbating these challenges, movements to congregate care often result in a change of schools, with research showing that youth in congregate care are more likely to have attended more schools and have a higher number of placement changes – circumstances that previous research associates with poor educational outcomes.[102,103,104] Fewer youth in a congregate care setting graduate high school, compared to their peers residing in foster homes.[105,106] Additional research indicates that graduation rates decline for youth as the length of time they spend in congregate care increases.[107]

The effectiveness of efforts to prepare youth to transition from congregate care settings to independence has been investigated, with research findings questioning the quality of transition services such as independent living, education, and work preparation provided to youth in congregate care.[108,109] Given the disproportionate behavioral and education challenges youth in congregate care settings experience, researchers, policymakers and systems' advocates have concluded that children in foster care should only be placed in nonfamily settings (shelters, group care, residential treatment) when such placements are therapeutically or medically necessary.[110] Further,

when such placements are needed, clinically effective, evidence-based alternatives to congregate care should be considered.[111]

Support Students to Succeed In and Graduate High School

Completing high school is an important social and economic milestone and provides access to employment opportunities and postsecondary education. However, researchers have found that youth in foster care are less likely to complete high school than their non-foster care peers,[112,113,114,115,116] including peers who are homeless.[117] This is troubling considering that high school graduates earn an average of $8,500 more per year than nongraduates.[118] When youth in foster care do complete high school, they often graduate later than expected. [119] Studies consistently show that children in foster care are

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more likely to be retained,[120,121] and significantly more likely than their peers to perform poorly on standardized reading and math tests and perform below grade levels.[122,123,124,125,126] Evidence suggests that young people in foster care are less likely to graduate high school if they experience repeated changes in their foster care living arrangements [127] and their school placements.[128]

Youth in foster care are also more likely to complete high school with a GED than with a high school diploma.[129,130] Youth of color in foster care, in particular, are less likely to have a high school diploma and more likely to have a General Education Development/Diploma (GED) than youth in foster care who are non-Hispanic white.[131,132,133] Having a GED can improve the life chances of individuals who do not graduate high school, however GEDs may not be equivalent to a regular high school diploma when it comes to labor market outcomes and postsecondary educational attainment.[134]

Statistics highlighting difficulties that youth in foster care experience in their academic careers demonstrate the need for interventions (including identifying

and enhancing protective and resilience factors) to improve their academic success. An increasing number of programs support high school completion and college access by students in foster care.[135,136,137,138,139] And for youth, in and from foster care who have been able to find educational success, school can prove to be a "safe haven."[140]

Support Transitions, Persistence, and Completion of Postsecondary Education

Although youth in foster care often express college aspirations, numerous studies have found lower college enrollment rates[141] and lower college completion rates[142,143,144, 145] among young people who have been in foster care compared to other young adults. One study suggests that former foster youth who do enroll in college are confident about their academic abilities and optimistic about their chance of success in college; however that same study, as well as others, finds that former foster youth lag behind their college peers in academic performance.[146,147] Research shows college enrollment is more likely when young people have had fewer foster care living arrangement moves[148] and they are allowed to remain in care until age 21[149,150] and/or receive campus support, including coaching or mentoring services.[151,152,153,154] Studies have found that foster care alumni were more likely to stay in a postsecondary program if they had independent living stability and tangible supports (tutoring, help with paperwork, access to other campus support programs or services).[155,156,157,158,159] Other studies examining the relationship between postsecondary educational attainment and race/ethnicity among young people who had been in foster care had mixed findings.[160,161,162]

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Foster and former foster youth face numerous challenges, each of which they must balance to successfully continue their education. Studies have found that financial difficulties, needing to work, childcare and parenting, and concerns about housing are among the barriers that prevent former foster youth from pursuing and succeeding in postsecondary education.[163,164,165,166] Research stresses the importance of taking a holistic approach to ensuring youth have the support and stability to be academically prepared for postsecondary education, the financial assistance to pay for tuition and fees, and the ability to meet their basic human needs.[167]

Increasing postsecondary educational attainment among youth in foster care would increase their average work-life earnings. With a four-year degree, youth in foster care could expect to earn approximately $481,000 more, on average, over the course of their work life than if they had only a high school diploma. Even if they did not graduate with a degree, completing any college or postsecondary education or training would increase their work-life earnings, on average, by $129,000.[168,169] One study found that increased levels of education have larger benefits for youth who exited care than youth from the general population, and at higher levels of attainment the two groups have similar employment rates and earnings become less pronounced.[170]

Endnotes

1. Research on attachment and child development indicates when youth engage with their environments in positive ways, healthy social and emotional development can occur (e.g., Brennan, Barnett & Baugh 2007; Brennan, Barnett & McGrath, 2009; Crooks, Chiodo, Thomas, & Hughes, 2009; Ludden, 2011; Agat, Champine, DeSouza, Mueller, Johnson & Lerner, 2014). For example, youth engagement is associated with a number of positive outcomes, such as resiliency, increased emotional and physical health, increased sense of inclusion or belonging, and increased community action (e.g., Scales, Benson, & Roehlkepartain, 2011; Arnett, 2014; Perkins, Caldwell & Witt, 2018; Witt & Caldwell, 2018). Research also connects youth engagement with decreased alcohol and substance use, lower rates of sexual activity and pregnancy, and lower rates of antisocial and criminal behavior (e.g., Mahoney, 2000; Sale et al. 2003).

2. While not focused on foster youth, past school-based longitudinal studies using large samples of adolescents have found youth's level of involvement in school to be important in reducing risk behavior, such as cigarette smoking, alcohol use, marijuana use, delinquency, and violent behavior (Dornbusch, Erickson, Laird, & Wong, 2001; O'Brennan, Waasdorp & Bradshaw, 2014; Waasdorp, Mehari, Milam & Bradshaw, 2019), as well as reducing levels of anxiety and depression, increasing persistence to complete secondary school, and academic success (Bond, Butler, Thomas, Carlin, Glover, Bowes & Patton, 2007; Farrington, Roderick, Allensworth, Nagaoka, Keyes, Johnson, Beechum, 2012; Watson, 2018). In a study of "at-risk" sixth-graders (non-foster care system involved children but from high poverty neighborhoods; N=330), for example, researchers found school involvement was associated with stronger reported feelings of school "connectedness" and better grades (Niehaus, Rudasill, & Rakes, 2012).

3. To explore the relationship between foster youth's sense of school engagement or "school connectedness" and academic performance, one study recruited youth aged 9-11 years of age from a randomized controlled trial of an intervention known as "Foster Healthy Futures" (a 9-month mentoring and skills group program) in a large urban center in an un-named western state. Participants (N=363) were enrolled from 2007 to 2011 in the program and were eligible for participation in the study if (1) they experienced a new episode of out-of-home care due to maltreatment by court order within the preceding year, (2) they still resided in foster care at the time of the baseline interview, and (3) their cognitive functioning was sufficient to comprehend the interview questions. Researchers found the intrapersonal variable of "school connectedness" or degree to which the youth reported a sense of school belonging significantly explained variance in academic achievement, with students who reported higher feelings of school connectedness having better grades (Somers, Goutman, Day, Enright, Crosby, & Taussig, 2020).

4. Using data from the NSCAW-II study, researchers examined the protective potential of multiple individual-level factors (i.e., school engagement, self-esteem, and social skills) against academically threatening problem behaviors for youth in foster care aged 11–17 years and living in out-of-home care (N=235). The goal was to investigate the protective potential of self-esteem and social skills in the association between school engagement and behavior problems that threaten foster youth's educational trajectories. Results indicated significant associations between school engagement and problem behaviors (with more engagement in school significantly associated with fewer foster parent reports of externalizing, problem behaviors), as well as between self-esteem, social skills, and school engagement (with gains in self-esteem and social skills significantly associated with more school engagement). Overall, school engagement, self-esteem, and social skills appeared to be meaningful protective factors regarding behavioral problems among adolescents in this study (Mihalec-Adkins & Cooley, 2019).

5. In a follow-up study using a subsample of youth (N=215; aged 11-17) from the NSCAW-II dataset, Mihalec-Adkins et. al (2020) tested a model of the influences of placement-related factors on foster youth's school engagement. The study focused on whether foster youth's perceptions of security in their living placements, their self-reports of how involved caregivers were in their education, and the youth's expectations for their future, influenced their level of school engagement. Results found positive future expectations (i.e., belief in the likelihood of positive life outcomes) were linked with positive school engagement (i.e., more social and cognitive/academic engagement) for foster youth. Feelings of placement security (i.e., stability and a sense of belongingness in foster placements) were also linked with positive future expectations, and, ultimately, more school engagement. (Mihalec-Adkins, Christ, & Day, 2020).

6. Findings from a study comparing youth in foster care to their high school peers in a large, representative statewide survey (California Healthy Kids Survey) suggest that negative in-school experiences may contribute to foster youth's lack of school engagement and poorer educational outcomes. After controlling for age, gender, and race, youth in care reported more negative experiences in school (e.g., violence, victimization, discrimination) than non-foster care students. Youth in care also reported feeling less connected to school, less engagement or participation in school, and lower (self-reported) academic achievements than their peers. The researchers concluded that improving in-school experiences for foster youth can positively impact their levels of school participation or engagement and academic success, even if their experiences outside of school are challenging (Benbenishty, Siegel & Astor, 2018).

7. For a summary of federal laws, including those that support older youth, please see Legal Center for Foster Care and Education. *Key Federal Laws: Supporting Students in Foster Care,* 2021.

8. One study of students aged 13-21 (N=327) in a large urban school district in Oregon compared the academic achievement of youth in foster care who were receiving special education services to youth who were involved in foster care only, special education only, or general education only. Researchers found that foster care youth involved in special education typically

performed lower on academic variables in contrast to one or more of the comparison groups, and were also less likely to have an adult advocate present during their special education meetings (Geenan & Powers, 2006).

9. Much of the research exploring the influence of supportive adults or advocates on foster youth's educational outcomes has focused on postsecondary school enrollment, persistence, and graduation. Drawing a representative survey sample of foster youth from the first wave of the CalYouth study (N=763), and accessing administrative data about college admissions, one study sought to identify the protective factors associated with the likelihood that youth who were in foster care would enroll in college. The study found that the number of "institutional agents" (e.g., foster parent, social worker, independent-living-program staff, attorney) identified by foster youth as being supportive, as well as receiving encouragement from school personnel, significantly increased the likelihood of enrolling in college. For each additional institutional agent or supportive adult the youth could identify, their odds of enrolling in college increased by 39% (Okpych & Courtney, 2017).

10. About half (48.5%) of the former foster youth surveyed at age 23 in the CalYouth study said they did not receive enough help from others to attend college ("no help," "only a little help," or "some help, but not enough") while 34.3% said they had received "enough help" or "more than enough" help (Courtney et al., 2020).

