

## An Exploration and Comparison of Infant Feeding Practices in Home and Center Contexts

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This study compared parents' and teachers' feeding practices with young children. Parents and teachers of children aged 0-3 years were recruited at 24 child care centers to complete surveys regarding their demographic characteristics, parenting styles, and feeding practices with young children. Respondents included 106 parents and 102 teachers. Participants' feeding beliefs and values were found to be related to their parenting style classifications (i.e., Authoritative, Authoritarian, or Permissive), ethnicity, income, and other demographic characteristics. Findings indicate the need for teachers and parents to begin communicating about their long-term goals for a child's development as soon as the child enters care. Understanding the goals and variation of feeding practices used at home and at school can help teachers and parents begin to construct a shared vision for care.

*Keywords* : feeding, mealtimes, infant, toddler, home, center, culture.

Center-based child care has become an important developmental context for many children aged 0-3. Each day, nearly six million infants and toddlers in the United States spend some or all of their day in non-parental care (U.S. Department of Education, 2005). As the population in the United States has become more ethnically, culturally, and linguistically diverse, so has the population of infants and toddlers who are enrolled in child care (United States Census, 2010). Many child care centers are now providing services to children and families who have languages, customs and backgrounds that may be different from and unfamiliar to the centers' teachers and staff. Teachers' and parents' approaches to daily care events such as toileting, sleeping, and mealtimes reflect

underlying cultural values, beliefs and goals for child socialization. As Rosenthal (1999) has noted, the guidelines for "quality care" in the United States are heavily rooted in white, middle class values and social ideological goals and may not always align well with the goals and practices of the families who have children in care. For example, in Western societies where individual achievement and expression tend to be valued, adults' sensitivity and responsiveness to children's individual needs are widely accepted as important aspects of caregiving. These same caregiving behaviors may not be as valued in Japanese society where group cohesion tends to be emphasized to a greater degree than individual expression. In this context, redirecting a child to seek help from peers would likely be viewed as a more appropriate teacher response than responding to each child's needs individually (Tobin, Wu, & Davidson, 1989).

In the current study, teachers' and parents'

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child-rearing ideologies and practices around the common caregiving event of feeding were explored. Janet Gonzalez-Mena (2002, p.11) describes feeding as “one of the most important activities in any infant/toddler program,” an activity that ideally “enhances attachment, increases feelings of security, and provides warmth, acceptance, and an overall sense of well-being” in the infant. Developmental theorists suggest that infants can benefit when parents and classroom teachers communicate to construct a shared understanding of the goals underlying home familial/cultural practices and center-based practices and strive to achieve congruency where possible (Gonzalez-Mena & Bhavnagri, 2000). Understanding the degree of variation in feeding practices that exists both between and within home and center contexts, and the factors related to these differences can help inform the practice of child care teachers and the content of early childhood teacher preparation programs.

### **Caregivers’ Parenting Styles and Feeding Practices**

Individuals’ approaches to parenting are influenced by many factors including ethnicity, culture, socioeconomic status, and community context (Hill, 2006). The relationship between caregivers’ parenting beliefs and practices and consequent child development outcomes is also influenced by context. For example, while some research has shown restrictive/authoritarian parenting practices to be associated with outcomes such as increased aggression in children (Sandstrom, 2010), other research has shown that restrictive parenting practices can buffer young children from stress when living in low-income family contexts (Bhandari & Barnett, 2007).

A growing body of research has linked caregivers’ parenting styles with their approach to feeding young children. Hubbs-Tait, Kennedy, Page, Topham, and Harrist (2008) discovered a strong relationship between the parenting styles and feeding styles held by parents of preschoolers. Variation in parents’ feeding styles

with young children have been found to closely mirror Diana Baumrind’s parenting style classifications and related dimensions of responsiveness and demandingness (Baumrind, 1989). Baumrind classifies individuals’ approaches to parenting by their differing levels of demandingness and responsiveness: *Authoritarian* parents exert high levels of demand and low levels of responsiveness, *Authoritative* parents exerting high levels of demand coupled with high levels of responsiveness, and *Permissive* parents are responsive to their children but exert very little in the way of demands.

