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Assessing Restrictiveness: A Closer Look at the Foster Care Placements and Perceptions of Youth With and Without Disabilities Aging Out of Care

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Abstract

The aim of the study was to examine the experience of restrictiveness among transition-aged youth with disabilities in foster care. Utilizing a sample of 207 youth, placement types were explored for differences in disability status, race and sex. Further, youth perceptions of restriction around communication, movement around one's home, and access to the community were examined for youth receiving special education services (SPED), youth receiving developmental disability services (DD), and youth without disabilities. Youth with disabilities were more likely to be placed in more restrictive placement types and had significantly higher levels of perceived restriction around communication, movement, and community when compared to youth without

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disabilities. Additionally, males with disabilities experienced higher levels of restrictiveness, particularly those who received DD services, while White youth with disabilities also experienced greater community restrictiveness.

Keywords

aging out of foster care; relative/kinship care; residential care

Large-scale studies have shown that adolescents exiting foster care are ill-equipped to successfully transition into adulthood. Youth face poor outcomes in the areas of high-school completion, employment, young parenthood (Courtney & Dworsky, 2005), poverty, and homelessness (Pecora et al., 2003). Few studies have specifically examined the transition experiences of foster youth with disabilities; however, the limited research that does exist indicates that having a disability appears to amplify difficulties faced by youth aging out of foster care. For example, the only large scale comparative study found that youth with disabilities exiting foster care had significantly poorer outcomes in areas of employment, high-school completion, self-sufficiency, and social support, than youth without disabilities (Westat, 1991). More recent research showed that only 16% of youth in foster care receiving special education services for emotional disturbance graduated from high school and, particularly disturbing, 18% of the youth left school because they were incarcerated (Smithgall, Gladden, Yang, & Goerge, 2005). Similarly, Anctil, McCubbin, O'Brien, Pecora & Anderson-Harumi (2007) found that at a mean age of 29, foster care alumni with disabilities had lower levels of educational attainment and self-esteem than foster care alumni without disabilities. Across the literature, various indicators have been used to signify disability status, most commonly eligibility for special education services due to a variety of impairments that impede learning [Individuals with Disabilities Education Act, 20 U.S.C. §1401(3); 1401(30) (2004)], as well as eligibility for other services (e.g., Developmental Disabilities), specific diagnoses (e.g., ADHD, intellectual disabilities) and caseworker report.

Older adolescents in foster care need opportunities to engage in developmental tasks that prepare them for the impending transition to adulthood and independence they soon will make. However, the child welfare system has been slow to make the shift from safety and protection to well-being, and youth in foster care often experience many restrictions in both their living situations and school environments that prevent them from engaging in typical activities of adolescence and participating fully in their communities. This article describes an investigation of the forms of restrictiveness that transition-aged youth in foster care experience within their foster care placements. In particular, this study explored differential experiences of restrictiveness based on disability status, and the extent to which sex and race contribute to the varied levels of restrictiveness that youth in foster care experience.

Background

Restrictiveness and Placement Type

Policies within the child welfare system indicate that when first entering care, children and youth should be placed in the least restrictive, most family-like placement, such as with kin or nonrelative caregivers (e.g. the Adoption Assistance and Child Welfare Act of 1980; Allen & Bissell, 2004). More restrictive levels of care are intended as a last resort to serve those children and youth with increased behavioral and/or emotional needs who cannot be safely placed with kin or in nonrelative foster homes (Barth, 2002). Increasing emphasis on least restrictive alternatives has been influenced by evidence that residential treatment was often used for youth when it was unnecessary (Fields & Ogles, 2002). James and colleagues

(2006) found that just over a quarter of their sample of 980 children and youth in care were placed into restrictive settings as a first placement in out-of-home care, illustrating that the ideal for placing children in least restrictive care was not always met. In a needs-based review of children and adolescents served by child welfare in residential treatment settings in Illinois, Lyons and colleagues (1998) found that many youth did not exhibit mental health needs that required residential treatment, with as many as one-third of the youth deemed inappropriately placed. In addition, lengths of stay in residential care tended to last longer than existing needs. Older adolescents were particularly likely to be residing in residential care absent of any behaviors that pointed towards the need for placement in a residential setting.

While evidence linking restrictiveness and outcomes for young people in out-of-home foster care is mixed (Fields & Ogle, 2002), there are indications that restrictiveness of living environment has negative implications for youth. More restrictive levels of care, generally group care such as group homes or residential treatment facilities, are typically more structured and limit opportunities for young people to practice transitional life skills such as cooking meals, taking public transportation, and being unsupervised in community settings. MacDonald, Allen, Westerfelt, and Piliavan (1996) reviewed the literature on youth who resided in group homes, a type of highly restrictive placement, and found that these youth had poorer outcomes as young adults than did their peers in other types of foster placements. Further, exposure to other peers with externalizing behaviors, such as those found residing in restrictive group care, can lead to an increase in externalizing behaviors for youth (Lee & Thompson, 2008). One study found that youth in group homes are 2.5 times likely to engage in delinquent behavior than are youth in other types of out-of-home care (Ryan, Marshal, Herz, and Hernandez, 2008). Positive outcomes for youth in care may be bolstered for those residing in less restrictive settings. Mech and Fung (1999) found that youth in less restrictive placements were twice as likely to be enrolled in postsecondary education as youth in highly restrictive settings. Additionally, surveys of youth revealed that living in one's own apartment, the least restrictive of settings, was related to increased life skills-knowledge (Mech, Ludy-Dobson, & Hulseman, 1994).