11. Much of the research exploring the influence of supportive adults or advocates on foster youth's educational outcomes has been qualitative in nature where students have been surveyed, interviewed, or have participated in focus groups. In one such study, researchers sought to determine which sources of adult support are associated with positive academic functioning for youth who are still in foster care. Participants for the study were 257 foster youth (average age of 13.55 years), their caregivers and teachers. Youth provided a self-report of the level of support they received from parents, caregivers, teachers, friends, and classmates. Information on placement characteristics were obtained from child welfare case files. Teachers provided information on youth's behavioral health in school, and academic grades were obtained from school records. Results suggested that youth-reported teacher social support, as compared to parent, caregiver, friend, or classmate social support, was most influential for academic performance and behavioral health in school. Findings highlight the need for more research on the important role of teachers for promoting academic success among youth in foster care, and the importance of placement changes relating to academic functioning (McGuire, Gabrielli, Hambrick, Abel, Guler & Jackson, 2021).

12. A mixed-method (interview and survey) study explored the characteristics of supportive relationships for foster youth who were transitioning from care to independence and pursuing higher education. A diverse group of foster youth (N=99) from a large unnamed urban center participated in a two-hour interview followed by a survey. Foster youth in the study who reported having a "very important nonparental supportive adult" had a high probability of attending college. The researchers concluded that forming consistent relationships with caring adults, such as caseworkers, foster parents, kin, counselors, teachers, or coaches, had a positive impact on foster youth's pursuit of higher education—including providing critical information about preparing for and applying to college, navigating the college experience, and serving as a supportive person to help them succeed academically (Duke, Farruggia & Germo, 2017).

13. Twenty-three former foster youth enrolled in college participated in interviews about what influenced their preparation for postsecondary education and decision to attend college, as well as what helped them to navigate college successfully. Youth reported relying on caregivers, high school counsellors, social workers, and child welfare staff to prepare them for college and help them decide to apply. In college, they reported relying on campus resources (e.g., extracurricular activities, faculty) to navigate college life. They also reported that lingering family problems, lack of family support, and racial/ethnic stereotyping on campus negatively impacted their college experiences. Study participants managed stress encountered in college by seeking counseling and increasing their involvement in the campus community (Avant, Miller-Ott & Houston, 2021).

14. Another qualitative study focused on high-achieving former foster students who were furthering their education at an academically oriented ("top-tier") university. Using survey and interview methods, former foster youth (N=57) were asked about the specific experiences while in out-of-home care that helped them enroll in a university and succeed while there. The study found that foster youth's hopes and expectations for their future achievement were influenced by various social factors, including home environments and connection to a supportive adult. Former foster youth noted how adult supporters provided guidance, emotional support, and stability, which allowed them to move out of their negative past experiences. Adults' willingness to assist youth and be a part of their lives provided students with a transformative academic and social emotional environment, furthering their ability to persist through high school and gain acceptance to a top-tier university (Neal, 2017).

15. AFCARs Data Report #27, 2020, retrieved from AFCARS Report #27 | The Administration for Children and Families (hhs. gov).

16. Data from the NSCAW-II study shows that 18 months after the close of investigation, children reported for maltreatment were found to be below their peers in social-emotional, cognitive, language, daily living skills, behavioral, and social skill-based domains (Maher, Darnell, Landsverk & Zhang, 2015). NSCAW II data also show that 34.5% of children one to five years old exhibited a risk of developmental delay on standardized measures; 6.5% had both an established medical condition and developmental delay; overall, 42.3% were found to be potentially eligible for services under the IDEA. Less than half of likely qualified infants and toddlers have a Part C Individualized Family Service Plan (IFSP) (Casaneuva, et. al., 2010). The most recent National Child and Adolescent Well-Being Survey (NSCAW III), which began data collection in 2015, was paused in 2020 due to the COVID-19 pandemic.

17. Children in nonparental care were 2.7 times as likely as children living with two biological parents to have had at least one adverse experience. Children in nonparental care were more than two times as likely as children living with one biological parent (and about 30 times as likely as children living with two biological parents) to have had four or more adverse experiences (Bramlett & Radel, 2014).

18. A report of NSCAW-II data comparing the well-being of children in kinship vs. nonrelative foster care placements indicates that children aged 0-2 who are placed in nonrelative foster care are significantly more likely to have a developmental delay (37%) compared to children placed in a formal kinship placement (22%) or voluntary kinship placement (26%). While differences were not statistically significant, 29% of children aged 3-17 placed in nonrelative care had developmental, cognitive, or academic needs, compared to 36% of children placed in formal kinship care, and 21% of children placed in a voluntary kinship placement (Casanueva, Smith, Ringeisen, Dolan, Testa, & Burfeind, 2020).

19. Researchers investigated whether maltreated children are more likely to demonstrate deficits in early receptive language skills that negatively impact later academic achievement, social competence, and behavioral adjustment. They examined the receptive language skills of children with child protective services (CPS) involvement who were in foster care (n=176) to children with CPS involvement but who placed with their birth parents (n=144). Results showed children in foster care had higher receptive vocabulary scores at ages 36 and 48 months than children who stayed with their birth parents. However, group differences were not significant after controlling for caregiver education level, marital status, and household income. These findings suggest that placement in foster care may be associated with meaningful improvements in children's receptive vocabulary among children with CPS involvement, but that increased supports to caregivers may ameliorate receptive vocabulary deficits in children—particularly supports that promote parent–child interactions that facilitate language development (Zajac, Raby, & Dozier, 2019).

20. Data from the NSCAW-II study was used to determine the extent of developmental problems for 268 children who were one-to-five years old and had been in foster care for approximately one year when the sample was drawn. Researchers found that 57% had a developmental problem in at least one of three domains: 47% had cognitive delays, 49% had language delays, and 52% had behavioral problems. Forty-two percent of the caregivers of these children reported that their child had been assessed for learning problems, special needs, or developmental disabilities, and 23% had been told that they had a learning problem, special need, or developmental disability. However, only half of the children identified as having a learning problem, special need, or developmental disability had an Individualized Family Service Plan (IFSP) or an Individualized Education Program (IEP). Thirty five percent of these children had been referred by their caseworker for an assessment to identify learning problems or developmental disabilities, 7% had been referred for special education services and 20% had been referred for services to address an emotional, behavioral or attention

problem. At the same time, 39% of their caseworkers indicated the child needed an assessment to identify learning problems or developmental disabilities, 22% indicated the child needed services for an emotional, behavioral or attention problem, and 14% indicated the child needed special education services. In addition to the children for whom a referral had been made, another 2-3% were already receiving special education services or other services to address a developmental problem (Ward, Yoon, Atkins & Morris, 2009).

21. In a study of Illinois children who entered foster care without first receiving in-home services, researchers found that over one-third of the three- to five-year olds showed evidence of a possible developmental delay in at least one of the following domains: visual-motor adaptive, language and cognition, fine or gross motor, personal, social, or problem-solving. Fourteen percent of the three-to-five year olds were identified as having behavior problems ranging from lack of focus to aggressiveness (Smithgall, Jarpe-Ratner & Walker, 2010).

22. An Oregon Social Learning Center study found that foster children entering kindergarten showed large pre-reading skills deficits, with average scores in the 30th to 40th percentile (Pears, Heywood, Kim, Fisher, 2011).

23. A study using data from the NSCAW-II study divided a sample of infants who entered foster care into three groups based on their living arrangement 66 months after the initial baseline survey of children in the study. The three groups were children who remained in foster care, children who were reunited with their birth parents, and children who were adopted. The group of children still in foster care at age five to six showed worse developmental outcomes than the other two groups for measures of social skills, math, and reading (Lloyd & Barth, 2011).

24. A study that analyzed data from NSCAW-I for 641 children who were less than six years old and in foster care when the first wave of data was collected found that nearly half had scores on measures of cognitive, behavioral, and social skills that would make them eligible for early intervention services. However, their caregivers reported that just over one-third of these children had received any type of service to address their developmental and behavior problems during the past year. Children at risk for delays in two or more domains were more likely to have received services than children at risk in zero or one domain, and children ages three to five were more than twice as likely to have received services as children ages zero to two (Stahmer, Hurlburt, Barth, Webb, Landsverk & Zhang, 2005).

25. Similarly, in a recent study using NSCAW-II data, researchers found that among children with a condition that would potentially qualify them for Part B or C services, their caregivers reported that half or fewer received early intervention (through an IFSP). Across all placement types (nonrelative foster placement, formal kinship placement, and voluntary kinship placement), most children involved with the child welfare system who potentially needed critical early education services did not receive them. (Casanueva, Smith, Ringeisen, Dolan, Testa, & Burfiend, 2020).

26. A study examining Head Start program enrollment in 2011-2012 found that 42% of all eligible children were served by Head Start but just 4% of those eligible were served by Early Head Start (Schmit, Smith & Robbins, 2013). Between 1991 and 2005, the percentage of all children ages three to four participating in a Head Start program remained fairly constant, ranging between 9 and 11%, and was at 9% in 2005 (Child Trends, 2010).

27. Children in nonparental care who participated in Head Start scored higher than non-Head Start controls on a school readiness measure. Additionally, Head Start participation had a positive impact on teacher-child relationships for children in nonparental care (Lipscomb, Pratt, Schmitt, Pears & Kim, 2013). While several studies over the years have demonstrated the benefits of Head Start, a recent study using an additional decade of data to examine the impacts of Head Start on outcomes in adulthood, found no statistically significant impacts on earnings and mixed evidence of impacts on other adult outcomes (Remy, Pages, Lukes, Bailey & Duncan, 2020).

28. A national study of young children referred to the child welfare system found that those who received highly rated center-based early childhood education had better language outcomes 18 months later than those who did not receive these services (Merrit & Klein, 2015).

29. One study explored the possibility that early care and education (ECE) services (e.g., childcare, preschool, day care) can help the child welfare system maintain children safely in their homes. Using the NASCW-II data, the researchers measured the relationship between ECE receipt and the likelihood that zero-to-five year-old children in the child welfare system would be placed in foster care approximately 18 months later. Specifically, logistic regression analyses explored the relationship between: (1) regular ECE participation (yes/no), and (2) type of ECE arrangement (Head Start, other center- or home-based ECE, family/friend/relative ECE, other ECE, and multiple types of ECE), and foster placement risk. After controlling for multiple socio-demographic characteristics and foster placement risk factors, children who received ECE were no less likely to be placed in foster care than children who received no ECE. However, when exploring ECE arrangement type, children who received Head Start were 93% less likely to be placed in foster care than children with no ECE. Children who participated in multiple types of ECE were almost seven times more likely to be placed in foster care than children with no ECE. The researchers concluded that Head Start participation may have helped maltreated children avoid foster care placement and that experiencing multiple types of ECE is a risk factor for foster care placement (Klein, Fries, & Emmons. 2017).

