ARTICLE

A FIRST LOOK AT NATURAL MENTORING AMONG PREADOLESCENT FOSTER CHILDREN

Johanna K. P. Greeson
University of Pennsylvania

Lindsey M. Weiler
Kempe Center for the Prevention and Treatment of Child Abuse and Neglect, University of Colorado School of Medicine and University of Minnesota

Allison E. Thompson
University of Pennsylvania

Heather N. Taussig
Kempe Center for the Prevention and Treatment of Child Abuse and Neglect, University of Colorado School of Medicine and University of Denver

This study describes natural mentoring among preadolescent children placed in out-of-home care and examines the association between natural mentoring and demographic, maltreatment, placement, and psychosocial characteristics. Cross-sectional data from a sample of 263 children and their out-of-home caregivers were analyzed. Caregivers rated children's social skills, and children reported on their perceived opportunities and attachment to peers and adults, including natural mentors. About half the sample endorsed having natural mentors, with school personnel being the most common type of mentor. Children with natural mentors were older,

more likely to be living in congregate care, and had stronger attachment to friends. Marginally significant findings suggested that children with natural mentors had been in out-of-home care for fewer months, and children who were sexually abused were less likely to have natural mentors with whom they had current contact. Future research is needed that examines the longitudinal course of natural mentoring among this population. © *2016 Wiley Periodicals, Inc.*

INTRODUCTION

The positive youth development framework is increasingly used to understand a young person's development (Lerner, Lerner, von Eye, Bowers, & Lewin-Bizan, 2011). Fundamental to this framework is the notion that *every* child has a unique set of strengths that, when aligned with the appropriate corresponding system of ecological contexts, contributes to the success of children in their community (Lerner et al., 2011). These environmental contexts include both formal institutions (e.g., schools, organizations) and relationships that are determined to be important to children (e.g., peer networks, parents, extended family, and mentors). Although numerous studies have investigated children's relationships with their peers and parents (Berndt, 1979; Fuligni & Eccles, 1993; Schneider, Atkinson, & Tardif, 2001), few have examined children's relationships with supportive nonparental adults, particularly among vulnerable children, such as those in foster care.

Children and youth in foster care represent a particularly vulnerable group of young people, as they have experienced removal from their homes and communities of origin, disrupted relationships, and ensuing challenges related to healthy attachment to caring and committed adults (McWey, 2004). Although it is widely accepted that all children and youth need supportive and caring adult relationships to flourish (Reis, Collins, & Berscheid, 2000; Roffey, 2012; Zimmerman et al., 2013), these relationships may be especially critical for young people in foster care. In fact, a growing body of literature on older adolescents suggests natural mentoring relationships with adults may function as a protective factor among vulnerable youth (Zimmerman et al., 2013), including young people in foster care (Britner, Randall, & Ahrens, 2013).

The term *natural mentor* refers to a significant nonparental, caring adult whom a child identifies in his or her existing social network; youth typically identify teachers, coaches, religious leaders, and/or adult relatives as natural mentors. Studies have found a positive association between the presence of a natural mentor and improved behavioral health outcomes and asset acquisition for adolescents in foster care (Munson & McMillen, 2009) and young adults who have exited foster care (Ahrens, DuBois, Richardson, Fan, & Lozano, 2008; Greeson, Usher, & Grinstein-Weiss, 2010). However, no studies have yet investigated whether this same relationship exists among foster children who have not yet undergone the myriad biological, cognitive, and social–emotional changes associated with adolescence.

The current exploratory study provides a first look at natural mentoring relationships among a sample of preadolescent children in foster care. Our investigation was guided by the following research questions: (a) What is the prevalence of natural mentoring among preadolescent children who recently entered out-of-home care? (b) Who are preadolescent foster children's natural mentors? (c) Of those children who endorsed ever having

a natural mentor, what percentage of the sample is still in contact with their natural mentors? (d) Is natural mentorship associated with demographic characteristics, maltreatment experiences, and/or type of placement in out-of-home care? and (e) Is natural mentorship associated with social skills, perceived future opportunities, or attachment to caregivers, biological parents, and/or friends?

Background and Significance

The notion of studying human development in a relational context may be traced to the seminal work of Harry Stack Sullivan (1938), who developed the interpersonal theory of personality. Sullivan posits that human development occurs within the context of significant relationships, and only through such interconnectedness does the individual personality come to be. Likewise, attachment theory suggests that healthy personality and emotional development are dependent upon the affectional bond with "some other differentiated and preferred individual who is usually conceived as stronger and/or wiser" (Bowlby, 1977, p. 203). Although the need for attachment with a primary caregiver begins in infancy, the need for attachment and affectional bonds with a differentiated and preferred individual, who may or may not be a parent or caregiver, extends throughout one's lifetime (Ainsworth, 1989). During times of distress, an individual seeks proximity of this stronger and wiser person to achieve security and comfort as a means of coping. The presence of a strong, secure attachment figure may provide a safe base from which an individual can explore and experience life and develop a strong sense of personal identity (Ainsworth, 1989).