Service use and treatment planning can also be influenced by level of restrictiveness, with youth in group care receiving more restrictive and less individualized services compared with youth in treatment foster care, a less restrictive type of setting where service use is typically more community-based and individualized to the youth's needs (Breland-Noble, Farmer, Dubs, Potter, & Burns, 2005). Children and youth in group care also report a less positive experience overall than those in other types of care. The sample of children and youth living in group care in the National Survey of Children and Adolescent Well-being (NSCAW, 2002) were significantly more likely to report disliking the people with whom they lived, compared with those living in kinship care and nonrelative foster homes. Further, children and youth in group care were less likely to have visitation with birth family members, a factor known to be critical for the adjustment of children while in foster care (Berrick, Courtney & Barth 1993; Dubowitz, 1990), and they were more likely to have visits frequently cancelled than those in other types of care (NSCAW, 2002).

Kinship care, which can be theorized as a less restrictive placement type, has mixed evidence in terms of overall child well-being. Nevertheless, there is some support to show that children and youth in kinship care are doing somewhat better than youth in nonrelative foster care in some areas (Cuddeback, 2004). Metzger (2008) found unique factors that may foster resiliency amongst children and youth in kinship care, including less depression, increased self-worth, stronger coping skills, and higher levels of social support. Conger and Rebeck (2001) found that school-aged youth in kinship care had higher rates of school attendance compared with youth in nonrelative foster care and group care while those in

group-homes had the lowest rate of attendance. This finding is particularly important as school attendance was a strong predictor of how well students preformed on math and reading tests. However, there is limited evidence that these differences extend to transition related outcomes for young people. Youth residing in kinship care and nonrelative foster care are similar in their self-report of independent living skill levels, employment, and their perception of readiness for independent living (Iglehart, 1995). Similarly, Benedict, Zuravin, and Stallings (1996) found that young adults who had previously resided in kinship care or nonrelative foster care did not differ in terms of education, employment, physical and mental health, risk-taking behaviors, and stressors and supports in their lives. It should be noted that both studies excluded youth in more restrictive levels of care, including those living in group homes and residential treatment and, thus, little is known about the outcomes for youth aging out of care from these more restrictive placements.

Demographic Factors and Restrictiveness

There are several key demographic factors which have been shown to be associated with the experience of restrictiveness within foster care, including disability status, sex, and race. Youth in out-of-home care who experience a disability, specifically those with significant emotional, behavioral, or developmental needs, appear to be more likely to be placed in restrictive or intensive settings (James, Landsverk, & Slyman, 2004; James et al., 2006). Hill (2012) found that older youth with disabilities were less likely to have permanency plans that involved their family of origin (e.g. reunification with biological family or relative care) than were youth without disabilities. Further, youth with disabilities in foster care have been shown to experience significantly greater placement instability (Geenen & Powers, 2006) and to be less likely than youth without disabilities to be placed in kinship care (Slayter & Springer, 2011; Beeman, Kim, Bullerdick, 2000).

With regard to sex, an investigation of the level of restrictiveness experienced by youth using the National Survey of Child and Adolescent Well-being found that older youth, particularly males, were more likely to be placed in restrictive or more intensive placements (James et al., 2006). Compounding this problem, males are generally recognized as being disproportionately identified as having disabilities. For example, males are over-represented in special education services (Coutinho & Oswald, 2005) and they have been identified as experiencing disabilities at higher rates than do girls (Oswald, Coutinho, Nagle & Best, 2003; Valdes, Williamson & Wagner, 1990).

Youth of color, particularly African-Americans, Native Americans and Hispanics are disproportionality represented in the foster care system overall (Hill, 2006). Being a youth of color may have some protective associations in regards to less restrictive foster care placements. African American children are twice as likely to be placed with kin compared to White children (Hill, 2004; Harris & Skyles, 2008). Nevertheless, African American youth are less likely to be reunified with their families (Hill, 2005) and they stay in foster care longer than do their White peers (Barth, 2005). As previously discussed, staying in care longer contributes to the risk of having a restrictive placement as older age is associated with higher levels of care (James et al, 2006). Furthermore, African-American children have been shown to be overrepresented in special education eligibility categories of emotional or behavior disorder (Fierros and Conroy, 2002) and intellectual disability (Losen & Orfield, 2002), both of which are associated with higher likelihood of placement in restrictive or intensive foster care settings (James et al., 2004; James et al., 2006). Finally, while White youth are the majority in group homes (Curtis et al, 2001), racial minority youth may be proportionately overrepresented in this type of placement setting (Ryan, Marshall, Herz & Hernandez, 2008; Berrick, Courtney & Barth, 1993).