30. Using secondary data from a large midwestern state child protection system and a local ECE evaluation, this study compared the developmental status in the year before kindergarten of low-income children with and without child protection involvement who were enrolled in highly rated early childhood education settings. Findings showed children with child protection involvement were performing worse than their low-income peers without child protection involvement (Kovan, Mishra, Susman-Stillman, Piescher & LaLiberte, 2014).

31. One study sought to determine whether home environments with higher levels of emotional support and cognitive stimulation predict later academic achievement of child-welfare involved children and whether this relationship is moderated by placement type (i.e., biological/adoptive parent care, kinship care, or non-kinship foster care). This study used analyzed data from NSCAW-II, home observation scores (on the Home Observation for Measurement of the Environment instrument or HOME) and achievement scores (on the Woodcock-Johnson III Tests of Achievement or WJ-ACH) of 1,206 children involved with child protective services between ages 2-17. Results were mixed. Although children placed primarily in non-kinship foster care demonstrated higher WJ-ACH scores for Passage Comprehension and Letter-Word Identification subscales, placement type was not significantly associated with HOME scores and with academic achievement. The researchers concluded that child and caregiver-level factors, as well as financial resources available in the environment, may account for the relationship between home environment (as expressed in HOME scores) and academic achievement (Johnson, Perrigo, Deavenport-Saman, Wee, Imagawa, Schonfeld & Vanderbilt, 2021).

32. Another study using data from the NSCAW-I examined school readiness of foster children (N= 1,193 children with a mean age of 7.11 years). Researchers were interested in determining which protective factors across early childhood promote cognitive, social and multidomain resilience at school entry, and if the timing, accumulation, and inconsistency of parenting and neighborhood protective factors matter for resilience. Whether the benefits of parenting and neighborhood protective factors differ for children initially placed out-of-home compared to children placed in-home was also explored. The study controlled for child race and ethnicity, age in months, and sex. Child neurodevelopmental risk was assessed with a standardized instrument (the Bayley Infant Neurodevelopmental Screener). Instability in living arrangement (measured as the number of times the child's caregiver differed from the previous wave of NSCAW data collection) and caregiver characteristics were also assessed (e.g., education, marital status, mental well-being and an indicator of whether the child's household received food assistance such as food stamps). The study found little evidence that the timing of protective factors was important for resilience. Rather the cumulative amount of family-level (e.g., cognitive stimulation and emotional support) protective factors seemed to be consistently linked with later resilience – a finding supported by previous research on nonmaltreated populations. There was no evidence that neighborhood quality influenced resilience. Early and overall emotional support was strongly associated with resilience among children in out-of-home care, but unrelated to social resilience for maltreated children who remained in-home. Since this study lacked a comparison group of children who did not experience maltreatment, the researchers were not able to evaluate the differences between maltreated and nonmaltreated children in how little or how much their development of resilience benefits from specific environmental factors and which protective factors uniquely help maltreated children (Sattler & Font, 2018).

33. In the Child Welfare Outcomes Report to Congress (2018), which reports national child welfare data from the AFCARS

and NCANDs reporting systems, the majority (84%) of children in foster care for less than 12 months achieved "placement stability" (i.e., defined in the dataset as having had two or fewer placements in a single foster care episode), while 65% children who had been in care for 12-24 months experienced two or fewer placements, and 41% of children who had been in care for more than 24 months experienced two or fewer placements. Examining this statistic over the last three years of reporting indicates little change in states' achievement of placement stability for children in care under 24 months. However, for children in care at least 24 months, the national median number of children with two or fewer placements while in foster care increased by 17.1 percent—from 35.1 percent to 41.1 percent—with nearly two-thirds (63 percent) of states showing improvement in performance (Administration for Children Youth and Families (ACYF), Child Welfare Outcomes Report to Congress, 2018).

34. In response to a request for data from California county child welfare agencies, the Alliance for Children's Rights (2020) found a state median home instability rate for school-aged foster children of 30-40% (i.e., of those child welfare agencies who provided data, 29% reported having 30-40% of school-aged foster children experiencing a placement change each year for the past three years). An older focus group consisting of school liaisons from one California school district identified instability in the lives of foster children, including school stability, as the most serious problem facing students in foster care (Zetlin, Weinberg, & Shea, 2010).

35. An analysis of California Department of Education data found that youth in foster care in California changed schools an average of eight times while in care (Alliance for Children's Rights, 2020).

36. PolicyLab's Children's Stability and Well-being (CSAW) study found that study participants in Philadelphia, on average, attended 2.7 different schools within the two-year study period (Zorc, O'Reilly, Matone, Long, Watts, Rubin, 2013).

37. In this study, researchers examined school changes throughout high school for students in foster care. They found that Colorado students in foster care typically change schools three or more times after initially entering ninth grade. They found that only 10% of students did not change high school at all while 59% changed high schools three or more times (Clemens & Sheesley, 2016).

38. Researchers from Boston University's School of Social Work, in partnership with the Massachusetts Court Improvement Program, matched administrative datasets from the Department of Children and Family Services, the Courts, and the Department of Elementary and Secondary Education to analyze the factors associated with school stability and success. The matching process identified 6,269 students in foster care during the 2014-2015 school year and found that one in four of those students attended two or more schools during the academic year, with 4% attending three or more schools. The report authors note the number of school changes may be underreported because it is only collected by the Department of Elementary and Secondary Education three times during the school year. About 23% of students experienced a school change when they moved to a new foster care placement (Massachusetts Court Improvement Program, 2019).

39. A study by the Center for Social Services Research and the Institute for Evidence-Based Change showed that three-quarters of California foster youth changed schools the year they entered foster care compared to only 21% of the comparison group (Frerer, Sosenko, Pellegrin, ManChik, Horowitz, 2013).

40. A study examining administrative data for 1,420 youth who had aged out of foster care in an unnamed southwestern state found that youth had an average of 13 different placements during their time in foster care, and that each placement change could involve a school move (Crawford, Pharris & Dorsett-Burrell, 2018).

41. During the 2001 through 2003 school years, elementary school-aged foster children in the Chicago Public Schools were more than twice as likely to change schools as students who had no history of child welfare services involvement. School mobility was especially high among children who entered foster care during the school year, with over two-thirds experiencing a school change. Among those children who entered foster care in 2008 without first receiving in-home services, over one-half of the 6-to-10 year-olds and almost two thirds of the 11-to-17 year-olds had changed schools at least once within the past two years (excluding normative transitions from elementary to high school) (Smithgall, Jarpe-Ratner, & Walker, 2010).

42. In a WestEd study of California foster youth, two-thirds of foster youth stayed in the same school over the course of a school year compared to 90% of non-foster youth from low socioeconomic backgrounds. In addition, approximately 10% of foster youth went to three or more schools over the course of the school year as opposed to only 1% of non-foster youth from low socioeconomic backgrounds (Barrat & Berliner, 2013).

43. A study conducted in Colorado by the University of Northern Colorado between the 2007-08 and 2013-14 academic years found that Black and Hispanic students are more likely than their White peers to change schools. Black students were also more likely to change schools more than once in the same school year. (Clemens & Sheesley, 2016).

44. Researchers used secondary data from a randomized control study of independent living programs for foster youth in California and Massachusetts to examine challenges faced by LGBTQ youth compared to their heterosexual peers. Researchers found that by age 19 sexual minority foster youth had experienced significantly more living placements than their peers (an average of 5.62 compared to 3.98) (Shpiegel & Simmel, 2016).

45. Data from the California Child Welfare Indicators Project, a longstanding university-agency data collaboration between the University of California, Berkeley and the California Department of Social Services, found the number of placements students in foster care experienced during the school year was correlated with low performance in English language arts and

mathematics, particularly among students who experienced three or more placements. Among students who experienced three or more placements, 50% scored below or far below basic in English language arts and 44% scored in the lowest two levels in mathematics (Wiegmann, Putnam-Hornstein, Barrat, Magruder & Needell, 2014).

46. A study by the Center for Social Services Research and the Institute for Evidence-Based Change showed that over a three-year period, California foster youth performed worse than a comparison group on standardized tests in math and English, and saw fewer gains over this period (Frerer, Sosenko, Pellegrin, Manchik, Horowitz, 2013).

47. A study of 7,674 youth in 4th through 10th grades in Colorado, who had been in foster care at any point between 2008 and 2014, found that when a foster care placement and school transition co-occurred, students' academic growth significantly decreased in reading, writing, and math. On average, students' reading scores declined by 3.7 percentile points, writing reduced by 3.0 percentile points, and math declined by 3.5 percentile points. This academic decline continued to impact these students' achievement in the following years (Clemens, Klopfenstein, Lalonde, & Tis, 2018).

48. A Washington State study used state-level administrative data to evaluate the educational outcomes of students involved in the foster care system across several key educational benchmarks. Educational outcomes were tracked for a five-year longitudinal cohort (2012-2017) of Washington State children and youth experiencing foster care. The results indicate students involved in foster care in Washington State: experienced disproportionately less educational success than their peers; were more mobile, with out-of-home placements increasing the frequency of mid-year school transitions and decreasing the number of days students spend in school during the academic year; experienced exclusionary school discipline at more than three times the rate of their same-grade peers; met state standards in math, science, and English/language arts at less than half the rate of their same-grade peers; were less likely to graduate high school; and had substantially lower rates of postsecondary education entrance. The results suggest students in the foster care system often face multiple challenges that have potential to impose barriers to school success (Crume, 2020; Chen, Pyle & Aldrich, 2019).

49. In a qualitative study, general education and special education teachers (N=91) in urban schools throughout greater Los Angeles were questioned about their experiences related to the education of foster youth. Teachers reported that foster children's high mobility and frequent school changes created delays with record transfers, delays in evaluation for academic placement, and delay of special education services that resulted in long periods when children did not receive needed services (Zetlin, MacLeod, & Kimm, 2013).

50. A review of administrative data from the Massachusetts Department of Children and Family Services, the Courts, and the Department of Elementary and Secondary Education, found that during the 2014-15 school year, foster children with fewer foster care placement changes were less likely to attend two or more schools, less likely to be chronically absent, less likely to have a disciplinary action, and less likely to be held back a grade at the end of the school year (Massachusetts Court Improvement Program, 2019).

51. A Chapin Hall study of children in Illinois who enter foster care without first receiving in-home services found that among children ages six to 10 with at least one school change in the past two years, 36% were behind or underperforming compared to 56% of those with no school change. Of children ages 11 to 17, 56% were behind or underperforming as compared to 61% of children with no school changes. The researchers concluded that in many cases, children who were doing well before transferring schools continue to do well after transferring and those who were struggling continue to struggle (Smithgall, Jarpe-Ratner, & Walker, 2010).

52. Data from the California Child Welfare Indicators Project found that students with three or more placements (13%) were more than twice as likely to drop out of high school as students with one placement (6%). Students with one placement were most likely to graduate high school (63%) and students with three or more placements were least likely to graduate high school (43%) (Wiegmann, Putnam-Hornstein, Barrat, Magruder & Needell, 2014).