Although the need for a close relationship with a stronger, wiser person spans over time, the types of adults who fulfill this need may change throughout the life course. For example, the transition from late childhood to early adolescence is marked by a dramatic decline in the amount of time children spend with their parents and families (Larson & Richards, 1991), and the role of nonparental adults becomes increasingly important as preadolescents are exposed to increasing numbers of adults outside of the home (Roffey, 2012). In addition to changes in preadolescents' social environments, cognitive advances also occur during this time, allowing children to better reflect on their own successes and failures and in light of adult expectations (Eccles, 1999). Thus, this period of time may represent a unique opportunity for naturally occurring nonparental adult mentors to influence and support preadolescent children in their growth and development.

Indeed, natural mentors may be uniquely positioned to contribute to children's lives in a way that is both similar to and distinct from parental and peer relationships. Spencer (2007) suggests that natural mentors may be able to provide guidance, advice, and emotional support similar to parents but without the pressures associated with addressing misbehavior and enforcing rules related to the structure of daily living. Likewise, natural mentors may provide companionship through shared activities, similar to peer relationships, but with the added opportunities for counsel, learning, and access to resources that peers cannot provide. Greeson (2013) posits that natural mentoring relationships are likely to be culturally sensitive and endure over time, as they often form gradually and organically and are rooted within the child's social support network.

Rhodes' developmental model of youth mentoring provides a theoretical framework to understand how supportive nonparental adult relationships, such as those with natural mentors, may serve to promote healthy social–emotional, cognitive, and identity-related development among vulnerable children, including those in foster care (Rhodes, Spencer, Keller, Liang, & Noam, 2006). In terms of social–emotional development, mentoring

relationships may provide fun opportunities for children to escape from life stressors, corrective emotional experiences that may transfer to and improve other social relationships, and modeling of and opportunities to practice emotional regulation strategies. Regarding cognitive development, mentoring relationships may expose children to new opportunities for learning, expanded ways of thinking, and intellectual and academic guidance and encouragement. Healthy identity development may occur as the mentor acts as a "social mirror," reflecting back more positive and expanded views of the child, who is then able to incorporate these views as part of the process of identity formation (Rhodes et al., 2006).

Empirical studies also suggest that positive relationships with supportive nonparental adults may promote better psychosocial functioning, and such relationships are associated with improved social–relational skills and perceived self-worth among preadolescents. For example, one study randomly assigned 56 predominantly White fifth- and sixth-grade students identified as "unaccepted" by their peers to one of four groups: (a) individual coaching with an adult, (b) group experience, (c) group coaching with an adult, and (d) no treatment. Results indicated that students participating in a coaching relationship with an adult had improved conversational skills and social competencies (Bierman & Furman, 1984).

Franco and Levitt (1998) conducted interviews about family support, friendship quality, and self-esteem with 185 racially mixed fifth-grade students and found that children's relationships with these nonparental adult family members were positively associated with their ability to navigate peer conflicts and enter into supportive, close friendships. Another study used a quasi-experimental, nonequivalent comparison group design to examine the effects of mentoring relationships on 86 predominantly African American elementary and middle school youth, and found that the mentored group had higher perceptions of body image and social acceptance as well as a better reported future orientation to avoid drug use (Kuperminc, Thomason, DiMeo, & Broomfield-Massey, 2011).

Although studies support a positive association between the presence of supportive nonparental adults, such as natural mentors, and healthy psycho–social functioning among preadolescents in the general population, less is known about these relationships for vulnerable subgroups of children, including those in foster care. Because of their unique experiences, foster children may encounter specific challenges related to the development of natural mentoring relationships. For example, Rhodes and colleagues (2006) contend that the achievement of positive outcomes within mentoring relationships is predicated by the establishment of a trust-based, close relationship, which may depend on "what the youth's preceding relationship history is, whether the relationship becomes close and meaningful to the youth, and how long the mentoring relationship lasts" (p. 696).

For children in foster care, these factors may present unique challenges to the establishment of quality mentoring relationships with supportive nonparental adults (Britner et al., 2013). For example, many foster children have experienced difficult relationship histories characterized by trauma and disrupted relationships with parents or caregivers as well as instability and numerous placement changes while in care, which together may make it more difficult for foster children to form close, enduring natural mentoring relationships. On the other hand, Britner et al. (2013) suggest that perhaps the loss of family connections and consistent external support may create an opportunity for other supportive nonparental adults to fill that void and have a greater impact and role in the lives of foster children. This notion is echoed by Spencer (2007), who also suggests that children may more readily turn to natural mentors when parents are

unable to provide consistent support, which may be the case for some children in foster care.

To date no studies have examined natural mentoring relationships among preadolescent foster children, and an examination of these relationships and their function during preadolescence warrants attention. This exploratory study describes natural mentoring relationships among a sample of preadolescent children in foster care and the association between natural mentoring and demographic characteristics, child welfare experiences (e.g., maltreatment and placement related factors), and child functioning (e.g., social skills, perceived future opportunities, and attachment). This study also investigates whether the pattern of findings is the same for foster children who *ever* had a natural mentor and for children who are in *current contact* with their natural mentor, comparing both groups to a group of foster children who *never* had a natural mentor.