In sum, the literature highlights the associations of restrictiveness of foster placement with poor outcomes, as well as suggesting that restrictiveness in placement type could be higher for youth with disabilities, particularly for males and youth of color with emotional and intellectual disabilities. However, much of the research to date on placement restrictiveness has been limited to placement type, excluded youth living in other non-family-like settings (e.g., group homes, treatment homes), and the associations of disability with sex and race in placement restrictiveness have not been systematically examined. Additionally, further research is needed that goes beyond placement type to investigate youths' perceptions of the level and nature of restriction that they experience in their placements. To address some of these gaps, this study involved a comparative examination of the patterns of placement restrictiveness for youth in foster care with and without disabilities. The following research questions were addressed:

- 1. What are the demographic characteristics of older youth in foster care based on race, sex, and disability as indicated by receipt of special education (SPED) and/or developmental disability (DD) services?
 - 1a) How do these demographic characteristics of youth with disabilities differ from the overall sample of youth without disabilities in foster care?
- **2.** Are youth in foster care with disabilities more likely to reside in restrictive placements than youth without disabilities?
- **3.** Do youth in foster care with disabilities perceive their placements to be more restrictive than youth without disabilities?
 - **3a)** What is the relationship between sex and disability status in youths' perceptions of placement restrictiveness?
 - **3b)** What is the relationship between race and disability status in youths' perceptions of placement restrictiveness?

As reflected in the research questions, receipt of SPED and DD services were considered two proxies for disability status in this study. Receipt of SPED services is a broader category, focusing on a variety of eligibility categories specified in Individuals With Disabilities Education Act, 20 U.S.C. § 1432 (2004), which are deemed to impact learning, while receipt of DD Services is typically associated with lifelong disability, acquired before age 22 and characterized by significant impairments in cognitive and/or physical function, with barriers in three or more major life activities, of which learning is one (Developmental Disabilities Assistance and Bill of Rights Act of 2000; PL 106–402). Thus, in this study, receipt of SPED and DD services were conceptualized as representing disability statuses on a continuum of increasing impairment, and the experiences of youth who received SPED services and those who received DD services were distinctly examined. Previous research suggests that individuals with intellectual disabilities, who comprise the majority of people who receive DD services, experience increased restriction in their choice-making and activities at home and in the community (Stancliffe, et al., 2000; Wehmeyer, et al., 1996). Further, Slayter and Springer (2011) found that youth with intellectual disabilities were significantly less likely to be placed in kin foster care, in comparison to youth who did not have intellectual disabilities. Thus, we wanted to examine whether youth in foster care with developmental disabilities would experience greater placement restriction than either youth with a range of impairments that made them eligible for special education services, or youth without disabilities.

Method

Sample

Study participants were from a population-based sample of youth in foster care who were recruited as a part of an evaluation of an intervention to enhance self-determination among youth transitioning from foster care to adult living. All youth between the ages of 16.5 and 18.5 and under the guardianship of Child Welfare within a targeted geographic area were recruited to the study; 90% of youth assented to participate and consent was provided for all of these youth by the Child Welfare agency. All study protocols and consents were approved by the Institutional Review Board of the University. For the purposes of this analysis, a cross-sectional analysis of baseline data for all youth recruited was used, with a final sample size of 207.

To accurately determine the special education and developmental disability status of participants, every six months the state child welfare agency generated a list of all youth who were in foster care and who met the targeted age and geographic eligibility requirements of the study. This list was provided to a school representative who cross-referenced it with special education records to identify all youth under child welfare guardianship who received SPED services. Data sharing agreements were established to permit this exchange of information. Following assent / consent to the study, the youth's name was forwarded to the Developmental Disabilities Services agency, which identified all youth who received DD services.

Measures

Restrictiveness—Indicators of youth perceptions of restrictiveness were drawn from Rautkis and colleagues' (2009) measure of restrictiveness. Three items from the Restrictiveness Evaluation Measure for Youth (REM-Y; Rauktis et al., 2009) were selected as indicators of restrictiveness in the categories of communication with others, ability to move freely in the home, and community participation, and were included in a comprehensive outcome survey administered to youth in the study. Rautkis et al (2009) reported strong validity for the original 21-item REM-Y measure with an alpha value of .92. Further, Hwang and Lee (2012) surveyed 40 youth and 37 caregivers and found strong agreement between youth and caregivers in rating the current restrictiveness of the youth's environment. The three items were rated on a 5-point scale:1=I have no limits, 2=I have a few rules, 3=I have some rules, 4=I have very limited access, 5=I am usually not allowed. These items were, "What best describes how much you are allowed to use the telephone or internet to communicate with others?"; "What best describes how much you are allowed to move around where you live"?; and "What best describes how much you are allowed to go out into the community"?.

Placement Type—Placement type at baseline was collected from official child welfare records. Placement service codes were categorized into 3 types of care: kinship care, non-relative foster care, or specialized foster care. Kinship care included youth who were coded as being in relative care as well as placed with kinship caregivers (those with an existing relationship with the youth, for example a neighbor, teacher, pastor etc.). Specialized care was conceptualized as all placements where providers were required to have a specific certification beyond standard foster care and/or were paid higher rates for offering more intensive levels of care. Placement types that were identified as specialized care included DD foster homes, DD group homes, general group homes, residential treatment facilities, treatment level foster care, and transitional independent living within a mental-health certified facility. Youth who were residing with a birth parent, were in the process of being adopted, or were living independently were not included in the sample.