53. Researchers examined the relationship between school mobility for Colorado students in foster care and their ability to earn a high school diploma or high school equivalency diploma. Results showed students in foster care changed public schools an average of 3.46 times during their first four years of high school. As the number of school changes increased, so did the likelihood that the student would not earn a high school diploma or equivalent (Clemens, LaLonde & Sheesley, 2016).

54. The Government Accountability Office (GAO) conducted discussion groups with youth currently or formerly in foster care in selected states. The foster youth who participated in the survey identified challenges they faced when changing schools including: repeating classes because they were not in classes long enough to receive credit; repeating grades or not graduating on time; adapting to new teaching styles and class schedules; leaving friends and having to make new ones; and losing relationships with teachers and staff (GAO, 2019).

55. See the section of this factsheet on succeeding and graduating high school.

56. Data from the California Youth Transitions to Adulthood Study (CalYouth) were used to examine factors that influence the likelihood of youth in foster care finishing high school and entering college. For this specific analysis, researchers used the CalYouth Study's representative sample of adolescents in California foster care who were between the ages of 16.75 and 17.75 years old in late 2012 and who had been in care for at least six months (N=732). Researchers found that placement instability was linked with lower odds of youth enrolling in college (Okpych, Courtney, & Dennis, 2017). See also the Casey National Alumni study (Pecora et al., 2006), which analyzed outcomes for youth who had been in foster care from 1996-1998

(N=1,609) and found fewer placement changes predicted high school completion while in foster care (Pecora, Williams, Kessler, Hiripi, O'Brien, Emerson, Herrick & Torres, 2006).

57. A recent study used the nationally representative sample of adolescent foster youth (i.e., NSCAW Wave II) to test a model of placement-related factors on foster youth's school engagement. Researchers were interested in whether levels of school engagement were influenced by foster youth's perceptions of security in their foster placements, their reports of education-specific involvement by foster caregivers, and the mediating potential of adolescents' expectations for their future. Results indicate that placement security (i.e., fewer placement moves) contributes to more positive future orientations for youth in foster care, which was associated with higher levels of school engagement. The researchers concluded that feelings of placement insecurity can undermine school engagement and multiple school moves hinder students' ability to form strong relationships and connections with school communities (Mihalec-Adkins, Christ, & Day, 2020).

58. A study that asked students in foster care about their educational experiences found many of those interviewed discussed how discontinuity and instability in their educational experiences negatively impacted important social relationships. Most youth identified disruptions in social relationships and school placements due to child welfare involvement and the corresponding placement disruptions in school as an important and negative factor in their educational well-being and progress (Levy, et. al. 2014).

59. While qualitative and descriptive in nature, in-depth focus groups were completed with 46 high school youth in foster care in a large urban city in an unnamed midwestern state. Youth who were asked about their experiences in high school reported that school mobility negatively impacted their connections with peers and teachers who might otherwise have been a source of social support. Multiple school moves, particularly mid-year school transfers that disrupt educational continuity, made it hard for students to form strong relationships and connections in school. Students in the study reported often navigating new schools without sufficient support while also having to navigate their maltreatment experiences. Educational instability as a result of changes in residential placement reduced the youth's "sense of belonging," by requiring them to sever ties with their established communities at each school move (Johnson, Strayhorn, & Parler, 2020).

60. One-fifth of the 11-to-17 year-olds of the Illinois children who entered foster care without first receiving in-home services were either not enrolled in school or had been absent for so long that they were effectively not enrolled. Many of these youth had become disengaged from school and remained disengaged after entering foster care (Smithgall, et al., 2010).

61. Failure to immediately enroll foster children in their new school when they change schools during the school year was a major problem identified by the four focus groups conducted in California with representatives from child welfare, education,

and other agencies as well as foster youth and caregivers (Zetlin, Weinberg, & Shea, 2006).

62. The Every Student Succeeds Act (ESSA) of 2015, reauthorizes the Elementary and Secondary Education Act (ESEA). Among its provisions, the law requires states to ensure protections for vulnerable youth in the foster care and juvenile justice systems. These include school stability and transportation, mandatory data reporting, and agency collaboration. For the immediate enrollment requirement of ESSA, see 20 U.S.C. § 1111(g)(1)(E)(ii-iii). For the points of contact requirements of ESSA, see 20 U.S.C. §1111(g)(1)(E)(iv) and 20 U.S.C. § 1112(c)(5)(A).

63. A Chapin Hall study of children in Illinois who enter foster care without first receiving in-home services found about one-third (30.2%) of the six-to-10 year-old children entering foster care missed more than 10 days of school during the past semester or grading period. Some had missed as many as 40 days. Family problems were the principal reasons that children in this age group missed school. Poor school attendance was more prevalent than for younger children. Over half of the children ages 11 to 17 who were enrolled in school at the time they entered foster care had experienced excessive absences (10 days or more) during the previous semester or grading period. The principal reasons for school absences were family problems, running away, and hospitalizations (Smithgall, Jarpe-Ratner, & Walker, 2010).

64. The CSAW study in Philadelphia showed that students had an average 31% daily absence rate in the two months leading up to placement in foster care (Zorc, O'Reilly, Matone, Long, Watts, Rubin, 2013).

65. A study of educational outcomes for children in foster care in Massachusetts found foster children had greater rates of school absenteeism compared to the general student population. The MA Department of Elementary and Secondary Education defines chronic absenteeism as missing 10% or more of school days. This study found that among all students in Massachusetts, 13% were chronically absent during the 2014-15 school year. In contrast, about one-third of the foster care students were chronically absent and the rate increased as the grade increased (20% of pre-K to grade five; 38% of grades 6-8; and 47% of grades 9-12 foster students were chronically absent). The study also found that foster children had greater school drop-out rates than the general student population, with foster youth in grade nine having higher dropout rates (6%) compared to grades 10-12 and to their non-foster care peers (2%) (Massachusetts Court Improvement Program, 2019).

66. A study in San Mateo County, California found the average absence rate for children and youth in foster care was 12% compared to only 6% for nondependent youth. The percentage leaving school mid-year was 17% for children and youthin foster care compared to only 2% for nondependent youth (Castrechini, 2009).

67. Washington State's longitudinal study of educational outcomes for a cohort of children (2012-2017) experiencing

foster care found that having more out-of-home placements increased the frequency of midyear school transitions and decreased the number of days students spent in school during the academic year. Missing school days and not staying enrolled was most frequent among ninth graders in foster care, who, on average, attended 123 days of school per year compared to 153 days for a ninth grader not in foster care. At the end of the school year, only 61% of ninth graders in foster care remained continually enrolled for the entire academic year compared to 77% of nin_th graders not in foster care. (Crume, 2020; Chen, Pyle & Aldrich, 2019).

68. Children participating in the CSAW study were absent for twice as many days during the school year as the overall student body (Zorc, O'Reilly, Matone, Long, Watts, Rubin, 2013).

69. A study by the PolicyLab at the Children's Hospital of Philadelphia (CHOP) was commissioned by the Mayor's Office of Education and others to examine the outcomes of students involved with the child welfare and/or juvenile justice system. The study found that ninth graders with child welfare agency involvement were absent two-to-four weeks more   than students who were never involved during the school year (Hwang, Griffis, Song, & Rubin, 2014).

70. One in four foster youth in California are chronically absent compared to one in 10 for the general student population [https://www.cde.ca.gove/nr/ne/yr17/yr17rel88asp-CDE Dataquest]

71. Among participants in the CSAW study, children with unstable placements (defined as failing to reach a stable placement within nine months of coming into care), were 38% more likely to be absent from school compared to children with "early placement stability" (defined as finding a stable placement within 45 days of coming into care) (Zorc, O'Reilly, Matone, Long, Watts,Rubin, 2013).

72. An examination of data from the Massachusetts Department of Elementary and Secondary Education found that for children in foster care during the 2014-2015 school year, those with fewer foster care placement changes were less likely to be chronically absent (Massachusetts Court Improvement Program, 2019).

73. A study of Illinois children who entered foster care without first receiving in-home services found that nearly half of   the six to 10-year-olds demonstrated behaviors that were deemed problematic by the school and that two-thirds of the 11-to-17 year-olds exhibited problem behaviors, received disciplinary action, or both (Smithgall, Jarpe-Ratner, & Walker, 2010).

74. A study in San Mateo County found that close to one-third of youth in foster care for more than two years (31.8%) had experienced a suspension and 4.1% of these youths had been expelled. Children in foster care for shorter (less than six months) and longer (more than two years) periods of time were more likely to be suspended or expelled (Castrechini, 2009).

75. A study in Washington State found that students involved in foster care receive exclusionary school discipline interventions at much higher rates than their peers. During the 2018-19 academic year, 921 or 14.3% of the 6,455 students involved in foster care in Washington State received a suspension or expulsion, compared to 44,510 or 3.9% of the 1,136,386 students not in foster care. Additionally, in comparison to other student characteristics, such as income status and homelessness, students involved in foster care were far more likely to experience a suspension or expulsion. Students involved in foster care were also excluded from school due to disciplinary measures for more school days, significantly hampering their academic progress (Chen & Aldrych, 2019).

76. Among all students in Massachusetts in the 2014-2015 school year, 4% received a disciplinary action and 3% received an out of school suspension. In contrast, about 14% of foster youth received a school disciplinary action and 12% received an out-of-school suspension. The percentage of those receiving a disciplinary action was highest for foster care students in grades six to eight (Massachusetts Court Improvement Program, 2019).

77. Analysis of administrative data from the Indiana Department of Education and Department of Child Services for the 2018-2019 school year found that a higher percentage of foster care students are suspended (23.3%) and expelled (1.08%) compared to all students (9.3% and 0.25%, respectively). Expulsion rates are more than four times higher and suspension rates are more than 2 ½ times higher compared to general population students. Foster care students had high suspension rates in each grade with a significant spike in grade eight. The expulsion rate appeared to begin at grade five, with the largest percentage of youth expelled in grade 10. African American students, males, and foster youth with special education needs received more disciplinary actions than their peers (Indiana Department of Education and Department of Child Services, Foster Care Data Report, April 1, 2020).

78. A study of 315 youth in foster care in Oregon found that 33.2% experienced a school discipline event in the two-year time period of the study. Data for the study came from an existing study of siblings in foster care and administrative educational data. Data were used to examine the effects of youth and contextual characteristics on discipline events over time. Results revealed that being male, in a higher grade, a student of color, living apart from one's siblings, and school mobility significantly predicted discipline events. Additional analyses divided youth into groups based on race, sex, and disability status, taking into account the multiple identities of youth. Results from those analyses suggested that gender, race, and disability status cumulatively inform school discipline experienced among youth in foster care. The authors concluded that for students involved in foster care, these experiences of exclusionary school discipline can be particularly devastating and contribute to social barriers, achievement gaps, and learning delays that increase educational struggles (Kothari, Godlewski, McBeath, McGee, Waid, Lipscomb & Bank, 2018).