METHOD

Participants

Participants included children and their caregivers from a large, urban Western city, who were recruited from 2007–2011 for a randomized controlled trial of an intervention for preadolescent foster children known as Fostering Healthy Futures (FHF; Taussig, Culhane, & Hettleman, 2007). Children, aged 9–11 years, were eligible for the randomized controlled trial if the following criteria were met: (a) they had been placed in out-of-home care by court order in one of four participating counties within the preceding year, (b) placement was ordered due to maltreatment, (c) they remained in out-of-home care at the time of the baseline interview, and (d) their cognitive functioning (based on study testing) was sufficient to comprehend the interview questions. Of those meeting eligibility requirements, 91.3% were enrolled in the FHF study. In the current analyses, we used baseline data collected prerandomization from interviews with 263 children and their current out-of-home caregivers.

The sample for the current study comprised 50.6% boys with a mean age of 9.8 years (standard deviation [*SD*] = .9). The racial/ethnic composition (nonexclusive categories) was 49.4% Caucasian, 46.0% Hispanic, and 23.2% African American. Within the current sample, 28.1% of children had experienced physical abuse, 12.5% sexual abuse, 42.2% failure to provide, 85.9% supervisory neglect, 63.9% emotional abuse, 22.8% educational neglect, and 24.7% moral/legal abuse. The categories of maltreatment type are also nonexclusive. The substitute caregivers were primarily women (90.1%). Children were living in nonrelative foster care ($n = 105$; 39.9%), kinship care ($n = 149$; 56.7%), or congregate care ($n = 9$; 3.4%; i.e., shelters or residential treatment) and had been in out-of-home care an average of 6.9 months ($SD = 3.4$) at the time of the interview.

Procedures

The university institutional review board approved the current study, and informed consent and assent were obtained before conducting the interviews. Children and their caregivers were interviewed separately, typically at their residence, and were each paid $40.00 for their participation. Caregivers were interviewed about children's social skills, and children reported on their perceived opportunities, support from peers, adults, and

natural mentors (i.e., a nonparental adult older than 18 years of age) and were asked additional questions about their natural mentoring relationships.

Measures

Demographic and maltreatment characteristics. Children's age, sex, race, and ethnicity were obtained from child welfare records and children's self-reports. To determine type(s) of maltreatment experienced, trained research assistants coded each child's legal petition and social history (child welfare records' narrative of the history and events preceding the legal filing that led to the child's removal from the home) using the Maltreatment Classification System (Barnett, Manly, & Cicchetti, 1993). The developers of the rating system report an overall kappa of .60 and adequate estimates of inter-rater agreement (.67–1.0). All records were consensus coded by at least two trained staff, and discrepancies were resolved through consultation with one of the senior investigators. In all, seven types of maltreatment were dichotomously coded as present or absent for each child, including physical abuse, sexual abuse, failure to provide, lack of supervision, emotional abuse, moral/legal abuse, and educational abuse.

Out-of-home care characteristics. Placement type was a categorical variable with three mutually exclusive categories: placement with a nonrelative foster family; placement in kinship care (i.e., with a relative, stepparent, or friend of the family); or placement in congregate care (i.e., residential treatment center or group shelter). Length of stay in out-of-home care was a continuous variable representing the number of days spent in out-of-home care (in the current episode) at the time of the interview. From this variable, the total number of months in out-of-home care was calculated for ease of interpretation. Number of caregiver changes was also a continuous variable and represents the total number of caregiver changes since birth.

Social skills. The Social Skills Rating System (SSRS; Gresham & Elliott, 1990) is a multi-informant rating system designed to assess the social skills of 1st through 12th graders. The Parent Report form comprises 38 items for parents to rate how often children exhibit certain social skills, such as "Makes friends easily," on a 3-point Likert scale ranging from 0 (*never*) to 2 (*very often*). The SSRS includes 10-item subscales for Cooperation, Assertion, Responsibility, and Self-Control, and it has been normed separately for boys and girls of different ages using a diverse sample of 4,000 children. In this study, all four subscales demonstrated acceptable to good reliability (αs = .71–.89).

Perceived future opportunities. Perceived opportunities was measured using a modified version of a scale included in the National and Denver Youth Surveys (Huizinga & Esbensen, 1990). Twelve items assess youths' perception of their opportunities for success (e.g., "Do you think you will have enough education to be what you want when you grow up?"). Huizinga and Esbensen report that the scale demonstrates adequate internal consistency (on average, across measurement waves, α = .65). Children rate their perceptions using a 3-point Likert scale ranging from 0 (*low chance*) to 3 (*high chance*). In this study, the scale demonstrated acceptable reliability (α = .78).