Special Education (SPED) Status—If a youth was identified by a collaborating school district as receiving special education services, the student's official IEP was requested; data on disability type was then taken from the educational disability codes recorded on the IEP. A youth could have up to three disability categories coded on her or his IEP and thus, could be represented in multiple disability categories.

Developmental Disability (DD) Services—As previously described, receipt of DD services was determined immediately following assent / consent to the study. If a youth was assigned a DD caseworker, he or she was coded as receiving DD services. DD services were state-funded services that could include general case management, in-home supports, and/or family support all aimed to promote community inclusion. One youth was pending assessment of DD services during recruitment and was coded as not receiving DD services. All youth receiving DD services also received SPED services.

Race and Sex—Information collected on sex and race was based on youth self-report collected at baseline during in-person structured interviews.

Results

Research Question 1: What Are the Demographic Characteristics of the Overall Sample?

Addressing the first research question, the demographic characteristics of the youth are presented in Tables 1 and 2. The mean age of the participants was 17.4 years.

The sample included somewhat more females (54.1%) than males (45.9%). Youth of color comprised almost 60% of the sample, with 41.1% of youth identifying as "White" (41.1%), while 16.9% identified as Hispanic, 15.5% identified as Black or African American, 8.2% of youth reported they were American Indian or Alaskan Native, and 12.1% reported being multi-racial. Approximately 60% of youth were identified by school records as receiving SPED services and about one-quarter (24.6%) received DD services.

Research Question 1a: What are the Demographic Characteristics of Youth with Disabilities and How Do They Differ from those of Youth without Disabilities?

Characteristics of youth receiving SPED services—In comparison to the overall sample, youth in special education were more likely to identify as male. This reflects national statistics, which indicate that boys receive special education services at twice the rate of girls (Rousso & Wehmeyer, 2002). In terms of race and ethnicity, a higher proportion of White (66%) and Native Youth (67.4%) received special education services in comparison to the other racial/ethnic groups; however, there were not significant racial or ethnic differences for youth who received SPED services. Regarding the types of educational disabilities experienced by youth in special education, having an emotional or behavioral disability was most common (31.4%), followed by learning disability (27.4%) and intellectual disability (25%); 28.3 percent of youth had more than one disability listed on their IEP.

Characteristics of youth receiving DD services—When examining the demographics of youth who received DD Services, a subgroup of the youth receiving special education services, the overrepresentation of males is even more pronounced. While males comprised a slight majority of those receiving SPED services, they made up a clear majority of those receiving DD services (63.5%). Additionally, the overrepresentation of Native youth was further amplified among youth who received DD services.

Research Question 2: Are Youth in Foster Care with Disabilities More Likely to Reside in Restrictive Placements?

Placement type and receipt of SPED /DD Services—As shown in Table 3, youth in special education were significantly more likely to be placed in specialized care settings. Specifically, 15.3% of youth in special education (vs. 25.4% of youth without disabilities) were placed in kinship, 38.7% were in non-relative placements (vs. 60.2% of non-SPED peers), and 46% of youth in special education resided in specialized care settings (vs. 14.4% of youth without disabilities). Pearson chi-square revealed that the placement differences between youth who received special education services and those who did not was statistically significant [χ (2, N=207) = 22.40, p<.0001]. Once again, these findings are even more pronounced for youth in special education who also receive DD services, with just two youth (4%) residing in kinship care, four youth (8%) living in non-relative care, and the remaining youth (88%) placed in specialized care. Pearson chi-square indicates the difference in placements between youth who receive DD services and those who do not is significant [χ (2, N=207)=91.80, p<.0001].

While not one of the original research questions, as shown in Table 3, males in special education were significantly more likely to be placed in specialized care, compared to all other groups [χ (2, N=207)=33.191, p<.0001], however this trend was not apparent for males and females with developmental disabilities, who were both much more likely to be placed in specialized care, compared to males and females without DD. As shown in Table 4, a higher proportion of youth of color were placed in kinship care as compared to White youth, with the highest proportion of kinship placement amongst youth of color without disabilities. Only two youth of any race/ethnicity with DD were placed in kinship care.

Research Question 3: Do Youth in Foster Care with Disabilities Perceive Their Placements to be More Restrictive than Youth Without Disabilities?

A series of two-tailed, independent *t*-tests were conducted to assess whether youth who receive special education experience greater restrictiveness than youth without disabilities in the areas of communication, movement and community. Significant differences were found between the two disability groups and youth without disabilities for all 3 restrictiveness variables. Youth in SPED (M=2.20, SD=1.19), reported significantly higher levels of restrictiveness of communication than did youth who did not receive SPED services (M=1.67, SD=1.00), t (204) = -3.27, p=.001. Similarly, youth in SPED (M=1.52, SD=.657) faced significantly higher levels of movement restrictiveness around home than youth not in SPED (M=1.34, SD=.572), *t* (201) = -2.04, p<.05. Finally, in terms of access to the community, youth in SPED reported higher levels of restrictiveness (M=2.06, SD=1.15) than those not in SPED (M=1.37, SD=.676), *t* (205) = -4.88, p<.001.