79. One focus group consisting of educational advocates and another consisting of school liaisons, all from California, suggested that failure to adequately address the needs of foster children led to emotional and behavior problems with which

schools do not know how cope (Zeitlin, Weinberg & Shea, 2010).

80. A growing body of research identifies adverse childhood experiences (ACEs) as a critical public health issue. ACEs are potentially traumatic experiences and events, ranging from abuse and neglect to living with an adult with a mental illness. They can have negative, lasting effects on health and well-being in childhood or later in life. Children exposed to traumatic events may experience longlasting negative effects that researchers have identified as including brain impairments, issues with physical growth and development, difficulty forming attachments, serious health problems, and significant mental health conditions (Bartlett & Rushovich, 2018; Kang-Yi, & Adams, 2017; McGuire, Cho, Huffhines, Gusler, Brown, & Jackson 2018; Pilkay and Combs-Orme, 2020; Turney, & Wildeman, 2016).

81. Data from Child Trends indicates that Black and Hispanic children in almost all regions of the United States are more likely to experience ACEs than their White and Asian peers (Sacks & Murphey, 2018).

82. Given the histories of maltreatment and complex trauma, it is not surprising that children and youth who are in the foster care system have been found to have high ACE scores, leaving them at risk for mental health and behavioral challenges in school settings (Hambrick, Oppenheim-Weller, N'zi, & Taussig, 2016). ACEs of children in foster care include emotional, physical, or sexual child abuse; neglect; divorce or separation of parents; domestic violence; alcohol or substance abuse; mental illness of family member, incarceration of family member (Deutsch, Lynch, Zlotnick, Matone, Kreider & Noonan, 2015; DeFosset, Gase, Ijadi-Maghsoodi & Kuo, 2017). Research estimates that 20% of abused children in foster care experienced symptoms of post-traumatic stress disorder (PTSD) as a result of an ACE versus the 11% that remained in their original home (Bartlett & Rushovich, 2018). In a study of women experienced the foster care system, study participants reported an average of 5.68 ACEs. Participants' experiences ranged from 97% reporting at least one ACE to 23% reporting nine ACEs (Bruskas & Tessin, 2013).

83. In a study investigating the lifetime exposure of older youth in foster care to various trauma including PTSD, researchers found the overall trauma exposure rate for youth in care was double that in the general population. They also found that females were much more likely to experience sexual trauma and consequently exhibited higher rates of PTSD than males. Approximately 30% of respondents in the study reported experiencing their worst trauma at or after age 16. While the recommendations for this study were geared to improving child welfare policy and practice to account for the   trauma experience of children and youth in foster care, the findings also impact the role that schools can and should when responding to students with PTSD and other trauma histories (Salazar, et. al., 2013).

84. A literature review examined the relationship between childhood maltreatment and educational outcomes, finding that children with maltreatment histories often experience impairments in their academic performance—including special education, grade retention, and lower grades—and their mental

well-being. Researchers found that these impairments were particularly likely to be identified among maltreated children in foster care. When maltreatment histories are not addressed adequately, there is a greater likelihood that a child will express anxiety, low mood, aggression, deficits in social skills and poor interpersonal relationships. These behaviors often disrupt their learning and potentially disrupt the classroom setting. Many schools are not adequately equipped to address the impacts of trauma on learning although there is a promising movement of schools becoming more "trauma informed" (Romano, et. al., 2015).

85. Numerous empirical studies and comprehensive literature reviews document the barriers related to foster youth's traumatic life experiences that can impact academic achievement, including: underachieving in reading, comprehension, writing and standardized tests. These behaviors make them more likely to bedisciplined and removed from the classroom far more often than non-foster peers. They also have higher rates of school leaving and are more likely to hav Individual Education Plans (IEPs) that address emotional/behavioral issues when compared to their non-foster peers (e.g., Clemens, Helm, Myers, Thomas, & Tis, 2017; Morton, 2017, 2018; O'Higgins, Sebba, & Gardner, 2017; Souers & Hall, 2016).

86. In a qualitative study involving in-depth interviews of former foster youth who were enrolled in college (N=21; aged 18-24), researchers asked youth to share the challenges they faced to pursuing postsecondary education. The former foster youth identified mental health concerns as significant barriers to their success in college. For the participants in the study, maltreatment, resulting in foster care placement, had resulted in trauma histories and mental health diagnoses. Anxiety, depression, and PTSD were the most common diagnoses reported by participants (Morton, 2017).

87. A study of all Oregon foster youth aged 16-18 found over 30% had identifiable disabilities that fall in the realm of special education and developmental delays in different domains of their lives including physical impairments (Lee, Powers, Geenen, Schmidt, Blakeslee & Hwang, 2018). An earlier study in an Oregon urban school district (Geenan & Powers, 2006) found that 44% of foster children were receiving special education or Section 504 services, and that 30% of those children were placed in the most restrictive learning environment. This finding is consistent with other research finding that one-third to one-half of foster children are identified for special education compared to 10-11% of the general school population (McLeskey, Rosenberg & Westing, 2013; Zetlin, 2006).

88. Just over half of the 11-to-14 year-old foster youth and 45% of the 15-to-18 year-old foster youth in Lucas County (Toledo), Ohio were identified as having special education needs. Just under one-fifth of the five to 10-year-olds were identified as having special education needs but data were missing for nearly one-third (Theiss, 2010).

89. Using data from the NSCAW-II, a recent study examined receipt of special education services among 1,855 child welfare involved youth. It found that youth in foster care had

approximately 2.7 times higher odds of receiving special education than children being cared for by biological or adoptive parents (Gee, 2020).

90. The high prevalence of special education status among children in foster care has been consistently reported in the literature (Smithgall, Gladden, Howard, George & Courtney, 2004; Geenan & Powers, 2006; Scherr, 2007; Allen & Vacca, 2010). Some estimates show that as many as 25% of children in foster care aged 6–17 years receive special education, which is more than double the rate among children nationally (Casanueva, Smith, Dolan, & Ringeisen, 2011).

91. Children in foster care and in special education in a large urban Oregon school district changed schools more frequently and were in more restrictive settings than special education students who were not in foster care. Moreover, the Individualized Education Plans for foster youth were of poorer quality and less likely to include goals related to postsecondary education or independent living skills than those of special education students not in foster care. The foster youth were also less likely than other special education students to have an advocate present during their transition planning meetings (Geenen & Powers, 2006).

92. Two focus groups consisting of California foster parents and relative caregivers identified the failure of schools to acknowledge their children's needs for services to address learning or behavior problems, and to provide their children with more intensive supports as ongoing problems (Zetlin, Weinberg & Shea, 2010).

93. California school liaisons who participated in the focus group study suggested that some problems that resulted in foster children being referred for special education services may be due to the emotional trauma or frequent school changes they have experienced rather than to learning disabilities (Zetlin, Weinberg, & Shea, 2010).

94. A review of data from the NSCAW-II study found that most children in the child welfare system who potentially needed special education services (across all placement types), did not receive those services. Caregivers of children with a condition that would potentially quality them for Part B or C services in the study reported that half or fewer received early intervention (an Individual Family Service Plan) or special education (an Individualized Education Plan) services (Casanueva, Smith, Ringeisen, Dolan, Testa & Burfeind, 2020); see also Petrenko, Culhane, Garrido & Taussig, 2011.

95. One study found that 84% of the youth whose screenings indicated potential special education needs did not receive related services within 9-12 months. California school liaisons who participated in the focus group suggested that some of the problems that resulted in foster children being referred for special education services may be due to the emotional trauma or frequent school changes they have experienced rather than to learning disabilities (Zetlin, Weinberg, & Shea, 2010).

96. In surveys of general education and special education teachers (N=91) in urban schools throughout greater Los Angeles, teachers reported that foster children's high mobility and frequent school changes delayed of special education services. These delays resulted in long periods when children did not receive needed services (Zetlin, MacLeod, & Kimm, 2013).

97. Congregate care is defined in the Adoption and Foster Care Analysis and Reporting System (AFCARs) as "a licensed or approved setting that provides 24-hour care for children in a group home (7-12 children) or an institution (12 or more children). These settings may include a child-care institution, a residential treatment facility or a maternity home" AFCARs (https://www.acf.hhs.gov/cb/data-research/adoption-fostercare). Research has included different definitions of congregate care. Some studies, for example, include only group homes in their definition while others include group homes, residential treatment centers, and psychiatric and other hospital programs.

98. Studies have indicated a wide range in use of congregate care, with some jurisdictions using few nonfamily settings for placement of foster children, and others placing nearly nine out of 10 children in a group home setting (e.g., Wulczyn, Alpert, Martinez & Weiss, 2015; Chadwick Center & Chapin Hall, 2017). In 2018, for 50% of states, 3.1% of children entering foster care under age 12 were placed in group homes or institutions —an improvement over the previous reporting period (3.9% in 2014, with 65% of states demonstrating an improvement in this statistic) (Child Welfare Outcomes Report to Congress, 2018). Other national level analyses have found approximately one in seven foster youth are placed in a group setting, and amongst teens, one in three are placed in congregate care (The Annie E. Casey Foundation, 2015). Chow et al. (2014) found the majority of youth who lived in congregate care were older, male, African American, and were youth with developmental delays and/ or learning disabilities, as well as mental health and physical needs (Chow, Mettrick, Stephan & Von Waldner, 2014). Other analyses of group care placement settings found that African American and Latino youth were more likely than White youth to be placed in group settings (e.g., African American youth were 18% more likely to be placed in a group home setting than their White peers), and boys were more likely than girls to be in group placements (e.g., boys were 29% more likely to be placed in group placements than girls) (Wulczyn, Alpert, Martinez & Weiss, 2015; Chadwick Center & Chapin Hall, 2017).

99. Child welfare and probation records in Los Angeles County were examined to investigate the relationship between group home placements and the risk of juvenile delinquency among foster youth. Foster youth with at least one group home placement were compared to a matched sample of foster youth in other types of placements (N=8,226). Results indicated the risk of delinquency was approximately 2.5 times greater for adolescents with at least one group home placement compared with youth in the other foster care settings (Ryan, Marshall & Herz & Hernandez, 2008).

100. A study compared outcomes for a matched sample of behaviorally troubled children receiving intensive in-home

therapy with those residing in group home settings and receiving residential care services (N=786). It found that youth in the group home/residential care setting had more justice system involvement, made less progress in school, and had less placement stability (Barth, Greeson, Guo, Green, Hurley, & Sission, 2007).

