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Child Care Center Quality and Child Development

This brief reviews the latest research on indicators of quality in child care centers. Through numerous studies, these factors are shown to indicate quality care and to predict improved outcomes for children. However, it is important to note that, although the indicators of high quality child care mentioned here are predictive of positive outcomes for children, these effects cannot be assumed to be causal. Therefore, the following indicators should be considered as general recommendations coming from the most recent and relevant studies on what elements contribute to quality child care and child development. Quality child care has been repeatedly linked to positive developmental traits in children, including cognitive, social, and emotional development, and with an increasing number of children attending center based care, these factors are important to consider on both an individual and policy basis.

- **Caregiver training and education** is an important predictor of high quality center care. A key recommendation of the Cost, Quality, and Child Outcomes in Child Care Centers¹ study was to invest more federal, state and local funding to the education and training of childcare teaching staff and administrators and to provide them with an adequate compensation based on their level of education, training, and experience (Helburn, 1995). Caregivers with formal degrees in childhood education, such as the Childhood Association Certification Associate's degree, or

the Early Childhood Education (ECE) Baccalaureate degree, or who attended workshops on child development, are shown to be more sensitive and responsive in interactions with children (Scarr et al., 1994). According to one study, specific workshops are particularly effective in improving childcare skills, whereas a Bachelors Degree in ECE is the best predictor of overall classroom quality rating (Burchinal, Cryer, Clifford, & Howes, 2002). In one study, preschoolers with better educated teachers showed improved standardized cognitive test scores, language skills, task completion, and school preparation (D. L. Vandell & Wolfe, 2000).

- **Licensing compliance** with state standards for day care centers provides assurance that the center is meeting the minimal levels of safety, teaching standards, and proper curricula. Registration and accreditation with a national, state, or local agency, such as The National Association for the Education of Young Children (NAEYC), one of the largest, can signal compliance with a higher standard of care. Many elements of quality care are included in these accreditation requirements, including staff background checks, other safety standards, and medical protocol, to name a few. These factors vary by state and by agency, making it important to understand the underlying measures which make up the licensing requirements. It has been found that center care state compliance is higher among centers caring for preschoolers than it is among those providing care to toddlers and infants. Therefore, particular attention should be given in making sure care

¹ A study done in 1995 which provided the first comprehensive econometric and psychometric analysis of child care and child outcomes.

providers for these younger age groups meet licensing requirements (Phillips et al., 2000).

- **Minimal staff turnover** is another important indicator of quality child care. Research suggests that children should be cared for by the same teaching staff for at least one year at a time. Consistency among staff helps to establish healthy and secure attachments. This is particularly important for infants, but is recommended for all young children. Recent research suggests that increased behavior problems among children in child care may be due to lack of stability in teaching staff (Love et al., 2003). This may be related to the fact that frequent turnover does not allow children to develop stable and affectionate relationships with teachers. Infants and toddlers are particularly affected by staff turnover and display more appropriate social behavior when they are in stable relationships with staff (Scarr et al., 1994).
- **Smaller teacher-child ratios and appropriate group sizes** have repeatedly been associated with quality child care. Children in classrooms with lower child-adult ratios have been found to understand teachers better, initiate and participate in conversations more frequently, have better general knowledge, readily cooperate, and show less hostility in interactions with each other (D. L. Vandell & Wolfe, 2000). While being part of a group can be beneficial, especially for older children for whom groups promote social and cooperative learning, group size should be appropriate for the age of the child (Scarr, Eisenberg, & Deater-Deckard, 1994). Lower teacher: child ratios are especially important for infants, whereas lower overall group sizes are more relevant for toddlers (Phillips, Mekos, Scarr, McCartney, & Abbott-Shim, 2000). Table 1 provides guidelines for teacher: child ratios and group sizes by age, as recommended by various organizations. The data from the U.S. Department of Health and Human Services and the American Academy of Pediatrics and American Public Health Association is based on evidence from programs where children thrive; whereas the New York State standards are the bare minimum requirements and do not necessarily provide the ideal environment for child development. **Teacher salary** has been found to be a strong predictor of quality care, particularly because it is associated with other

quality center characteristics including less staff turnover and more educated staff. Teacher wages in combination with teacher training, parent fees, ratios and group size can significantly predict the quality of classroom interactions (Phillips et al., 2000). In one study, it was found that the highest wage paid to a teacher was the best predictor of center quality (Scarr et al., 1994). Because staff wages are typically the largest expenditure of a child care center, higher teacher wages mean a higher overall cost of care. This means that while higher teacher wages can lead to a higher quality of care, it can also make it difficult or impossible for parents to pay for care. Because investment in early child education and care can reduce social costs later in life, every effort should be made to make high quality care more affordable for families with young children (D. L. Vandell & Wolfe, 2000).