Like parenting styles, differences in feeding styles have also been linked to ethnicity and socioeconomic status. Hughes, Power, Fisher, Mueller, and Nicklas (2005) found that Hispanic parents of preschoolers were more likely than African American or White parents to engage in “indulgent” feeding practices or practices characterized by high responsiveness to children’s requests for food coupled by very little parental control. African American parents in that study were more prone to use “uninvolved” feeding practices characterized by less responsiveness, less interaction overall, and more instances of physical punishment. Another study found that low income East Asian parents engaged in more cooperative/child-centered feeding practices with preschoolers while low income African American parents engaged in adult-centered feeding practices with greater frequency (Ventura, Gromis, & Lohse, 2010). For the purposes of this study, adult-centered feeding styles were defined as feeding interactions in which the adult is in control of all aspects of the mealtime including how much, what, and when the child eats and the use of verbal and/or physical means to control the amount eaten. A cooperative feeding style refers to feeding interactions in which the adult shares responsibility for the give and take of food with the child and believes the child knows when he/she is hungry or has had enough to eat.

Interactions that occur during mealtimes serve to socialize children into the social and behavioral norms of their particular culture. As

Ochs and Shohet (2006, p. 47) stated in an anthropological analysis of mealtimes, "Meals are cultural sites where members of different generations and genders come to learn, reinforce, undermine, or transform each other's ways of acting, thinking, and feeling in the world, sometimes through cajoling, begging, probing, praising, bargaining, directing, ignoring, or otherwise interacting with one another in the course of nourishing one's body. These practices orient children both to mealtime comportment and to more encompassing dispositions expected of socially differentiated members." Infants and toddlers may need to reconcile conflicting cultural norms and values if center-based mealtime practices differ greatly from practices they experience at home.

Little research has yet examined the relationship between parenting styles and feeding practices with children younger than three years of age. As a first step in exploring underlying beliefs and values associated with home and center feeding practices, teachers and parents of children aged 0-3 years old were surveyed. The following research questions were addressed 1) How do classroom teachers' and parents' infant/toddler feeding practices compare? 2) What demographic factors relate to differences in feeding practices? 3) How do classroom teachers and parents' feeding practices relate to their parenting styles? 4) How do practices compare by childcare center quality ratings?

## Methods

### Design

A survey research design was selected to collect descriptive information about teachers' and parents' feeding styles with 0-3 year old children who were enrolled in center-based care. Stratified random sampling was used to select centers of differing child care quality at which to recruit teacher and parent participants. Teachers and parents completed and returned surveys regarding their

demographic characteristics, caregiving styles, and feeding practices with young children. All survey instruments were available in Spanish and English. Survey packets took participants approximately 30 minutes to complete. Participants received \$15 gift certificates to a local child care resource center bookstore.

### Sample

Stratified random sampling was used to select 45 child care centers representing three different child care quality rating levels within a large, urban, Midwestern city. Fifteen centers were selected at one-star, two-star, and three-star levels of quality. The State's quality rating system assigns a one-star rating to a center that has only met the State's minimum licensing requirements, a two-star rating is assigned to a center that has either met additional quality criteria or is nationally accredited, and a three-star rating is assigned to a center that has both met additional quality criteria and is nationally accredited. Of the invited centers, 24 centers agreed to participate: seven one-star centers, ten two-star centers, and seven three-star centers. At each center, all teachers and parents of children aged 0-3 were invited to participate in a survey about their feeding practices with infants and toddlers.

*Parents.* 106 parents participated in this survey study (see Table 1). In order to participate, all parents had to have at least one child 36 months of age or younger currently enrolled in center-based care. Parents were 31 years of age on average ( $\pm 7$  years) and nearly all (97%) were female. Sixty-five percent of parents were married with the remainder reporting they were single (14%), divorced (7%), separated (7%) or in a committed relationship but unmarried (8%). Of those employed outside the home (69%), approximately three-quarters of parents worked full-time. Parents were primarily Caucasian (70%), with the remaining participants reporting Latino (13%), African American (10%), or Native American (7%) heritage. Families' annual incomes ranged from less than \$30,000

per year to over \$70,000 per year, with a median income category of \$40,001 to \$50,000. Parents' highest levels of educational achievement ranged from high school/vocational education (20%), some college (26%), AA/AS (10%), BA/BS (32%), to graduate education (12%). Parents had one or

two children on average with a range of one to four children. The infants and toddlers who were the focus of the survey items were an average of 21-months of age ( $\pm 10$  months) and 57% were boys. Thirty-seven percent of parents had their infants enrolled in care at one-star centers, 34% at two-star centers, and