Independent sample t-tests showed similar trends in restrictiveness reported by youth who received DD services compared with those who did not. With regard to restrictions around communication, youth with DD (M=2.70, SD=1.23) were significantly more restricted than youth not receiving these services (M=1.76, SD=1.02), t (204) = -5.41, p<.001. For movement around the house, youth receiving DD services (M=1.68, SD=.794) reported experiencing more restrictiveness than youth who did not receive these services (M=1.37, SD=.549), t (201) = -3.06, p<.01. Finally, this trend continues around access to the community with those receiving DD services (M=2.61, SD=1.31) reporting significantly more restriction than those not receiving DD services (M=1.51, SD=.766), t (205) = -7.303, p<.001.

Research Question 3a: What is the Relationship Between Sex and Disability Status in Youths' Perceptions of Restrictiveness?

Interaction between sex and SPED with restrictiveness—To examine the interaction between sex and receiving SPED services on youths' experience of restrictiveness, a one-way ANOVA was run comparing 4 groups: males receiving SPED services, females receiving SPED services, males not receiving SPED services, and females not receiving SPED services. When an ANOVA revealed a significant difference between the groups on a type of restrictiveness, a post hoc analysis was conducted to discover where the difference rested between the four groups. Post hoc analyses were conducted using t-tests, with p values adjusted to control for multiple comparisons using the Bonferroni method.

Significant omnibus differences were found for all 3 types of restrictiveness: communication [F(3, 202) = 5.27, p < .01], movement [F(3, 199) = 3.52, p = .016], and community [F(3, 203) = 8.69, p < .001]. Follow-up analyses (p = .05) revealed a pattern of males receiving SPED services reporting significantly higher levels of restriction in communication, movement in the home, and community participation, compared to females not receiving SPED services. Males receiving SPED services also reported significantly higher levels of restriction in the community compared to males not receiving SPED services. Finally, females receiving SPED services reported significantly higher community restrictiveness than males and females not receiving SPED services. There were no significant differences between males and females receiving SPED services for any type of restrictiveness and no significant differences between females receiving SPED and males and females not receiving SPED for communication and movement restrictiveness.

Associated with the relatively high proportion of males receiving SPED services who were placed in specialized care settings, we examined whether the sex by group differences in youth's perceptions of restrictiveness would be maintained when controlling for placement type. Specifically, an ANCOVA was conducted for each area of restrictiveness (community, movement, communication), where the four study groups listed above were the independent variable and placement type was entered as the covariate. Placement type was a significant covariate for all three types of restrictiveness. When it was statistically controlled for, significant group difference did persist in the area of community. Thus, when placement type was held constant statistically, males in SPED continued to experience greater levels of restriction in community participation. However, males receiving SPED only had significantly higher restriction than females not receiving SPED. Similarly, females receiving SPED had significantly higher community restriction than did females not receiving SPED. Significant group differences in communication and movement restrictiveness by sex did not continue once placement type was controlled for.

Interaction between sex and DD with restrictiveness—A one-way ANOVA was utilized to test the interaction of sex with DD services for restrictiveness using 4 groups, similar to the above analysis. There were significant omnibus differences for communication restrictiveness, [F(3, 202) = 14.85, p < .001], movement restrictiveness, [F(3, 199) = 6.29, p < .001], and community restrictiveness, [F(3, 203) = 17.64, p < .001]. Follow-up analyses (p .05) indicated that males with DD reported higher levels of communication restrictiveness than females without DD and females with DD reported higher levels of communication restrictiveness than did males and females without DD. There were no significant differences in communication restrictiveness between males and females with DD or between males and females who received DD and males who did not receive DD services. With regard to restrictions around movement in the home, males with DD reported higher levels of restrictiveness when compared with all 3 groups. Finally, both males and females

with DD reported higher levels of community restrictiveness compared with both males and females without DD. Thus, in most cases, males and females with DD – most of whom were placed in specialized care – reported higher levels of restrictiveness than their non disabled peers.

Because DD certified homes were coded as specialized care placements, almost all of youth in this sample who received DD services were in specialized care. Therefore, an ANCOVA was not conducted because of the almost one-to-one correspondence between DD status and placement in specialized care.

Research Question 3b: What is the Relationship Between Race and Disability Status in Youths' Perceptions of Restrictiveness?

Interaction between race and SPED with restrictiveness—To examine the interaction between race and receiving SPED services on youths' perceptions of placement restrictiveness, a one-way ANOVA was run comparing 4 groups: White youth in SPED, youth of color in SPED, White youth not in SPED, and youth of color not in SPED. There were significant omnibus differences for communication restrictiveness, [F (3, 201) =4.22, p <.05] and community restrictiveness, [F (3, 202) =10.54, p<.001] but not for movement restrictiveness. For communication restrictiveness, post-hoc tests showed there were no significant differences comparing means for any 2 groups. Post-hoc tests for community restrictiveness indicated that White youth receiving SPED services reported significantly higher levels of restrictiveness than all other groups.

ANCOVAs were conducted and these analyses revealed that placement type was a significant covariate in the area of community restrictiveness. When placement type was statistically controlled for, significant group difference did persist in this area. White youth receiving SPED continued to report significantly higher levels of restrictiveness than all other groups.