Natural mentorship. The presence of a natural mentor was assessed with the following question, "Have there been any other adults (over the age of 18) that you could turn to for advice and support such as teachers, coaches, counselors, caseworkers, or people at

church?" This operationalization is consistent with the definition used in the National Longitudinal Study of Adolescent Health (Harris et al., 2009) and multiple published studies on natural mentoring (e.g., Ahrens et al., 2008; Greeson et al., 2010; Munson & McMillen, 2008). When a child answered "yes," she or he was then asked, "What is/was his/her relationship to you?" followed by "Do you still see or talk with them?" Next, children were asked, "Which person listed above provided the most support?" Children identified this person by name, and the interviewer then coded the answer as to his or her relationship to the child (e.g., teacher). These responses were then recoded into the following categories based on previous research and cell counts: school personnel (teacher, coach), extended family, counselor/therapist, caseworker/court appointed special advocate (CASA)/guardian ad litem (GAL), and other (e.g., church member).

Attachment. The Inventory of Parent and Peer Attachment-Short Form (IPPA-Short Form; Gifford-Smith, 2000) is a 15-item measure of attachment that was used to assess attachment to parents, current caregivers, peers/friends, and natural mentors. The IPPA was derived from an adolescent version of the measure (Armsden & Greenberg, 1987) and was modified for use with fourth and fifth graders by the FAST Track Project (Gifford-Smith, 2000). In FAST Track, the IPPA demonstrated high internal consistency (αs = .80–.83) with a diverse sample, and its subscales discriminated between high risk and normative youth. Children rate their feelings of attachment (e.g., "My mentor listens to me") on a 3-point Likert scale ranging from 1 (*not true*) to 3 (*often true*). In the present study, attachment was assessed between the child and (a) his or her current caregiver (α = .81), (b) his or her biological parents (α = .91), (c) his or her natural mentor (α = .75), and (d) his or her peers/friends (α = .82). Each scale contained 15 items.

Analytic Procedures

Using IBM SPSS, we examined descriptive statistics to determine (a) the lifetime prevalence of natural mentoring among preadolescent children who recently entered out-of-home care; and (b) who the natural mentors were, how many mentors children indicated, and whether children had current contact with their mentors. Chi-square and *t*- tests were used to compare (a) children who *ever* had a natural mentor with children who reported *never* having a natural mentor; and (b) children who reported having a *current* natural mentor (i.e., a subset of those who reported ever having a mentor) with those who reported *never* having a natural mentor on demographic, maltreatment, out-of-home care, and psychosocial characteristics. For nonexclusive variables in which a child could be represented in multiple categories, (i.e., race/ethnicity and maltreatment type), dummy codes were created for each response choice. As such, findings should be interpreted in regard to the reference group for that dichotomous variable (e.g., those children who are not in the given racial/ethnic or maltreatment category).

RESULTS

Natural Mentoring Characteristics

In the current sample, 142 children (54.0%) reported ever having a natural mentor and 121 children (46.0%) reported never having a natural mentor. Of those who endorsed having a mentor, 106 (74.6%) were in current contact at the time of the interview. On

Table 1. Natural Mentoring Relationship Characteristics

Variable	Children who **ever** had a natural mentor (n = 142) Mean (SD)/(%)	Children with natural mentor with **current contact** (n = 106) Mean (SD)/(%)
Relationship with natural mentor		
School personnel	31.0	25.5
Extended family	21.8	21.7
Caseworker/CASA/GAL	16.9	21.7
Counselor/therapist	16.9	17.0
Other	13.4	14.2
Number of natural mentors	2.0 (1.1)	2.0 (1.1)
Attachment (natural mentor)	2.8 (.22)	2.8 (.22)

Note. SD = standard deviation; CASA = caseworker/court appointed special advocate; GAL = guardian ad litem.

average, children identified two natural mentors in their lifetime. Descriptive statistics of the nature of the natural mentoring relationships are provided in Table 1. Of the natural mentors identified by children as having provided the most support, "school personnel" (teachers, coaches) was the most frequently endorsed type of natural mentoring relationship, followed by extended family, counselor/therapist, caseworker/CASA/GAL, and then other. Children rated their natural mentors very highly on the attachment scale, and there was very little variability in responses.

Group Comparisons

Results of the analyses comparing (a) children who *never* had a mentor with children who *ever* had a mentor and (b) children who *never* had a mentor with children who reported *current contact* with their mentor are shown in Tables 2 and 3. Table 2 compares the subgroups on demographic, maltreatment, and out-of-home care characteristics, whereas Table 3 compares the subgroups on child- and caregiver-reported psychosocial functioning.

First, children who never had a mentor did not differ from children who endorsed having a mentor in terms of sex, ethnicity, maltreatment type, and number of placements. Children with a natural mentor, however, were slightly older and had been in out-of-home care for fewer months than those without a mentor. The omnibus chi-square test indicated a marginally significant difference between groups on type of placement. Post hoc tests revealed that children in residential care were more likely to report having had a natural mentor than children in kin, $\chi^2(1, N = 158) = 3.83$, $p = .05$, and children in foster care, $\chi^2(1, N = 114) = 5.40$, $p = .02$. Children placed in foster care did not, however, differ from children placed in kinship care. In terms of psychosocial characteristics, children who never had a mentor did not differ from children who endorsed ever having a mentor on social skills, perceived opportunities, and relationship quality with caregivers and biological parents. Children who had a natural mentor, however, indicated stronger attachment to friends compared to children who never had a natural mentor.