Table 1  
*Participants' Demographic Characteristics*

Characteristic	Parents (N=106)	Teachers (N=102)
Average Age	M=31 years (SD=7)	M=37 years (SD=14)
Sex		
Male	3%	0%
Female	97%	100%
Ethnicity		
Caucasian	70%	63%
Latino	13%	19%
African American	10%	8%
Native American	7%	6%
Asian	0%	1%
Annual income		
Less than \$30,000	43%	55%
Between \$30,001-\$60,000	15%	33%
Over \$60,001	42%	12%
Marital status		
Married	65%	49%
Single	14%	29%
Committed relationship	8%	7%
Divorced	7%	14%
Separated	7%	0%
Widowed	0%	2%
Education		
High School/Vocational School	20%	33%
Some college	26%	21%
AA/AS	10%	8%
Certificate program	0%	11%
BS/BS	32%	20%
Graduate	12%	4%

*Continued*

Table 1  
*Participants' Demographic Characteristics*

Characteristic	Parents (N=106)	Teachers (N=102)
Number of children	M=1.5 (SD=2)	N/A
Age of child(ren) under 3 years		
1-6 months	5%	N/A
7-12 months	18%	N/A
13-24 months	33%	N/A
25-36 months	40%	N/A
Child Sex		
Male	57%	N/A
Female	43%	N/A
Star-rating of child care center where child is enrolled/teacher works		
1-star	37%	25%
2-star	34%	41%
3-star	29%	33%
Position title		
Master teacher	N/A	8%
Lead teacher	N/A	29%
Teacher	N/A	28%
Assistant teacher	N/A	26%
Years teaching in early childhood field	N/A	M=8 years (SD=9)

29% at three-star centers.

*Teachers.* 102 teachers of children aged birth to three participated (see Table 1). All teachers were female and an average of 37 years of age ( $\pm 14$  years). The majority of teachers were Caucasian (63%) or African American (19%) with the remainder of the teachers reporting Latino (8%), Native American (6%), or Asian (1%) heritage. Teachers' annual family incomes ranged from less than \$10,000 to more than \$70,000 with a median income category of \$20,001 to \$30,000. The highest level of education achieved ranged from high school/vocational education (33%), some college (32%), AA/AS (8%), BA/BS (20%), to graduate education (4%). All teacher

participants currently worked and had feeding responsibilities in classrooms with children aged 0-3. Participants were currently serving as lead teachers (29%), teachers (28%), assistant teachers (26%) or master teachers (8%) in their classrooms. Years working in the field of early childhood education averaged 8 years ( $\pm 9$  years) with a range of 1 month to 38 years. Teachers were employed at centers with one-star (25%), two-star (41%), or three-star (33%) ratings.

### Measures

*Demographic Questionnaire.* Parents and teachers completed several questions regarding their demographic characteristics including their

age, sex, ethnicity, marital status, household composition, yearly income, employment and educational backgrounds.