Interaction between race and DD with restrictiveness—A one-way ANOVA was run for all 3 restrictiveness types to examine 4 groups of youth: Whites receiving DD services, youth of color receiving DD services, Whites not receiving DD services, and youth of color not receiving DD services. Significant omnibus differences were found for all 3 types of restrictiveness: communication restrictiveness, [F (3, 201) = 11.08, p < .001], movement restrictiveness, [F(3, 198) = 4.39, p = .005], and community restrictiveness, [F(3, 198) = 4.39, p = .005](3, 202) = 22.17, p < .001]. Whites who received DD services reported significantly higher levels of communication restrictiveness than youth of color who did not receive DD services, while youth of color who received DD services reported higher levels of communication restrictiveness than both Whites and youth of color who did not receive DD services. For home movement restrictiveness, youth of color with DD had higher levels of restrictiveness than youth of color without DD. Finally, with respect to community restrictiveness, Whites with DD had higher levels of restrictiveness than all 3 groups, while youth of color with DD had higher levels of restrictiveness as compared to Whites and youth of color without DD. Thus, DD status was generally associated with reports of greater restrictiveness for both White youth and youth of color.

Discussion

The findings convey a consistent pattern of restrictiveness in foster care placements for youth with disabilities, based on consideration of foster care placement type and youths' perception of the restrictiveness of their placements. Youth with disabilities (SPED and DD) were in more restrictive placements, and they perceived their placements overall to be more restrictive, compared to youth without disabilities. This finding held for all three areas of

communication, home mobility, and community restriction. For youth with DD, restriction was inextricably associated with placement in specialized care.

While youths' restrictiveness perceptions did not differ between males and females with disabilities, both males and females with disabilities (SPED and DD) reported more community restriction than males and females without disabilities. For those youth in SPED, placement type was significantly associated with communication, home mobility, and community restrictiveness, and the significantly increased community restriction of males and females in SPED, compared to females not in SPED, was maintained even when placement type was statistically accounted for. Similar findings were observed for youth with DD, with males receiving DD services reporting higher restriction of their home mobility, compared to all other youth, and higher restriction of their communication, compared to females without DD. These findings, in particular, highlight the heightened restrictions experienced by males with disabilities, which deviates from typical sex role expectations and restrictiveness. Increased restriction of males in SPED could be related to their disproportionate labeling with emotional and behavioral disabilities, which we have observed sometimes stimulates restriction as method for controlling and rewarding behavior. Likewise, restriction of males with DD could be associated with interrelated concerns that males would be more likely to exhibit behavior problems and about safety for youth who are often perceived as the most vulnerable.

With regard to the interaction of race and disability in restrictiveness, White youth receiving SPED services reported significantly higher levels of community restrictiveness than all other groups, even when the influence of placement type was accounted for. For youth with DD, disability status rather than race appeared most influential in explaining youth's perceptions of restrictiveness. However, the disproportionate placement of youth with DD in specialized care impeded examination of the potential influence of placement type on this finding.

These findings should be interpreted within the context of several study limitations, including: the study's modest sample size and focus on the experiences of youth in one geographic area; use of single questions to assess youth's perceptions of restrictiveness in communication, home mobility, and community participation; and use of special education and developmental disability status as indicators of disability, which could leave out other youth who have health or other impairments that would not necessarily lead them to receive these services. Taking these limitations into account, as the first study known to conduct a multi-perspective examination of placement restrictiveness among youth in foster care with disabilities, these findings nonetheless reveal serious disparities in foster care placement restriction which are likely to impede the successful transition to adulthood of youth in foster care with disabilities. Youth with disabilities, as represented by youth in SPED services and youth in DD services, were shown to experience significantly higher rates of restrictiveness than youth without disabilities.

As previously stated, youth with disabilities are also at risk for poor transition outcomes when compared with youth without disabilities. Thus, those youth at highest risk for difficult transitions are also the youth who are afforded fewer opportunities to engage in activities that allow for increasing independence and building skills pertinent for adulthood. Restrictiveness can interfere with personal growth, assumption of adult roles, and social relationships, making the process of aging out of care more difficult. Further, restrictions in communication and access to the community can prevent youth from developing meaningful and beneficial relationships with teachers, mentors, siblings, and family who may otherwise provide a natural support system to help ease the transition from care.

These findings are critically important for child welfare and other systems to consider in the context of the large number of transition aged youth in foster care who experience disabilities. Historically, estimates of the prevalence of disability among youth in foster care have been limited by lack of accurate data. However, use of systematic methods that cross-reference information from child welfare and special education records, which were used in this study and by Hill (2012), suggest that about 60% of transition-aged youth in foster care also receive special education services. Our findings, which recruited all youth in foster care from a major urban area, further indicated that approximately 25% of these youth received developmental disability services. Thus, the restriction of youth with disabilities in foster care is not a side issue for child welfare and disability systems. Rather, it's a problem that has potential to impede the successful passage to adulthood of the majority of youth in foster care, and which requires practice and policy improvement to address.

The fact that 88% of youth with DD services resided in specialized care provides an example of the potential influence of system policies on this problem, and could be more closely tied to certification and licensing requirements than to the needs of individual youth. Youth in DD certified homes had significantly higher levels of community restrictiveness than youth in other types of specialized care placements, t (67) = -2.76, p<.01. The high levels of placement restriction reported by these youth are clearly inconsistent with societal expectations for individuals with developmental disabilities to achieve maximum self-determination, independence, employment, and participation in their communities (Lakin & Turmbull, 2005).