Second, we compared children who never had a mentor with children who reported current contact with their mentor. Similar to the pattern of findings in the previous comparison, the groups did not differ in terms of sex, ethnicity, and number of placements, but children who reported current contact with their natural mentor were older than those who never had a mentor. The omnibus chi-square test indicated a marginally

Table 2. Demographic, Maltreatment, and Out-of-Home Care Characteristics by Subgroup (N = 263)

Variable	Children who never had a natural mentor (n = 121) Mean (SD)/(%)	Children who ever had a natural mentor (n = 142) Mean (SD)/(%)	Group comparison[a] χ²/t	Children currently in contact with natural mentor (n = 106) Mean (SD)/(%)	Group comparison[b] χ²/t
Percent of total	46.0	54.0	.889	46.7	.313
Sex, %					
Boys (n = 133)	48.9	51.1		44.9	
Girls (n = 130)	43.1	56.9		48.6	
Age (in years), mean	9.6 (.94)	9.9 (.86)	−2.28*	9.9 (.87)	−2.44*
Race/ethnicity (nonexclusive), %					
White (n = 130)	43.8	56.2	.000	49.6	.058
Hispanic (n = 121)	47.1	52.9	.517	43.0	1.99
African American (n = 61)	44.3	55.7	.002	50.0	.057
Placement type, %			5.83†		6.84*
Nonrelative foster care (n = 105)	51.4	48.6		40.7	
Kinship care (n = 149)	44.3	55.7		48.4	
Congregate care (n = 9)	11.1	88.9		87.5	
Maltreatment type (nonexclusive), %					
Physical abuse (n = 74)	43.2	56.8	.317	46.7	.000
Sexual abuse (n = 33)	54.5	45.5	1.11	30.8	2.99†
Failure to provide (n = 111)	43.2	56.8	.591	48.4	.181
Lack of supervision (n = 226)	47.8	52.2	2.05	45.2	1.38
Emotional abuse (n = 168)	43.5	56.5	1.22	49.3	1.08
Moral/legal abuse (n = 65)	46.2	53.8	.001	46.4	.002
Educational abuse (n = 60)	40.0	60.0	1.13	54.7	1.79
Length of stay in OOHC (in months), mean	7.3 (3.4)	6.5 (3.4)	1.79†	6.6 (3.5)	1.61
No. of caregiver transitions, mean	4.4 (1.8)	4.4 (1.7)	−.080	4.5 (1.8)	−.470

Note. SD = standard deviation; OOHC = out-of-home care.

[a]Group comparison of children who reported never having a natural mentor with children who reported having a natural mentor in their lifetime.

[b]Group comparison of children who reported never having a natural mentor with children who reported having current contact with their mentor in their lifetime.

†p < .10. *p < .05. **p < .01. ***p < .001.

Table 3. Psychosocial Functioning (N = 263)

Variable	Children who never had a natural mentor (n = 121) Mean (SD)	Children who ever had a natural mentor (n = 142) Mean (SD)	Group comparison[a] t	Children currently in contact with natural mentor (n = 106) Mean (SD)	Group comparison[b] t
Social skills rating					
Cooperation	1.4 (.28)	1.4 (.25)	.488	1.4 (.25)	.185
Self-control	1.4 (.31)	1.4 (.29)	.639	1.4 (.29)	.018
Assertion	1.6 (.27)	1.6 (.25)	-.596	1.6 (.26)	.040
Responsibility	1.5 (.26)	1.5 (.23)	-.850	1.5 (.24)	-1.08
Perceived future opportunities	1.8 (.25)	1.8 (.22)	-.661	1.8 (.23)	-.259
Attachment (caregiver)	2.5 (.32)	2.6 (.33)	-.145	2.5 (.34)	.194
Attachment (biological parent)	2.5 (.49)	2.5 (.42)	-.515	2.5 (.45)	-.245
Attachment (friends)	2.3 (.36)	2.5 (.34)	-3.43***	2.5 (.36)	-2.72**

Note. SD = standard deviation.

[a] Group comparison of children who reported never having a natural mentor with children who reported having a natural mentor in their lifetime.

[b] Group comparison of children who reported never having a natural mentor with children who reported having current contact with their mentor in their lifetime.

†p < .10. *p< . 05. **p < .01. ***p < .001.

significant difference between groups on type of placement. Post hoc tests revealed that children in residential care were more likely to report having had a natural mentor than children in kin, $\chi^2(1, N = 136) = 4.60$, $p = .03$, and children in foster care, $\chi^2(1, N = 99) = 6.53$, $p = .01$. Children placed in foster care did not, however, differ from children placed in kinship care.

Unlike the previous comparison, one statistical trend was noted between groups on maltreatment type; children who had been sexually abused were less likely to have a natural mentor with whom they had current contact. There were no differences between groups on length of stay in out-of-home care. In terms of psychosocial characteristics, the results were consistent with the previous comparisons. Children who never had a mentor did not differ from children who reported current contact with a mentor on social skills or attachment to caregivers and biological parents. Children who reported having current contact with a mentor, however, indicated stronger attachment to friends than children without a mentor.