*Parenting Styles and Dimensions Questionnaire* (PSDQ) (Robinson, Mandleco, Frost, Olsen, & Hart, 2001). The PSDQ consists of thirty-two statements describing different parenting behaviors. Respondents rate the frequency with which they engage in these behaviors on a five-point Likert scale (1=*Never*, 2=*Once in Awhile*, 3=*About Half of the Time*, 4=*Very Often*, 5=*Always*). The measure yields three main factors or scales relating to Baumrind's (1989) typologies of authoritarian, authoritative, and permissive parenting. Reliabilities and mean scores were computed for each parenting style: *Authoritative* (15 items), ex: "I emphasize the reasons for rules" (Parents:  $M=4.13$ ,  $SD=.40$ ,  $\alpha=.79$ ; Teachers:  $M=4.30$ ,  $SD=.40$ ,  $\alpha=.80$ ); *Authoritarian* (12 items), ex: "I spank when my child is disobedient" (Parents:  $M=1.62$ ,  $SD=.42$ ,  $\alpha=.80$ ; Teachers:  $M=1.45$ ,  $SD=.35$ ,  $\alpha=.76$ ); and, *Permissive* (5 items), ex: "I give into my child when he/she causes a commotion" (Parents:  $M=2.29$ ,  $SD=.60$ ,  $\alpha=.56$ ; Teachers:  $M=1.93$ ,  $SD=.60$ ,  $\alpha=.51$ ). Note: Teachers were instructed to complete items on this particular measure as if they were parents in order to assess their parenting/caregiving styles outside of their classroom roles. Teachers completed all other surveys instruments only in regard to the children they cared for in the classroom setting.

*Infant (0-12 months) Feeding Practices Questionnaire* (IFPQ) (developed and adapted from Barnard, 1994). This 48-item survey measure was developed for this study to assess parents' and teachers' feeding practices with infants aged 0-12 months. The survey was developed on the basis of Barnard's (1994) Nursing Child Assessment Satellite Training (NCAST) observational assessment of mother-infant feeding interactions. The NCAST has been shown to appropriate for use in a wide variety of cultures as an assessment of feeding interactions (Boffman, Clark, & Helsel, 1997).

The IFPQ had four subscales rated on a five-point Likert scale (1=*Never*, 2=*Rarely*, 3=*Sometimes*, 4=*Most of the Time*, 5=*Always*): *Sensitivity to Cues* (14 items), ex: "How often while feeding the child do you hold the child so that it is possible to make eye contact with him/her?" (Parents:  $M=3.86$ ,  $SD=.64$ ,  $\alpha=.76$ ; Teachers:  $M=4.07$ ,  $SD=.52$ ,  $\alpha=.75$ ); *Response to Child's Distress* (10 items—one item was removed due to low reliability), ex: "When the child cries or fusses during feeding, how often do you try to soothe the child in nonverbal ways (rocking, bouncing, etc.)?" (Parents:  $M=4.37$ ,  $SD=.30$ ,  $\alpha=.60$ ; Teachers:  $M=4.41$ ,  $SD=.35$ ,  $\alpha=.76$ ); *Social-Emotional Growth Fostering* (14 items), ex: "How often during feeding do you laugh or smile?" (Parents:  $M=4.32$ ,  $SD=.35$ ,  $\alpha=.72$ ; Teachers:  $M=4.41$ ,  $SD=.41$ ,  $\alpha=.72$ ); *Cognitive Growth Fostering* (8 items—1 item removed due to low levels of reliability), ex: "How often during the feeding do you provide the child with objects, finger foods, toys, and/or spoons?" (Parents:  $M=3.99$ ,  $SD=.53$ ,  $\alpha=.75$ ; Teachers:  $M=3.99$ ,  $SD=.65$ ,  $\alpha=.81$ ).

*Caregiver's Feeding Styles Questionnaire* (CFSQ) (Hughes, Power, Fisher, Mueller, & Nicklas, 2003). The CFSQ assesses caregivers' feeding styles with children aged 12-36 months. The CFSQ was originally developed to assess feeding and mealtime interactions among Latino and African American populations in the United States and has since been used effectively with caregivers from a variety of cultural and socioeconomic backgrounds (Hughes et al., 2003). Items are rated on a five-point scale (1=*Never*, 2=*Rarely*, 3=*Sometimes*, 4=*Most of the Time*, 5=*Always*). The dimensional approach was used to examine respondents' use of adult-centered vs. cooperative or "child-centered" feeding practices. Adult-centered and cooperative feeding approaches assessed were: *Adult-centered/High Control* (3 items), ex: "How often during a meal do you physically struggle with the child to get him or her to eat (for example, physically putting the child in the chair so he or she will eat)?" (Parents:  $M=2.06$ ,  $SD=.70$ ,  $\alpha=.56$ ; Teachers:  $M=1.74$ ,  $SD=.60$ ,  $\alpha=.39$ ). *Adult-*