- **Curriculum and child assessment** are two procedures through which centers work to foster a positive learning environment for children. An appropriate curriculum can encourage teachers to interact with children in an age-appropriate way that can improve their social and cognitive development. Additionally, children should be given regular assessments on their progress and behavior, and parents should be updated with this information.
- **Warm and caring child care providers** who are attentive, culturally sensitive, utilize positive discipline, and interact with the children frequently are important for creating a nurturing environment to stimulate development. Children whose child care providers are more involved and invested in them enter kindergarten with fewer behavior problems (D. L. Vandell & Wolfe, 2000). Children appear happier, have closer and more secure attachments to caregivers, and perform better on standardized cognitive and language tests in settings with more warm and caring child care providers who have vested interest in the children's development. In contrast, insensitivity and lack of warmth among providers predicts increased behavior problems among children (D. L. Vandell & Wolfe, 2000). When caregivers engage in more positive verbal interactions with children, the children are more considerate, sociable, intelligent and task oriented, and have more positive peer relationships (Scarr et al., 1994).

Table 1: Recommended staff-child ratios and maximum group sizes

		Under 6 weeks	6weeks -12 months	12 -18 months	18-24 months	25-30 months	31-36 months	3 years old	4 years old	5 years old
U.S. Department of Health and Human Services	Ratio	1:3	1:3	1:3	1:3	1:4	1:5	1:7	1:8	1:8
	Group Size	6	6	6	6	8	10	14	16	16
American Academy of Pediatrics and American Public Health Association	Ratio	1:3	1:3	1:4	1:4	1:4	1:5	1:7	1:8	1:8 16
	Group Size	6	6	8	8	8	10	14	16	
New York State Day Care Licensing Standards	Ratio	1:3	1:4	1:4	1:5	1:5	1:5	1:7	1:8	1:9
	Group Size	6	8	8	12	12	12	18	21	24

Higher quality instructional interactions were positively associated with measures of academic or language skills, and higher quality emotional interactions were associated with teachers' ratings of better social competence and fewer behavioral problems (Mashburn et al., 2008).

- The beneficial influences of quality child care are particularly strong for **economically disadvantaged children**. In one study, the Carolina Abecedarian Project, long term IQ, reading, and math scores were all increased as a result of quality early child care. Even at age 21, those who received high quality child care in the preschool period were on average older at the time their first child was born, and more likely to have attended a four-year college than their peers who did not receive such care. Other outcomes related to experiencing high quality child care are juvenile criminal activity, earnings, and public assistance use (D. L. Vandell, Belsky, Burchinal, Steinberg, & Vandergrift, 2010). In the Early Head

Start Program, children from low-income families who attended quality care exhibited reduced aggressive behavior and improved cognitive, language, and social-emotional development (Love et al., 2003).

In summary, quality child care promotes **social, language, emotional, and cognitive development** in children and these influences can be seen into adulthood. In the Cost, Quality, and Outcomes Study, children enrolled in higher-quality child care classrooms as preschoolers displayed better math skills through second grade; this effect was greatest for the children of less-educated mothers (D. L. Vandell & Wolfe, 2000). The effects of quality care in early childhood have been associated with higher levels of academic learning ability in future years, along with school readiness, better memory, better language and math skills, and fewer behavior problems (Frank Porter Graham Child Development Center. & Educational Resources Information

Center (U.S.), 1999). An interesting finding shows that quality effects on children's development are higher at higher levels of quality. In other words, the outcomes show a non linear relationship. The repercussions of quality center based child care have been shown to last into adulthood, and therefore display that competencies in one period set the stage for progress in later periods in life (D. L. Vandell et al., 2010).

Of course many elements of quality care are related. In one study, the researchers found that all of the measures used to evaluate child care centers were so highly correlated that using all of them became redundant (Scarr et al., 1994). In other words, it is

possible to look at a few indicators and be able to get a good sense of the quality level of the center. There are many measures, such as Environment Rating Scales, used to evaluate child care centers; however the above list incorporates the points which are most commonly discussed in the recent literature and encompass many of the evaluative criteria used in rating systems. Although these measures have shown to provide children with positive and healthy learning environments, careful provisions should be made for children with special needs in order to foster their development. Overall, quality of early child care continues to be an important policy topic, as quality care continually shows better development and lasting consequences.

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