101. The Invisible Achievement Gap-Part 2 report of children in foster home settings in California found that children in family-like foster care placements were more than twice as likely as youth in group care placements to test at proficiency levels in math and English language arts. Among students placed in group homes, 61% tested below basic proficiency levels in English language arts and 66% tested at the two lowest levels of proficiency in math (Wiegmann, Putnam-Hornstein, Barrat, Magruder & Needell, 2014). In another exploratory study of characteristics of foster youth residing in group homes (N=30 group homes in a mid-Atlantic unnamed state), researchers found the majority of youth who lived in congregate care were typically older, male, African American, and were youth with developmental delays and/or learning disabilities, as well as youth with mental health and physical needs (Chow, Mettrick, Stephan & Von Waldner, 2014). (For a recent, comprehensive review of educational challenges faced by youth in congregate care, see Armstrong, Duren-Green & Kruger, 2020).

102. Students in congregate care placements in Massachusetts had higher rates of attending two or more schools, and higher rates of chronic absenteeism. They also received more disciplinary actions, and were retained in school at higher rates than other types of foster care placements (Massachusetts Court Improvement Program, 2019).

103. Analyses linking statewide, individual-level student education and child welfare data of K-12 students in foster care in California, indicated that 72% of children placed in kinship care attended one school, 21% attended two schools, and 7% attended three or more schools. For youth placed in group homes, however, findings indicated that 49% had attended one school, 29% attended two schools, and 21% attended three or more schools. Analyses found foster care placement instability and placement in more restrictive settings were strongly correlated with heightened school mobility. Overall, the study found that youth in congregate care, on average, were three times as likely to attend three or more schools – a finding prior research has associated with poorer educational outcomes (Wiegmann, Putnam-Hornstein, Barrat, Magruder, & Needell, 2014).

104. See previous research summarized and cited in section on school stability and education outcomes for examples.

105. A California Department of Social Services report to the legislature (2015) indicated that just 35% of youth in a congregate care setting in the state will graduate high school, compared to 49% of those residing in foster homes.

106. Weigmann et al. (2014) found that in students grades 9-12 who were living in group homes were the most likely of all placement types to have dropped out of school. Students in kinship and guardianship placements were the most likely of

foster care grade-12 students to graduate from high school at the end of the school year (64% and 71%, respectively). In contrast, students in group homes (35%) were among the least likely to graduate (Weigmann, Putnam-Hornstein, Barrat, Magruder & Needell, 2014).

107. Analyses of child welfare and school administrative data from a longitudinal study in Colorado found that for each month that a student remains in a family foster care setting, the risk of dropping out of school decreases by 2.4% (assuming there are no additional school changes during this time). For a full 12 months more of family-like foster care, the risk of foster youth school dropout decreases to 32.7% (compared to being either in congregate care or not in out-of-home care). In addition, for every three months students were placed in family-like foster care settings, their academic growth percentile was 2.1 points better than those students who were either at home or in congregate care (Clemens & Sheesley, 2018; Clemens, Klopfenstein, Lalonde & Tis, 2018). See also similar findings from California's Invisible Achievement Gap-Part 2 study, Weigmann et. al, 2014).

108. Interviews with foster youth (N=21; aged 18-25) who had been in congregate care (defined in the study as group homes, residential treatment centers, mother-child facilities and maternity facilities) in New York City's child welfare system examined the effectiveness of efforts to prepare youth for life after foster care, and postdischarge outcomes for youth, particularly when discharged to independent living. The study also included interviews with professional stakeholders, including representatives of child welfare agencies providing congregate care, children's attorneys, social workers, and judges (N=56). Results indicated that professionals and young adults alike were concerned about the quality of their independent living preparation in congregate care, as well as their preparation to pursue further education and work-related goals (Freundlich & Avery, 2006).

109. A multimethod study involving surveys, focus groups, and interviews of youth placed in residential care in Pennsylvania (N=394) found that 56% of youth attended an onsite residential school program (only 10% of the youth attended regular public schools). Outcomes for the onsite schools were not positive, with 52% of caseworkers reporting the curriculum at onsite schools was not grade-level appropriate. Instruction hours were also limited. Almost half of the foster youth surveyed reported they had been taught in a classroom with children of varying ages and abilities and that school consisted largely of using independent worksheets (Styer, 2011).

110. In a 2017 survey, 80% of attorneys and 76% of judges agreed with the following statement: "Children in foster care should only be placed in nonfamily settings (shelters, group care, residential treatment) when such placements are therapeutically or medically necessary" (American Bar Association, 2018).

111. The Chadwick Center in San Diego and Chapin Hall examined the California Evidence-Based Clearinghouse for Child Welfare (CEBC)—a registry of programs that can be used by professionals serving children and families in child welfare

systems – to identify alternative interventions to congregate care for youth with clinical needs (e.g., behavioral and mental health needs). They also looked for interventions with strong research support for their effectiveness (i.e., are evidence-based or well supported by research). These programs are briefly summarized in the review, along with the authors' general recommendations for reducing unnecessary use of congregate care (Chadwick Center & Chapin Hall, 2017).

112. Nationally, the percentage of men and women aged 22–44 who had been in foster care and lacked a high school diploma or General Education Development/Diploma (GED) (24.9% for men; 21.3% for women) was just over twice the percentage of those who had never been in foster care (12.0% and 9.6%, respectively) (National Health Statistics Report, January 22, 2020). The National Center for Education Statistics also reports that compared to the national graduation rate of 84% in 2017, 65% of youth in foster care receive a high school diploma or GED by 21 years of age (National Center for Education Statistics, 2018).

113. In 2019-2020, 58% of foster youth graduated high school in California compared to 85% of non-foster care youth. Graduation rates in the California data are calculated as the percentage of students who graduate high school with a traditional high school diploma within four years from the time they enter ninth grade (California Department of Education, Foster Youth in California Schools 2019-2020, retrieved from: Foster Youth in California Schools - Student Group Information (CA Dept of Education). A California study conducted by WestEd in 2013 also found that graduation rates for 12th-grade foster youth was 58% compared to 84% for all 12th-grade students in the state. Researchers found the graduation rate for foster youth to be the lowest of any at-risk group examined in the study (Barrat & Berliner, The Invisible Achievement Gap, 2013).

114. In Washington State, researchers found overall graduation rates among all students have been steadily increasing over the last five years – an increase that was also observed among students involved in the foster care system. Despite these gains however, researchers found that less than half of students involved in the foster care system graduated from high school with their high school class. Among the class of 2019, the state average for high school graduation was 80.9%. In contrast, students involved in foster care in the class of 2019 graduated at only 46.2%. This trend was particularly pronounced for Black, Indigenous, and People of Color (BIPOC) students, as less than 40% of BIPOC students involved in Washington's foster care system graduated from high school (Chen, Pyle, & Aldrich, 2019).

115. In Oregon, only 35% of youth in foster care completed high school compared to 77% of youth not residing in foster care (Oregon Department of Education, 2019).

116. A review of secondary data from a multistate evaluation of youth programs found that LGBTQ foster youth (N=405) were less likely to receive a high school diploma or GED when compared to their heterosexual foster youth peers (43% vs. 63%). LGBTQ foster youth were also less than half as likely to obtain

a diploma or GED even after controlling for demographics, victimization histories, and child welfare experiences (Shpiegel & Simmel, 2016).

117. In 2014, the Colorado Department of Education began reporting on graduation, completion, and mobility rates for students in foster care. This was primarily accomplished through a five-year trend study (2007- 2012) conducted by the University of Northern Colorado. The study compared statewide averages for students across three demographic characteristics and unique populations. Students were placed into three groups: students who had been or were in foster care during the 2007-08 to 2011-12 school years, students who were homeless over this same time period, and students who were neither homeless nor in foster care during this period with all students being in ninth grade at the start of the 2007-08 school year. The report primarily served as a measure of whether students graduated within four years of entering ninth grade. The study found that although the on-time graduation rate for Colorado students as a whole steadily improved, the rates for students in foster care remained stable (no improvement) and well below their non-foster care peers. Students in foster care dropped out one or more times more than non-foster peers, and they dropped out earlier in their educational careers than other populations of students (e.g., students who were homeless). The overall graduation rate for students in foster care included in the Class of 2013 was 27.5%, compared to the state graduation rate of 76.9%, and the graduation rate of students who are homeless which was 42% (Clemens, 2014; Parra & Martinez, 2015).

118. This report calculated that raising the graduation rate of one year's cohort of youth aging out of foster care to the national average would increase earnings and tax revenues totaling over $2 billion with an estimated impact in excess of $61 million in the first year alone (Jim Casey Youth Opportunities Initiative, 2013).

119. In a review of California child welfare and education data compiled from 10 districts and county offices around the state of California in 2016-2017, only 54% of foster youth graduated from high school in four years compared to 83% percent of their non-foster youth peers (Pipeline to Success Report, October 2019).

120. More than one-third of the Casey National Alumni Study participants reported that they had repeated a grade in school (Pecora, et al., 2006) and the 17 and 18 year-old Midwest Study participants were 1.7 times more likely to report that they had repeated a grade than a nationally representative sample of 17 and 18 year-olds (Courtney, et al., 2004).

121. Data from the Indiana Department of Education show that for 2018-19, foster care students (3.2%) were retained in kindergarten through grade 11 more than three times as often when compared to all Indiana students (1%) (Indiana Department of Education Foster Care Data Outcomes Report, 2018-2019 school year, April 2020).

122. Findings of a study by the Center for Advanced Studies suggest that an achievement gap exists for youth in child welfare compared to youth without child welfare involvement. The

proportion of youth proficient on the Minnesota Comprehensive (MCA-II) math and reading tests were consistently lower in the child welfare population than for the general population, even after controlling for race and socioeconomic status (Piescher, Colburn, LaLiberte, & Hunt, 2014).

123. For the academic year 2018-2019, youth in foster care in Washington State were more likely to perform lower on state assessments compared to their non-foster care counterparts, with only 22.4% meeting grade-level standards in science (compared to 46.8% of non-foster youth), 21.67% meeting grade-level standards in math (compared to 49.1% of non-foster youth) and 32.7% meeting grade-level standards in English language arts (compared to 59.8% of non-foster youth) (Chen, Pyle & Aldrich, 2019).

124. One study using state-level child welfare and education administrative data to examine educational outcomes for youth in foster care in Colorado (N=7,674 youth in 4th through 10th grades who were also in foster care at any point between 2008 and 2014), found that youth involved in foster care started each school year below grade level and then continued to fall further behind year over year (Clemens, et al., 2018).

125. In Indiana, foster care students had substantially higher rates of waivers for graduation requirements than all students (35.6% of foster care students received a wavier compared to 12.1% of all students). This finding indicates that foster students may be struggling to meet proficiency benchmarks or credit requirements when compared to their peers (Indiana Department of Education Foster Care Data Outcomes Report, 2018-2019 school year, April 2020).

126. Analysis of California child welfare and education data from 10 districts and county offices around the state in 2016-2017, found that foster youth were (regardless of their race/ethnicity) more likely to achieve a lower grade point average (GPA) than their peers across all high school grade levels. While it is important to note that the researchers did not control for the length or intensity of a child's experience in foster care in their analyses, they did find the average cumulative high school GPA for foster youth was nearly one whole grade point lower than their non-foster youth peers (Pipeline to Success Report, October 2019).