Policy, Practice, and Research Implications

It is the observation of the authors that safety requirements that pose heightened levels of restriction on youth aging out of care, particularly for those youth with disabilities, often function to serve the needs of caregivers and liable agencies responsible for the well-being of young people in the child welfare system more so than serving to meet the needs of youth aging out of the foster care system. When children and youth cannot be safely returned home, the child welfare system must assume not only the responsibility of ensuring the safety of these young people, but must also ensure that these young people have been provided essential information, skills, opportunities, and support to become well prepared for a successful transition from care into young adulthood. This requires a shift in licensing regulations to allow more freedom and flexibility for caregivers to provide, and youth to participate in, activities that are typical of adolescent development and promote responsibility, independence, and concrete independent living skills. Policy should implement formal considerations for reviewing placement decisions for youth with disabilities in higher levels of care whereby caseworkers must document thorough review of least restrictive alternative options and strategies, and concrete safety concerns that could not be feasibly addressed in less restrictive settings. Restrictive placement recommendations warrant a higher level of review by child welfare and disability program leaders who are positioned to direct additional individualized supports and careful monitoring to avoid altogether or minimize time spent in highly restrictive settings. Restrictive placements also should not be used as a default living option for youth with complex needs when kinship and nonrelative foster care placements are in short supply. Additionally, the child welfare system should provide training for kinship caregivers and non-relative foster caregivers that emphasize the unique skill set necessary for caring for older youth and those with disabilities while simultaneously providing increased supports to these placement types so that costly specialized care placements that further limit youth's freedoms are utilized much less often. Therapeutic foster care in a family setting should also be prioritized over institutional care or group care for youth who are placed in more restrictive settings as there is often less flexibility to work with youth around their individual transition needs in these

types of placements. Finally, efforts to decrease the number of youth who grow up in foster care under a plan of long-term foster care must be bolstered. Increased financial support for kinship caregivers to assume guardianship or adoption of youth with disabilities would be particularly beneficial to many youth and families.

While independent living skill programs funded by the Chafee Foster Care Independence Act (1998) function to offer opportunities for skill development and support for youth aging out of care, these programs often engage those youth with fewer needs and have been unable to successfully engage the vast majority of youth in care with disabilities. These programs must also move beyond general independent skill development to emphasize youth empowerment and mega-cognitive skill development.

Intervention strategies focused on enhancing self-determination for youth in foster care have been shown to improve academic performance, school retention rates, decrease depression and anxiety (Powers et al., 2012), increase high-school completion rates, enhance overall quality of life and self-determination, and increase engagement in employment, independent living activities, and engagement with community-based transition services (Geenen & Powers, 2007). Youth voice is one critical aspect of this type of intervention where youth transition goals are oriented around what the youth has identified as pertinent to her or his own individual path towards aging out of care. All goals are supported by program staff and rather than adults deciding what may or may not be in the youth's best interest, youth are taught how to gather information, weigh the benefits and consequences to these decisions, and negotiate with members of their team. Additionally, given coaching and support, all youth are capable of leading their own meetings to discuss their transition goals with caseworkers, foster parents, DD caseworkers, special education counselors and other key team members. Youth skill development should include a framework for youth to break goals into doable activities and steps, identify activities or steps that may be challenging to the youth, and voice the need for support from specific members of the youth's team around challenging activities. Further, youth should be offered ample opportunities for building independent living skills through experiential activities (ie: doing an informational job interview in a desired career field, going to the store to practice pricing and purchasing one's food etc.). Finally, youth should be coached to identify allies in their support network who can continue to provide assistance both during and after their transition process and have conversations with these allies about concrete ways in which these adults are willing to provide support.

Future research should focus on identifying specific transition outcomes that are impacted by residing in highly restrictive placement settings and evaluating whether intervention strategies, such as those presented in the self-determination model, effectively mitigate the consequences of residing in restrictive care on youths' transition from care. Further, the definition of restrictiveness as conceptualized in this analysis could be broadened in future studies of youths' experiences in care to include other forms of restrictiveness youth may experience in care, including the use of medications as a form of restriction for youth with disabilities.

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Table 1

Demographics

	Total N (%)	SPED N (%)	DD N (%)
Gender			
Male	95 (45.9%)	65 (52.4%)	33 (63.5%)
Female	112 (54.1%)	59 (47.6%)	19 (36.5%)
Race			
White	85 (41.1%)	56 (45.2%)	21 (40.4%)
Hispanic	35 (16.9%)	18(14.5%)	8(15.4%)
African-American	32 (15.5%)	17 (13.7%)	8 (15.4%)
Am.Indian/Alaskan	17 (8.2%)	11 (8.9%)	8 (15.4%)
Hawaiian/Pacific Is.	4 (1.9%)	2 (1.6%)	1 (1.9%)
Asian	3 (1.4%)	0 (0%)	0 (0%)
Multi-racial	25 (12.1%)	15 (12.1%)	5 (9.6%)
Other	5 (2.4%)	4 (3.2%)	1 (1.9%)
Missing	1		
Age			
16	69 (33.3%)	46 (37.1%)	20 (38.5%)
17	98 (47.3%)	57 (46.0%)	24 (36.2%)
18	40 (19.3%)	21 (16.9%)	8 (15.4%)