*centered/Contingency Management* (4 items), ex: “How often during the meal do you encourage the child to eat by using food as a reward?” (Parents:  $M=2.09$ ,  $SD=.78$ ,  $\alpha=.77$ ; Teachers:  $M=1.52$ ,  $SD=.64$ ,  $\alpha=.71$ ). *Child-centered/Cooperative* (6 items), “How often during the meal do you reason with the child to get him or her to eat (for example, ‘Milk is good for your health because it will make you strong’)?” (Parents:  $M=3.71$ ,  $SD=.60$ ,  $\alpha=.64$ ; Teachers:  $M=3.73$ ,  $SD=.60$ ,  $\alpha=.63$ ).

## Results

### *How do classroom teachers’ and parents’ infant/toddler feeding practices compare?*

To compare the nature of teachers’ and parents’ feeding practices/styles, the mean scores for the subscales of the Infant (0-12 month) Feeding Practices Questionnaire (IFPQ) (i.e., Sensitivity to Cues, Response to Child’s Distress, Social-Emotional Growth Fostering, Cognitive Growth Fostering) and the Caregiver’s Feeding Styles Questionnaire (CFSQ)(i.e., Adult-centered/High control, Adult-centered/Contingency Management, and Cooperative/Child-centered) were compared using t-tests to examine whether any statistically significant differences existed between the responses of the two groups of participants.

Teachers’ and parents’ mean scores on the *Sensitivity to Cues* subscale of the IFPQ differed significantly at the  $p<.05$  level. Teachers reported noticing and attending to 0-12 month old infants’ hunger and fullness cues during feedings more often than did parents (“Most of the Time” [ $M=4.07$ ,  $SD=.52$ ] versus “Sometimes” [ $M=3.86$ ,  $SD=.64$ ],  $t(168)=2.39$ ,  $p=.02$ ). Mean differences on the other subscales of the IFPQ did not reach significance at a  $p<.05$  level. On average, both teachers and parents reported engaging in feeding practices that soothed distressed infants (Parents:  $M=4.37$ ,  $SD=.30$ ; Teachers:  $M=4.41$ ,  $SD=.35$ ) and fostered infants’ social-emotional (Parents:  $M=4.32$ ,  $SD=.35$ ; Teachers,  $M=4.41$ ,  $SD=.41$ ), and cognitive

(Parents:  $M=3.99$ ,  $SD=.53$ ; Teachers= $M=3.99$ ,  $SD=.65$ ) growth “Most of the Time” on a scale where 1=*Never*, 2=*Rarely*, 3=*Sometimes*, 4=*Most of the Time*, and 5=*Always*.

When feeding 12-36 month old children, parents reported using adult-centered/high control (e.g. physical coercion) strategies significantly more often than did teachers,  $M=2.06$ ,  $SD=.70$  versus  $M=1.74$ ,  $SD=.60$ , respectively,  $t(196)=3.47$ ,  $p=.001$ . Parents also reported using adult-centered/contingency management strategies such as giving children rewards for eating more often than did teachers,  $M=2.09$ ,  $SD=.78$  versus  $M=1.52$ ,  $SD=.64$ , respectively,  $t(196)=5.72$ ,  $p=.0001$ . However, cooperative/child-centered feeding practices were reported more often than adult-centered feeding practices by both sets of respondents. On a scale where 1=*Never*, 2=*Rarely*, 3=*Sometimes*, 4=*Most of the Time*, and 5=*Always*, teachers and parents reported engaging in child centered feeding practices “Sometimes” or “Most of the Time” (Parents:  $M=3.71$ ,  $SD=.60$ ; Teachers:  $M=3.73$ ,  $SD=.60$ ).

### *What demographic factors relate to differences in feeding practices?*

Participants’ mean scores on the subscales of the IFPQ and CFSQ were examined to identify whether any significant differences existed by demographic factors (i.e., caregiver age, child age, marital status, ethnicity, yearly income, employment status, education, and years in the early childhood field [for teachers only]).