127. Researchers reported the odds of graduating from high school among foster care alumni in the Northwest Study were 4.6 times higher if they had experienced a low rate of placement change (i.e., less than .5 per year) and 2.7 times higher if they had experienced a moderate rate of placement change (i.e., .50 to .99 per year) than if they had experienced a high rate of placement change (i.e., at least one per year). In addition, their odds of graduating from high school were twice as high if they had experienced six or fewer school changes than if they had experienced 10 or more (Pecora et al., 2009).

128. A Colorado study examining the effects of child welfare placement and school moves on academic success of foster youth (N=7,674 youth in 4th through 10th grades in Colorado who

were also in foster care at any point between 2008 and 2014). Researchers found that placement changes and school moves had a statistically significant negative relationship with student academic growth, which worsened when child welfare placement and school instability occurred together. The study found that each time a transition in child welfare placement and school co-occurred, academic growth was reduced on average by 3.7 percentile points in reading, 3.0 percentile points in writing, and 3.5 percentile points in math (Clemens et al., 2018).

129. The rate of high school completion for foster care alumni in both the Northwest Alumni Study and the Casey National Alumni Study was comparable to the 2008 high school completion rate of 85% among 18-to-24 year-olds in the general population. However, 29% of the Northwest Alumni Study participants and 19% of the Casey National Alumni Study completed high school with a GED rather than a high school diploma compared to 6% of 18-to-24 year-olds in the general population (Pecora, et al, 2005; Pecora, et al., 2006).

130. In Washington State, students involved in foster care were far more likely than their peers to earn a GED credential rather than a traditional high school diploma (Chen, Pyle & Aldrich, 2019).

131. American Indian/Alaskan Native foster care alumni were about as likely to complete high school as non-Hispanic White alumni in the Casey National Alumni Study but were significantly less likely to have a high school diploma and significantly more likely to have a GED (O'Brien, et al., 2010).

132. Although the African American foster care alumni in the Casey National Alumni Study were about as likely to have completed high school as their non-Hispanic White counterparts, they were significantly less likely to have completed high school with a regular diploma (Harris, et al., 2009).

133. Likewise, African American foster care alumni in the Northwest Study were significantly more likely to have completed high school than their non-Hispanic White counterparts, but significantly less likely to have a high school diploma (Dworsky, et al., 2010).

134. While an older study, a comprehensive review of academic literature about the GED credential found minimal value of the certificate in terms of labor market outcomes. Reviewers also found little support for the premise that the GED can serve as a pathway to college, as few individuals actually use the GED to obtain postsecondary credentials (Heckman, Humphres & Mader, 2010).

135. Analyzing data from the National Youth in Transition Database (NYTD) Outcome survey, NYTD service files, and the Adoption and Foster Care Analysis and Reporting System (AFCARS), researchers compared educational outcomes for foster youth who had received Independent Living Services (ILS) to those who did not participate in ILS (N=4,206). ILS was defined in the study as receiving any, or a combination of, academic support, career preparation, employment or vocational training, mentoring or education financial assistance during

the ages of 17-18. Researchers also used statistical techniques (propensity score matching) to adjust for any potential selection bias and preexisting differences between youth who received ILS and youth who did not (e.g., race and ethnicity, sex, disability, previous experience of homelessness, reasons for removal from family, placement type, length of time in care, and the number of placements). With respect to high school completion, the study found that youth using ILS were significantly more likely than those who did not use ILS to complete a high school education. The study also found that youth using ILS were significantly more likely to complete postsecondary education and to work full-time (Kim, Ju, Rosenberg & Farmer, 2019).

136. Research has found that extending foster care to age 21 has educational benefits for youth. The CalYouth study data found, for example, that each additional year in extended foster care increased the probability that youth completed a high school credential by approximately eight percentage points (Courtney, Okpych & Park, 2018).

137. The Take Charge program (now called My Life), an educationally focused mentoring program, for youth who were living in foster care and receiving special education services, was evaluated using a randomized control trial method in two studies in an urban school district in Oregon. In the first study, 69 youth ages 16-17 were enrolled and the second study enrolled 133 youth ages 14-17. Youth in the intervention groups received individualized coaching by trained staff as well as group mentoring by "near-peer foster care alumni" over the academic year. Control group youth did not receive the program services. Across the two studies, positive outcomes were noted in self-determination and mental health (as rated by youth and parents), independent living activities, use of transition services, self-identified educational goals and accomplishments, educational planning knowledge and engagement in their own education plans, postsecondary preparation, and overall quality of life. There were no significant differences, however, between the intervention and control groups in GPA or school attitude (Geenen, Powers, Cunningham, McMahon, & Nelson, 2013; Powers, Geenen, Powers, Pommier-Satya, Turner, Dalton & Swank, 2012). In a follow up randomized control trial study (N=288), researchers found that when compared to the control group, the My Life group had greater postintervention and one-year follow-up gains on several indicators of self-determination. Findings also suggest that My Life foster youth participants with low-to-average risks in terms of placement stability, placement restrictiveness, and traumatic stress levels seem to benefit the most from the program (Blakeslee, Powers, Geenan, Schmidt, Nelson, Fullerton, George, McHugh & Bryant (2020).

138. An evaluation of a tutoring/mentoring program (School Success) for K-12 youth in foster care (N=615) in 18 school districts in Ohio found that the academic skills of participants (measured at pre- and post-involvement in the program) were improved. Most children and youth in the program progressed to their appropriate grade level while improving their overall grade point averages from 1.74 to 2.56 in core academic subjects. Program participants demonstrated one-year improvements that were significant when compared with those of their non-foster care peers: Basic reading and comprehension skills improved 58%; math reasoning and comprehension skills improved 50%; basic writing skills improved 48%; and overall academic skills improved 51%. These improvements were seen across both gender and race, with almost equal gains made by minority and nonminority children and youth (Mallet, 2012).

139. One of the major provisions of Preventing Sex Trafficking and Strengthening Families Act of 2014 is the development of standards for foster care recipients' "participation in age or developmentally appropriate extracurricular, enrichment, cultural, and social activities" 42 U.S.C.A. § 675(10). One study examined if participating in extracurricular activities was associated with completing high school and attending college among a sample of older youth transitioning from foster care in Missouri (N = 312). Results of interviews conducted with the foster youth indicate that better self-reported grades and greater educational aspirations are associated with extracurricular participation. Although participation in extracurricular activities was associated with graduating from high school in the study sample, it was not associated with starting college by age 19 (White, Scott & Munson, 2018).

140. Nineteen young adults who were in foster care were interviewed about turning points in their lives that led them to complete a postsecondary education or were on track to complete one. Participants identified "safe havens" as a turning point, including school and home environments that provided a refuge from stresses in other parts of their lives. Participants noted that schools were spaces where they could demonstrate their academic competencies or gain access to new knowledge, helping them find relief from distress and opportunities to set goals (Haas, 2016).

141. CalYouth study data indicate that by age 23, most former foster youth (86.5%) aspire to complete a college degree with 77.1% wanting to complete a four-year degree or higher. With respect to degree completion, 10.8% of former foster youth had actually earned a college degree by age 23, including 6% who earned a two-year degree and 4.8% who earned a four-year degree (Courtney et al, 2020). In another analysis of CalYouth and Midwest study data, researchers found that by age 21, 31-52% of former foster youth enrolled in college and by age 25, 8% had earned a college degree (Okypych & Courtney, 2019).

142. In a recent study examining college preparedness, researchers examined the path from high school to college among a sample of 500 former foster youth enrolled at a large, urban Northeastern public university. Overall, the study found former foster youth were "underprepared" for college work. When compared to non-foster youth on standard college admission predictors of success, former foster youth had lower SAT scores, advance placement (AP) course and exam participation and performance. Once in college, former foster youth had lower rates of successful completion/degree attainment when compared to peers without foster care experience (Sandh, Donaldson & Katz, 2020).

143. Forty-three percent of foster care alumni in the Northwest Alumni Study had completed any postsecondary education

and almost half of the foster care alumni in the Casey National Alumni Study, however only 2% of the former and 9% of the latter had at least a bachelor's degree (Pecora, et al., 2006; Pecora, et al., 2005).

144. Forty-seven percent of participants in the Midwest study had completed at least one year of college at age 26, but only 8% had obtained a postsecondary degree. By comparison, 46% of 26-year-olds in the nationally representative National Longitudinal Study of Adolescent Health sample had obtained a two- or four-year degree (Courtney et al., 2011).

145. Compared to students in foster care in 2019 in the United States, 46% of *all* 25- to 29-year-olds earned at least an associate degree and 36% earned at least a bachelor's degree, and college enrollment overall has increased since 2000 from 35% of high school graduates to 40% (McFarland, Hussar, Zhang, Wang, Hein, Diliberti, Cataldi, Bullock & Barmer, 2019).

146. One study using administrative data from Michigan State University showed that former foster youth were more likely to drop out of college compared to a comparison group of youth who were never in foster care but were from low-income backgrounds and were first generation college students. The study showed that 34% of former foster youth dropped out before earning a degree compared to 18% for the comparison group (Day, Dworsky, Fogarty, Damashek, 2011).

147. For the former foster youth in the CalYouth study who were in college, only 25% had been reading at or above their grade level at age 17 (Courtney et al., 2017). Among first-year college students, foster youth earn an average of 9.3 college credits compared to 15.1 earned by non-foster youth (Pipeline to Success Report, 2019).

148. One study found that mobility in foster care was significantly associated with going to college, with more frequent placement changes decreasing youths' odds of enrolling in college (Okpych et al., 2017). Okpych and Courtney (2017) also found placement type differences, with youth living in kinship foster homes significantly more likely to enroll in college than youth living in foster homes with nonrelatives. Courtney and Hook (2017) found that youth residing in a group care setting were less likely to advance in their educational attainment than were youth in foster care homes with nonrelatives. In the Northwest Alumni study, researchers found the odds of graduating from college were 3.7 times higher for foster care alumni if they had experienced six or fewer school changes than if they had experienced 10 or more (Pecora, et al., 2009).

149. CalYouth study data were analyzed to examine the effect of one additional year in foster care on a number of outcomes. At age 21, one year of extended foster care (EFC) was significantly associated with an increased likelihood of high school graduation and enrollment in college. However, among the youth who made it to college at 21, the amount of time spent in extended foster care was not significantly related to the likelihood they would persist in college through two semesters or to the total number of semesters they completed (Courtney, Okpych, & Park, 2018).