Table 2

Special Education Disability

Categories (% non-exclusive)	N	%
Intellectual	31	25.0
ED	39	31.4
Learning	34	27.4
Autism	5	4.0
Vision	1	.08
Hearing	1	.08
TBI	3	2.4
Speech	12	.09
Orthopedic	2	.02
Other Heath	24	19.3
Missing	8	.06

Demographics by Placement Type

	Kinship	Non-Relative	Specialized Care
Categories	N=40 (19.3%) N (%)	N=98 (47.3%) N (%)	N=69 (33.3%) N (%)
Gender			
Male	12 (30%)	42 (42.9%)	41 (59.4%)
Female	28 (70%)	56 (57.1%)	28 (40.6%)
Race			
White	10 (25%)	44 (44.9%)	31 (44.9%)
Hispanic	8(20%)	18 (18.4%)	9 (13%)
African-American	9 (22.5%)	13 (13.3%)	9 (13%)
Am.Indian/Alaskan	4 (10%)	8 (8.2%)	5 (7.2%)
Hawaiian/Pacific Is.	1 (2.5%)	1 (1%)	2 (2.9%)
Asian	0 (0%)	3 (3%)	0 (0%)
Multi-racial	6 (15%)	8 (8.2%)	11 (15.9%)
Other	2 (5%)	1 (1%)	2 (2.9%)
Age			
16	14 (35%)	31 (31.6%)	24 (34.8%)
17	17 (42.5%)	49 (50%)	32(46.4%)
18	9 (22.5%)	18 (18.4%)	13 (18.8%)
SPED			
Yes	19 (47.5%)	48 (49%)	57 (82.6%)
No	21 (52.5%)	50 (51%)	12 (17.4%)
DD			
Yes	2 (5%)	4 (4.1%)	45 (65.2%)
No	38 (95%)	94 (95.9%)	24 (34.8%)

Placement Type by Gender for SPED and DD

	Males With	Females With	Males Without	Females Without	
	N (% of group)				
SPED					
Placement Type					
Kinship	9 (13.9%)	10 (16.9%)	3 (10%)	18 (34%)	
Non-Relative	21 (32.3%)	27 (45.8%)	21 (70%)	29 (54.7%)	
Specialized	35 (53.8%)	22 (37.3%)	6 (20%)	6 (11.3%)	
DD					
Placement Type					
Kinship	1 (3.1%)	1 (5.3%)	11 (17.5%)	27 (29%)	
Non-Relative	3 (9.4%)	1 (5.3%)	39 (61.9%)	55 (59.1%)	
Specialized	28 (87.5%)	17(89.4%)	13 (20.6%)	11 (11.8%)	

Placement Type by Race for SPED and DD

	Whites With	Youth of Color With	Whites Without	Youth of Color Without	
	N (% of group)	N (% of group)	N (% of group)	N (% of group)	
SPED					
Placement Type					
Kinship	8 (13.1%)	11 (17.7%)	5 (15.6%)	16 (31.4%)	
Non-Relative	24 (39.4%)	23 (37.1%)	23 (71.9%)	27 (52.9%)	
Specialized	29(47.5%)	28 (45.2%)	4 (12.5%)	8 (15.7%)	
DD					
Placement Type					
Kinship	1 (4.3%)	1 (3.6%)	12 (17.1%)	26 (30.6%)	
Non-Relative	0 (0%)	4 (14.3%)	47 (67.2%)	46 (54.1%)	
Specialized	22 (95.7%)	23 (82.1%)	11 (15.7%)	13 (15.3%)	

Mean Restrictiveness Scores by Gender

	Males With	Females With	Males Without	Females Without		
	M(SD)	M(SD)	M(SD)	M(SD)		
Communi	cation					
SPED	2.34 (1.12)	2.03 (1.26)	1.93 (0.98)	1.53 (0.99)		
DD	2.55 (1.18)	2.95 (1.31)	2.05 (1.01)	1.56 (0.98)		
Movemen	t					
SPED	1.63 (0.70)	1.41 (0.59)	1.48 (0.57)	1.25 (0.56)		
DD	1.87 (0.81)	1.37 (0.68)	1.44 (0.53)	1.33 (0.56)		
Communi	Community					
SPED	2.15 (1.11)	1.95 (1.20)	1.23 (0.43)	1.45 (0.77)		
DD	2.59 (1.19)	2.63 (1.54)	1.49 (0.72)	1.53 (0.80)		

Mean Restrictiveness Scores by Race

	Whites With	Youth of Color With	Whites Without	Youth of Color Without
	M(SD)	M(SD)	M(SD)	M(SD)
Communi	cation			
SPED	2.18 (1.13)	2.18 (1.25)	1.66 (0.97)	1.69 (1.03)
DD	2.50 (1.10)	2.86 (1.33)	1.84 (1.06)	1.66 (0.96)
Movemen	t			
SPED	1.53 (0.62)	1.50 (0.70)	1.41 (0.50)	1.29 (0.62)
DD	1.59 (0.73)	1.75 (0.84)	1.46 (0.53)	1.29 (0.56)
Communi	ty			
SPED	2.30 (1.23)	1.82 (1.03)	1.31 (0.47)	1.41 (0.78)
DD	3.04 (1.26)	2.25 (1.27)	1.60 (0.82)	1.44 (0.72)