DISCUSSION

The current study provides a first look at natural mentor relationships among preadolescent foster children. Despite a dearth of literature on the prevalence of natural mentorship among foster youth during preadolescence, the findings appear to reflect trends observed in foster care populations during late adolescence and emerging adulthood. For instance, consistent with studies of older youth and former foster youth (Ahrens et al., 2008; Greeson et al., 2010; Munson & McMillen, 2008), this study found that about half of the participants (54%) endorsed having a natural mentor, and of those children, about 75% reported current contact with him or her. Children also rated their relationships with their mentors quite highly. The categories of natural mentors most frequently reported in the current study included school personnel, extended family, and social service professionals; this is also consistent with past literature.

In a study of older adolescents in foster care, mentored youth most often reported natural mentoring relationships with nonparental family members, adults in professional roles, and people in more informal roles (e.g., coaches; Ahrens et al., 2008). Similarly, young adults in a study of former foster youth by Greeson and colleagues (2010) most often endorsed relatives, school personnel, and community members as natural mentors during adolescence.

Interestingly, children who never had a mentor did not differ from children who endorsed having a mentor in terms of gender and ethnicity. This is in contrast to at least one study of older adolescents in foster care, which found that male youth (marginally significant) and non-White youth were less likely to endorse a nonkin natural mentor (Munson & McMillen, 2008). The lack of gender and racial/ethnic differences in rates of natural mentorship among preadolescent children in foster care is encouraging, as many studies have demonstrated disparities in mental health services for ethnic minority children in out-of-home care (Burns et al., 2004; Staudt, 2003).

Age differences, were, however, found in the current study, as older children were more likely to have a natural mentor (either ever or currently). This is noteworthy, as there was a very truncated age span (9–11 years), and past studies on older adolescents have not observed age differences (e.g., Ahrens et al., 2008). Given the developmental period of preadolescence, age differences may be attributable to older children having more opportunity to develop natural mentoring relationships. Older children may be

given more autonomy outside the home to interact with potential natural mentors (e.g., calling them on their own). Older preadolescent children may also have greater ability to maintain contact with natural mentors after entering out-of-home care.

When examining the association between placement type and rates of natural mentors, findings indicated that those in congregate care were more likely to report having a natural mentor. One possible explanation is that these children, by virtue of their emotional/behavior problems, may have exposure to more "helping" adults. Importantly, caution should be taken in interpreting results regarding children in congregate care settings as the number of children was very small ($n = 9$). The current study also examined whether length of time in out-of-home care or number of lifetime caregiver transitions was associated with natural mentorship. Children who had been in out-of-home care longer were less likely to report ever having a mentor. Perhaps children who had been in out-of-home care longer had lost touch with, or had forgotten, their natural mentors. Somewhat unexpectedly, the number of caregiver transitions was not associated with having a natural mentor. One might expect that those children with greater mobility would be less likely to have a chance to form relationships with nonparental adults.

Previous studies suggest that children with histories of maltreatment are less open to forming new relationships with adults after traumatic exposure (Britner & Kraimer-Rickaby, 2005), yet the current study observed no differences in the rate of natural mentorship on six of the seven maltreatment types. Similarly, Munson and McMillen (2008) found that maltreatment types were not associated with the presence of a natural mentor among a sample of older youth in foster care. Children who had been sexually abused, however, were marginally less likely to have a natural mentor with whom they had current contact. Sexual abuse is considered a form of complex trauma, which is deemed to be of an invasive, interpersonal nature that is both severe and pervasive. The experience of complex trauma often results in children learning that they cannot rely on others to help them, and as a result they frequently have difficulty developing strong, healthy attachments with adults (National Child Traumatic Stress Network, n.d.).

One explanation for this difficulty as it pertains to natural mentors could be the shame that some children experience related to their trauma. Consequently, they may seek to keep the painful experience a secret and/or close themselves off to other potentially emotionally healing relationships with caring adults due to an inability to trust. Studies also suggest that perpetrators of sexual abuse frequently keep child victims isolated from other supportive adults (Elliott, Browne, & Kilcoyne, 1995). It is therefore possible that the children from this study who were sexually abused did not have as much access to natural mentors as did nonsexually abused youth.

Consistent with several past positive youth development studies of natural mentoring in preadolescents, the current study found that the presence of a natural mentor was associated with better attachment to friends. For example, Bierman and Furman (1984) found that coaching relationships improved social competencies in fifth- and sixth-grade students. Similarly, Franco and Levitt (1998) found that fifth-grade students who reported having relationships with nonparental adult family members were better able to navigate peer conflicts and more likely to have supportive, close friendships. Studies of formal or programmatic mentoring, like Big Brothers/Big Sisters, have found that foster youth who had a formal mentor showed improvements in their peer prosocial support over time, while all foster youth in a nonmentored control group showed decrements in peer support over time (Rhodes, Haight, & Briggs, 1999). Mentors, whether natural or formal, may provide youth in out-of-home care with a model of relationships involving trust, support, and care that generalizes to their peer relationships. Alternatively, it may be

that youth who have better peer relationships are more likely to find and engage natural mentors.