Some variables with multiple response categories such as marital status and ethnicity were dichotomized for analysis purposes because of insufficient sample sizes across cells. A comparison between parents who were married and those who were not revealed that married parents reported greater sensitivity to 0-12 month old infants’ hunger and fullness cues during feeding on average than did participants who were not married,  $M=3.99$ ,  $SD=.50$  and  $M=3.56$ ,  $SD=.80$ , respectively,  $t(76)=2.99$ ,  $p=.01$ .

Significant differences in feeding style were

also found by participants' ethnic backgrounds. Among teachers, Caucasian respondents reported engaging in feeding practices with 0-12 month old infants related to social-emotional growth more often than did non-Caucasian respondents,  $M=4.49$ ,  $SD=.39$ , and  $M=4.26$ ,  $SD=.47$ , respectively,  $t(85)=2.45$ ,  $p=.02$ . Among parents, significant differences were found in Caucasian and non-Caucasians' feeding practices with 12-36 month old children. Caucasian parents reported engaging in Adult-Centered/High Control and Adult-Centered/Contingency feeding practices less often than did Non-Caucasian parents,  $M=1.95$ ,  $SD=.63$  versus  $M=2.31$ ,  $SD=.81$ ,  $t(97)=2.38$ ,  $p=.01$ , and,  $M=1.98$ ,  $SD=.78$  versus  $M=2.36$ ,  $SD=.72$ ,  $t(97)=2.27$ ,  $p=.02$ , respectively. Caucasian parents reported engaging in Cooperative/Child-Centered feeding practices less often than did non-Caucasian parents as well,  $M=3.63$ ,  $SD=.53$ , versus  $M=3.91$ ,  $SD=.60$ ,  $t(97)=2.34$ ,  $p=.02$ .

Teachers who earned less than \$30,000 per year reported less sensitivity to 0-12 month old infants' hunger and fullness cues during feedings than did teachers who earned more than \$30,000 per year,  $M=4.22$ ,  $SD=.44$ , and  $M=3.98$ ,  $SD=.58$ , respectively,  $t(84)=2.16$ ,  $p=.03$ . No significant differences were found in parents' feeding styles by income.

Parents who were more highly educated were less likely to use Adult-centered/High control strategies when feeding their 12-36 month old children,  $r(96)=-.26$ ,  $p=.01$ . No significant correlations were found between teachers' educational backgrounds and feeding practices. However, teachers who reported receiving less information about nutrition and feeding from their child care centers and other sources, reported using Adult-Centered/Contingency feeding strategies more often with children aged 12-36 months,  $r(95)=-.27$ ,  $p=.01$ .

No significant differences in feeding styles were found by caregiver age, child age, employment status, or the number of years teachers had worked in the field of early childhood.

#### *How do classroom teachers and parents' feeding practices relate to their parenting styles?*

Participants' mean scores on the Authoritative, Authoritarian, and Permissive scales of the Parenting Styles and Dimensions Questionnaire (PSDQ) were correlated with their responses on the IFPQ and CFSQ feeding interaction surveys. For both teachers and parents, having an Authoritative parenting style was significantly and positively correlated with higher mean scores on all subscales of the IFPQ and the Child-centered feeding subscale of the CFSQ at the  $p<.001$  significance level. Authoritative parenting was most strongly associated with the Social-Emotional Growth Fostering subscale of the IFPQ,  $r(162)=.58$ ,  $p<.001$ . Teachers and parents with Authoritarian parenting styles were significantly less likely to report responsiveness to infants' distress during feeding interactions or feeding practices that fostered infants' social-emotional growth,  $r(162)= -.22$ ,  $p<.001$  and  $r(161)= -.28$ ,  $p<.001$ , respectively. These participants were significantly more likely to report having adult-centered/high control and adult centered/contingency management feeding practices,  $r(194)=.30$ ,  $p<.001$  and  $r(194)=.40$ ,  $p<.001$ , respectively.

#### *How do practices compare by childcare center quality ratings?*

No significant differences were found between the feeding styles of parents and teachers who were recruited from centers rated at one-star, two-star, and three-star levels. Teachers at three-star centers reported slightly greater sensitivity to 0-12 month-old infants' hunger and fullness cues during feeding than did teachers at one- or two-star centers, however this difference did not reach statistical significance,  $F(2,86)=2.96$ ,  $p=.05$ .