150. A Washington State study examined education attainment among foster youth who participated in EFC compared to former foster youth who did not participate in EFC. The sample for analysis was all youth who turned 18 while in an out-of-home placement in Washington State's child welfare system between 2006 and 2018 (N=5,751). The study used rigorous statistical methods (i.e., propensity score matching) to ensure the sample of youth aging out of care who did not participate in EFC were as similar as possible to those that did participate in EFC. Researchers found that students who participated in EFC had significantly better high school graduation rates and rates of postsecondary enrollment. Researchers also found that compared to White youth, Native American youth were less likely, and Latino youth were more likely, to participate in EFC (Miller, Bales, & Hirsch, 2020).

151. Research has found generally that increasing the number and quality of significant support figures (e.g., mentors) available to youth increases their chances of healthy development (e.g., Masten, Cutuli, Herbers & Reed, 2009). In an early study examining the impact of a mentoring program for foster youth, the odds of enrolling in college were found to be 4.6 times higher for foster youth who participated in a Washington State mentoring program than for nonmentored peers with similar characteristics even after controlling for other factors (Burley, 2009).

152. The Massachusetts Adolescent Outreach Program uses licensed social workers to coach/mentor older youth (ages 15 to 20) who are transitioning from foster care to help them develop and engage in independent living skills, including applying for jobs and college. A randomized control trial study of the program (N=194) found positive impacts for the program on college enrollment and retention, obtaining important documents (e.g., birth certificate, license) and receiving assistance with education, employment, housing, and financial management. There were no differences, however, between the control and intervention groups on several other target indices, including employment, economic well-being, stable housing, delinquency, pregnancy, or preparedness for independence. No racial/ethnic disparities in program effect were detected. (Courtney, Zinn, Johnson, & Malm, 2011; Greeson, Garcia, Kim, & Courtney, 2015).

153. While a review of the academic literature to date indicates the need for more evaluation of campus-based support programs serving foster care alumni (e.g., Schelbe, Day, Geiger, & Piel, 2019; Schelbe, Randolph, Yelick, Cheatham & Groton, 2018), some emerging evidence indicates the strong value of foster youth participating in campus support programs. In one study, for example, foster youth who participated in a campus support program were twice as likely to persist in college than those who did not (Okpych, Park, Sayed & Courtney, 2020).

154. A qualitative study of a campus-based program in an unnamed western state university aimed at providing support to foster youth enrolled in college provides insight into foster youth's experience with such programs. Thirty former foster youth participated in in-depth interviews about the benefits of the program as well as the difficulties they continued to face in being successful college students. Students valued the relational

aspects of the program the most, noting that the "most important benefit" they received from the program was a sense of belonging to a community of people who had similar backgrounds and experience. Participants explained that the most common challenge they experienced in college was being academically successful. This challenge arose, most often, because they had to adjust to the expectations associated with the "university student" role (e.g., time investment required in courses, balancing academic requirements with other responsibilities including work and friends). They also reported not being fully prepared by their high school experience to be successful college students (Oppsal & Eman, 2018).

155. Kim et al. (2019) analyzed the National Youth in Transition Database (NYTD) Outcome survey and service files and AFCARS data to test whether Independent Living Service (ILS) had an effect on educational attainment of a matched sample of foster care youth (N=4,206). The researchers found that ILS significantly increased the high school graduation rates among students involved in foster care and increased the likelihood that they would go on to postsecondary education opportunities (Kim, Ju, Rosenberg, & Farmer, 2019).

156. CalYouth Wave 4 study data show that over two-thirds (67.6%) of former foster youth at age 23 who were enrolled in postsecondary education were using a scholarship, loan, or some other type of financial aid to help pay for educational expenses. Among youth who were currently or recently enrolled in college, Pell Grants and Educational Training Vouchers (ETVs) were the most common ways they were paying for college. Among youth who were currently or recently enrolled in college, 50.6% had some involvement in a campus support program for foster youth, largely due to the many available campus-based support programs in California, such as Guardian Scholars. (Courtney et al., 2020).

157. A national study using the National Youth in Transition Database (NYTD) found that states with tuition waivers, on average, have postsecondary enrollment rates 29% higher than states without tuition waivers (Watt Kim & Garrison, 2018).

158. To examine the impacts of Education and Training Vouchers (ETVs) and campus support programs (CSPs) on postsecondary education persistence for college students with foster care backgrounds, researchers drew on data from the CalYouth study and National Student Clearinghouse. The study sample included 401 former foster youth who had enrolled in college. Researchers controlled for youth characteristics such as educational background, foster care history, child welfare services, and postsecondary institution characteristics, and compared persistence in college for youth who had used ETVs and CSPs with those who had not. The study found ETV receipt and CSP involvement increased the expected odds of college persistence. Moreover, foster youth who participated in a campus support program were two times more likely to persist in college than those who did not participate (Okpycha, Park, Sayed & Courtney, 2020).

159. In a study analyzing administrative data (N=4,263) from the Texas Department of Family and Protective Services and Texas

Higher Education Coordinating Board, researchers found that foster youth who used tuition waivers were 3.5 times more likely to graduate with a bachelor's degree within six years of turning 18. However, the study also found the tuition waiver program to be underutilized. Youth who would be eligible for a tuition waiver (identified by examining available information in administrative datasets), were tracked to see if they actually used a waiver. Analyses determined that 40% of youth who were eligible to use a tuition waiver did not use one (Watt & Faulkner, 2020).

160. American Indian/Alaskan Native foster care alumni in the Casey National Alumni Study were about as likely as their non-Hispanic White counterparts to have experienced some postsecondary education. However, they were significantly less likely to have actually completed their postsecondary education and graduated from college when compared to non-Hispanic White students. No significant differences were found in postsecondary educational outcomes between the non-Hispanic White and African American alumni (O'Brien, et al., 2010).

161. Using the NYTD, researchers examined the educational attainment of White, African American, Hispanic, and American Indian/Alaska Native emancipated youth. Results reveal that Hispanic youth had the highest rates of postsecondary enrollment. African American youth were 36% more likely to enroll in higher education than White youth but White youth were more likely to be employed compared to African American youth – a finding consistent with other research studies (e.g., Dworsky et al., 2010; Watt, Kim & Garrison, 2018). American Indian/Alaska Native former foster youth were the least likely of any group to enroll in higher education (Watt & Kim, 2019).

162. Washington State data about former foster youth enrollment in any postsecondary education were examined for 2016-2017 by race/ethnicity of the student and compared to non-foster care students. The rate of postsecondary enrollment for all foster care youth was 37.6% (compared to 54.7% of non-foster care youth). The postsecondary enrollment rates by race/ethnicity were: 35.5% for White foster youth (55.7% for White non-foster youth); 43.6% for African American foster youth (53.5% for African American non-foster youth); 38.1% for Latinx foster youth (47.2% for Latinx non-foster youth); 56.4% for Asian foster youth (72.5% for Asian non-foster youth); and 29.7% for American Indian/Alaska Native foster youth (36.9% for American Indian/Alaska Native non-foster youth (Chen, Pyle & Aldrych, 2019).

163. A study of former foster youth participating in eight campus support programs in California and Washington State found that although former foster youth clearly appreciated the concrete services and supports they received (e.g., financial support, housing, transportation assistance), it was the less tangible benefits that they valued the most, such as having someone to turn to or someone who believed in them and feeling understood or part of a family. Moreover, some of the challenges participants reported were similar to those faced by many young people from low-income families when they go away to school. Other concerns, particularly those relating to having a stable place to live, were probably related to their status as former foster youth (Dworsky & Perez, 2010).

164. A study examining the testimony of 43 high school and college-age foster youth in front of policymakers in Michigan identified a lack of supportive relationships with caring adults as the most frequently cited barrier to graduating from high school or applying to/attending college (Day, Riebschleger, Dworsky, Damashek, Fogarty, 2012).

165. For youth in the CalYouth Wave 4 (age 23) study who were not currently enrolled in school, 35% reported that they had faced at least one barrier to continuing their education. When asked about barriers, participants identified needing to work full time, concerns about affording college, and childcare responsibilities as the "major reason" for not pursuing school. More women than men reported that there was something preventing them from continuing their education (41.5% of women compared to 24.1% of men), with childcare responsibilities cited as a more common barrier to pursuing education for women (Courtney et al, 2020).

166. A longitudinal, qualitative study explored how foster care alumni enrolled in a university perceived the barriers they faced as they pursued their bachelor's degree. Twenty-one students representing six colleges and universities were interviewed and surveyed multiple times over a two-year period. By the end of the study, one-third of the participants had dropped out of college. A major theme that emerged from participants' narratives about their experiences was that their "survivalist self-reliance" acted as both a support and a barrier. On one hand, it propelled them to succeed without support. On the other hand, it contributed to their sense of isolation and inability to seek help. Additionally, participants reported struggling with a lack of self-confidence, challenges in forming relationships with others, and challenges with mental health stemming from traumas they had experienced that hurt their ability to carry out daily activities, such as attending classes and completing assignments (Morton, 2017 & 2018).

167. Using 10 years of state child welfare, K-12, and higher education administrative data (from 2008 to 2018) for former foster youth in Colorado (N=12,199), and in-depth interviews with 23 former foster youth, researchers examined postsecondary enrollment and persistence for up to three years after exiting high school (average age 21). The study found that only 13.4% of youth who were in foster care during high school began postsecondary education by age 21, and even fewer persisted beyond their first semester or year in college. Interviews with youth about their experience in foster care and school indicate that postsecondary goals, educational planning, access, retention, and success were influenced by both school and child welfare systems. Youth reported that having (or not having) their basic needs met (i.e., physiological needs as well as the need to feel safe, loved, and a sense of belonging) influenced their educational goal setting. Youth in the study attributed their ability to explore and apply for postsecondary education to access to multiple systems-level supports. They identified the following supports as particularly helpful: informed caseworkers who helped them prepare and navigate postsecondary application and enrollment; scholarship programs, in addition to federal financial aid; alternative financial supports for youth with criminal backgrounds; advocates and mentors in navigating systems; and

communication across child welfare and school systems (Myers, Lalonde, Tsai, Clemens, Sheesley, & Tolliver, 2020).

168. Researchers conducted analyses focusing on the increase in postsecondary educational attainment among foster youth who are allowed to remain in care until they are 21 years old. They also studied the resulting increase in lifetime earnings associated with postsecondary education among these foster youth. Researchers estimated that lifetime earnings would increase an average of two dollars for every dollar spent on keeping foster youth in care beyond age 18 (Peters, Dworsky, Courtney, Pollack, 2009).

169. Research indicates that postsecondary educational attainment is associated with increased earnings later in life and is a key factor in achieving self-sufficiency among youth as they transition to adulthood—including among youth with foster care experience (DeCoursey & McKlindon, 2020).

170. Among youth formerly in care, results from regression analyses indicate that, compared to individuals with no high school credential, a GED or certificate of completion predicts no benefits in earnings or likelihood of being employed; a diploma predicts an earnings benefit; and some college, a two-year degree, and a four-year degree or greater predict larger benefits in earnings and likelihood of employment (Okpych & Courtney, 2014).

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