Natural mentorship was not associated with any other psychosocial variables, including social skills, perceived future opportunities, and attachment to caregivers or biological parents. We hypothesized that the lack of differences observed might be a result of confounding effects of the other variables that differed between mentored and nonmentored youth. Therefore, in an attempt to examine the unique association between natural mentorship and these psychosocial variables, we conducted a series of post hoc, exploratory multivariate analyses that controlled for attachment to peers as well as age, placement type, sexual abuse, and length of time in out-of-home care (i.e., those nonpsychosocial variables that were significantly or marginally significantly different between groups).

After controlling for these variables, however, the findings remained unchanged. It is possible that although natural mentoring was not significantly associated with improved psychosocial functioning among preadolescents in this study, such benefits may emerge in the years to come as the children enter adolescence. Researchers have posited that mentees' developmental stage may affect the type of benefits derived from mentoring relationships (Noam, Malti, & Karcher, 2013). For example, one study found that middle and high school students felt empowered by their natural mentors; but younger mentees experienced this empowerment in terms of encouraged exploration, whereas older mentees experienced it in terms of assistance with reaching their self-determined goals (Liang, Spencer, Brogan, & Corral, 2008).

Limitations

The limitations of this study should be noted. The first is the cross-sectional nature of the data. This design potentially limited our ability to find associations between natural mentoring and psychosocial effects. The cross-sectional design also limits our ability to determine the directionality of the associations. For instance, are mentored children more likely to have positive attachments to peers, or are children with positive peer attachments more likely to engage with a natural mentor? Future studies should examine the longitudinal course of natural mentoring and its associated effects among preadolescent foster children. Our study also focused specifically on the social support provided by significant adults, and we did not capture support that may have been provided by older peers or siblings younger than 18 years of age. There was also a lack of variability and restricted range among most of the psychosocial variables. This could also contribute to finding few associations between natural mentoring and psychosocial constructs. Finally, the small sample size in some subgroups was a limitation, and such findings should be interpreted with caution.

Conclusion

Despite these limitations, this is the first study to provide important preliminary information about the nature of natural mentor relationships among preadolescent foster children. This study demonstrated that half of the children in the sample enter out-of-home care already engaged in supportive relationships with natural mentors who come from a variety of contexts or networks, including extended family, school, and service systems. Additionally, the bivariate differences related to age, placement in congregate care, length of stay in out of home care, exposure to sexual abuse, and attachment to friends shed some initial light on natural mentoring in the lives of these at-risk children. More

work with longitudinal data is needed in this area to fully elucidate how these relationships operate over time. Understanding the developmental trajectory of these relationships will enable researchers to identify if, for whom, and in what ways natural mentorship may exert a positive influence in the lives of vulnerable youth.

REFERENCES

Ahrens, K. R., DuBois, D. L., Richardson, L. P., Fan, M-Y, & Lozano, P. (2008). Youth in foster care with adult mentors during adolescence have improved adult outcomes. Pediatrics, 121, e246–e252.

Ainsworth, M. S. (1989). Attachments beyond infancy. American psychologist, 44(4), 709.

Armsden, G. C., & Greenberg, M. T. (1987). The Inventory of Parent and Peer Attachment: Individual differences and their relationship to psychological well-being in adolescence. Journal of Youth and Adolescence, 16, 427–455.

Barnett, D., Manly, J. T., & Cicchetti, D. (1993). Defining child maltreatment: The interface between policy and research. In D. Cicchetti & S. L. Toth (Eds.), Child abuse, child development, and social policy (pp. 7–73). Norwood, NJ: Ablex.

Berndt, T. J. (1979). Developmental changes in conformity to peers and parents. Developmental Psychology, 15, 608.

Bierman, K. L., & Furman, W. (1984). The effects of social skills training and peer involvement on the social adjustment of preadolescents. Child Development, 55, 151–162.

Bowlby, J. (1977). The making and breaking of affectional bonds. I. Aetiology and psychopathology in the light of attachment theory. An expanded version of the Fiftieth Maudsley Lecture. The British Journal of Psychiatry, 130(3), 201–210.

Britner, P. A., & Kraimer-Rickaby, L. (2005). Abused and neglected youth. In D. L. DuBois & M. J. Karcher (Eds.), Handbook of youth mentoring (pp. 482–492). Thousand Oaks, CA: Sage Publications, Inc.

Britner, P. A., Randall, K. G., & Ahrens, K. R. (2013). Youth in foster care. In D. L. DuBois & M. J. Karcher (Eds.), The handbook of youth mentoring (pp. 341–354). Thousand Oaks, CA: Sage Publications, Inc.

Burns, B. J., Phillips, S. D., Wagner, H. R., Barth, R. P., Kolko, D. J., Campbell, Y., & Landsverk, J. (2004). Mental health need and access to mental health services by youths involved with child welfare: A national survey. Journal of the American Academy of Child and Adolescent Psychiatry, 43, 960–970.

Eccles, J. S. (1999). The development of children ages 6 to 14. The Future of Children, 9, 30–44.

Elliott, M., Browne, K., & Kilcoyne, J. (1995). Child sexual abuse prevention: What offenders tell us. Child Abuse & Neglect, 19, 579–594.