## Discussion

Rogoff, Mistry, Goncu, & Mosier (1993, p.1)



state that “development occurs through active participation in cultural systems of practice in which children, together with their caregivers and other companions, learn and extend the skills, values, and knowledge of their community.” As a greater proportion of infants and toddlers in the United States spend time in out-of-home care, it is important to understand how the skills, values, and knowledge that children construct through participation in the developmental contexts of home and center-based settings may differ. By surveying teachers and parents about their feeding practices with children aged 0-3 and exploring factors related to differences in these practices, this study provides exploratory data that can help inform teacher preparation and practice in an increasingly diverse society.

Overall, teachers and parents had similar feeding styles in this study. When feeding 0-12 month-old infants, both teachers and parents reported tuning-in to infants’ hunger and fullness cues, soothing infants, and engaging in feeding interactions that supported social-emotional and cognitive growth at least “Sometimes.” When feeding children aged 12-36 months of age, both teachers and parents reported engaging in Cooperative/Child-centered feeding practices “Sometimes” or “Most of the Time”, and engaging in Adult-centered feeding practices that were characterized by high control (e.g., using physical coercion to make the child eat) and/or contingency management (e.g., using rewards to guide the child’s eating behavior) only “Rarely.”

However, while cooperative feeding was used by parents and teachers across contexts, the frequency with which parents and teachers engaged in cooperative feeding varied. On average, teachers reported engaging in higher levels of cooperative feeding than did parents, and reported being significantly more sensitive and responsive to young infants’ hunger and satiety cues than were parents. Teachers were more likely to report using cooperative feeding practices when they were from Caucasian ethnic backgrounds, earned more than \$30,000 per year, or had received information about nutrition/

feeding from their child care center or other sources. Similarly, parents were more likely to report using cooperative feeding practices when they were from Caucasian backgrounds, were married, or were college educated. These findings align with previous research that has found responsive, individualized care to be highly valued among white, middle-class and higher income caregivers (Rosenthal, 1999). The project also reinforced findings from previous studies with older children that demonstrated that one’s parenting style (i.e., Authoritarian, Authoritative, or Permissive) or child-rearing beliefs tend to mirror the control and responsiveness exerted during mealtime interactions with young children. Teachers and parents who reported Authoritative parenting practices characterized by warmth and control were more likely to report responsiveness to infants’ hunger and fullness cues during feeding interactions than were Authoritarian caregivers.

These findings have implications for teacher-parent communication around feeding routines in care. Feeding styles differed significantly by ethnicity in this project. “Appropriate” caregiving practices vary depending on the underlying goals for development. It is recommended that teachers and parents begin to communicate about their long-term goals for child development before, or as soon as, the child enters care. Understanding what practices look like around feeding, sleeping, and toileting at home and at school and the underlying goals behind these practices can help teachers and parents begin to construct a shared vision for care. Parents can share with teachers the foods, mealtime roles, and practices that are engaged in at home so that some of these practices can be adopted in the classroom to allow for more continuity between contexts. These conversations are important because, for classroom practices to be developmentally appropriate, they must also be culturally appropriate (Cople & Bredekamp, 2009).

A limitation of this study was that parents and teachers were not linked by child. Therefore, the congruency of care that individual children were

receiving across home and center contexts is unknown. The project does provide a broad understanding of differences found in teachers' and parents' approaches to infant feeding, however, and provides some clues as to the demographic factors that are most strongly related to these differences. Future research can build upon the findings of this study by following infants' development over time to examine the impact of differing feeding styles experienced between contexts and chronicling the ways that infants, parents, and teachers navigate these differences. The National Infant and Toddler Child Care Initiative (U.S. Department of Health & Human Services [2010]) reports that "culture has a powerful impact on early learning, ECE professionals need competencies in learning about the families, cultures, and languages of children in their care to challenge their own assumptions about differences." Qualitative research is needed to examine the cultural underpinnings of differences in feeding styles in more depth and the ways in which teachers can communicate with families to construct developmentally appropriate feeding practices that will be supportive of children's family practices, cultural backgrounds, and long-term development.

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