Franco, N., & Levitt, M. J. (1998). The social ecology of middle childhood: Family support, friendship quality, and self-esteem. Family Relations, 47, 315–321.

Fuligni, A. J., & Eccles, J. S. (1993). Perceived parent-child relationships and early adolescents' orientation toward peers. Developmental psychology, 29, 622.

Gifford-Smith, M. (2000). People in my life [online]. Retrieved from http://www.fast trackproject.org

Greeson, J. K. P. (2013). Foster youth and the transition to adulthood: The theoretical and conceptual basis for natural mentoring. Emerging Adulthood, 1, 40–51.

Greeson, J. K. P., Usher, L., & Grinstein-Weiss, M. (2010). One adult who is crazy about you: Can natural mentoring relationships increase assets among young adults with and without foster care experience? Children and Youth Services Review, 32, 565–577.

Gresham, F. M., & Elliott, S. N. (1990). Social skills rating system manual. Circle Pines, MN: American Guidance Service.

Harris, K. M., Halpern, C. T., Whitsel, E., Hussey, J. Tabor, J., Entzel, P., & Udry, J. R. (2009). The National Longitudinal Study of Adolescent Health: Research Design. Retrieved from: http://www.cpc.unc.edu/projects/addhealth/design.

Huizinga, D., & Esbensen, F. (1990). Scales and measures of the Denver Youth Survey. Boulder, CO: Institute of Behavioral Science.

Kuperminc, G. P., Thomason, J., DiMeo, M., & Broomfield-Massey, K. (2011). Cool Girls, Inc.: Promoting the positive development of urban preadolescent and early adolescent girls. The Journal of Primary Prevention, 32, 171–183.

Larson, R., & Richards, M. H. (1991). Daily companionship in late childhood and early adolescence: Changing developmental contexts. Child development, 62(2), 284–300.

Lerner, R. M., Lerner, J. V., von Eye, A., Bowers, E. P., & Lewin-Bizan, S. (2011). Individual and contextual bases of thriving in adolescence: A view of the issues. Journal of Adolescence, 34, 1107–1114.

Liang, B., Spencer, R., Brogan, D., & Corral, M. (2008). Mentoring relationships from early adolescence through emerging adulthood: A qualitative analysis. Journal of Vocational Behavior, 72, 168–182.

McWey, L. M. (2004). Predictors of attachment styles of children in foster care: An attachment theory model for working with families. Journal of Marital and Family Therapy, 30(4), 439–452.

Munson, M. R., & McMillen, J. C. (2008). Nonkin natural mentors in the lives of older youths in foster care. Journal of Behavioral Health Services & Research, 35, 454–468.

Munson, M. R., & McMillen, J. C. (2009). Natural mentoring and psychosocial outcomes among older youth transitioning from foster care. Children & Youth Service Review, 31, 104–111.

National Child Traumatic Stress Network. (n.d.). Effects of complex trauma. Retrieved from http://www.nctsn.org/trauma-types/complex-trauma/effects-of-complex-trauma

Noam, G. G., Malti, T., & Karcher, M. J. (2013). Mentoring relationships in developmental perspective. In D. L. DuBois & M. J. Karcher (Eds.), The handbook of youth mentoring (pp. 99–116). Thousand Oaks, CA: Sage Publications, Inc.

Reis, H. T., Collins, W. A., & Berscheid, E. (2000). The relationship context of human behavior and development. Psychological bulletin, 126(6), 844.

Rhodes, J. E., Haight, W. L., & Briggs, E. C. (1999). The influence of mentoring on the peer relationships of foster youth in relative and nonrelative care. Journal of Research on Adolescence, 9, 185–201.

Rhodes, J. E., Spencer, R., Keller, T. E., Liang, B., & Noam, G. (2006). A model for the influence of mentoring relationships on youth development. Journal of Community Psychology, 34(6), 691–707.

Roffey, S. (2012). Positive relationships: Evidence-based practice across the world. New York, NY: Springer.

Schneider, B. H., Atkinson, L., & Tardif, C. (2001). Child–parent attachment and children's peer relations: A quantitative review. Developmental psychology, 37, 86.

Spencer, R. (2007). Naturally occurring mentoring relationships involving youth. In T. D. Allen & L. T. Eby (Eds.), The Blackwell handbook of mentoring: A multiple perspectives approach (pp. 99–117). Malden: Blackwell Publishing.

Staudt, M. M. (2003). Mental health services utilization by maltreated children: Research findings and recommendations. Child Maltreatment, 8, 195–203.

Sullivan, H. S. (1938). The data of psychiatry. Psychiatry, 1, 121–134.

Taussig, H. N., Culhane, S. E., & Hettleman, D. (2007). Fostering healthy futures: An innovative preventive intervention for preadolescent youth in out-of-home care. Child Welfare, 86, 113–131.

Zimmerman, M. A, Stoddard, S. A., Eisman, A. B., Caldwell, C. H., Aiyer, S. M., & Miller, A. (2013). Adolescent resilience: Promotive factors that inform prevention. Child Development Perspectives, 0, 1–6.