CLASP

CENTER FOR LAW AND SOCIAL POLICY

Center Ratios and Group Sizes: Charting Progress for Babies in Child Care Research-Based Rationale

August 2008

by Rachel Schumacher*

Recommendation #6

Ensure that babies and toddlers in centers are in small groups with sufficient numbers of providers: Ensure that infants in center-based programs are cared for in groups no larger than six, with ratios of one child care provider to no more than three infants, and that toddlers are cared for in groups no larger than eight, with ratios of one provider to no more than four toddlers.

"We create chaos and confusion when we put too many infants or toddlers in one group, even with an appropriate number of adult caregivers. As the number of infants in a group goes up, so do noise level, stimulation, and general confusion. The group's intimacy is gone. Children look lost and wander aimlessly, not quite knowing what to do…In small groups, very young children are able to make connections, form caring relationships, and learn to understand other children." J. Ronald Lally, Yolanda Ledon Torres, and Pamela C. Phelps, "Caring for Infants and Toddlers in Groups."[1]

What does the research say about babies and toddlers in child care centers and their need for small groups with sufficient numbers of providers?

Babies and toddlers in child care centers need nurturing, secure relationships with their providers, as well as stimulating language and play interactions.

In the earliest years of life, babies naturally seek out interactions with their environment and those that take care of them, so that they can begin to understand their world. If the baby's needs are met, the infant forms a secure attachment to their caregiver that creates a foundation for healthy development in early childhood and beyond.[2] This responsive relationship is critical to the development of the baby's brain, impacting socio-emotional, language, and cognitive development.[3] Child care providers who are attuned to each child's unique needs and personality can support, nurture, and guide the child's growth and development.[4] Research has found that infants with secure attachment relationships with their providers are more likely to play, explore, and interact with providers in their child care setting.[5]

Small group size with sufficient numbers of providers is particularly important for babies and toddlers and is linked to better quality early care environments and more positive caregiving interactions with providers.

When there are fewer children and more providers in small groups, group care situations are more likely to promote the well-being of babies and toddlers. The landmark National Institute of Child Health and Human Development (NICHD) study examined care for babies and toddlers in a range of child care center and home settings and found that ratios and group sizes were consistent predictors of quality. The researchers found that the closer the provider-to-child ratio was to 1:1, the higher was the probability of sensitive, positive caregiving, with only 8 percent of caregivers with a ratio of 1:4 rated as "highly sensitive" by observers. In this study, group sizes were the more predictive factor of quality in center-based care.[6] Researchers found that centers with smaller group sizes and more providers per child rated higher on the Infant and Toddler Environmental Rating Scale (ITERS) and observational measures of sensitivity of care.[7] Another study examined specific thresholds for ratios and group sizes and found that adding just one more child to a group could negatively impact the quality of care. Infants and toddlers with better provider-to-child ratios in child care (1:3 or better for infants, 1:4 or better for toddlers) were more likely to experience highly rated caregiving and activities compared to children in care with worse ratios. Infants and toddlers cared for in smaller group sizes (6 or less for infant rooms, 12 or less for toddler rooms) were more likely to experience developmentally appropriate activities.[8] Likewise, a study conducted in the Netherlands of 217 providers in infant and toddler rooms observed that the quality of interactions between children and providers improved when provider-to-child ratios moved from 1:5 to 1:3, especially for the very young children.[9]

Babies and toddlers who experience child care in smaller groups with sufficient numbers of providers develop better language and socio-emotional skills.

Children in centers with better ratios and group sizes were more likely to receive better quality care and to form more secure emotional attachments to their providers, resulting in higher social competence with their peers.[10] A study of one-year-olds in child care centers found that those in rooms with more providers per child had more advanced receptive language and communication skills and

scored higher on measures of cognitive development than those with fewer providers per child.[11] An analysis of NICHD data found that centers meeting provider-to-child ratios of 1:4 and group sizes of eight for children 24 months of age could be linked to those toddlers demonstrating fewer behavior problems and more cooperative behaviors.[12]

Not enough child care centers meet recommended guidelines for group size and provider-to-child ratios for babies and toddlers.

Only three states currently require licensed child care center providers to meet 1:3 provider-to-child ratio for infants, and one state limits group size to six. Only 5 states meet ratio guidelines of 1:4 for toddlers, and while eight states limit toddler group size to eight at age 18 months, only two still do so for children at 27 months of age.[13] In the national NICHD study, researchers reported that few center rooms met the recommendations for ratios and group size for infants and toddlers published in the report *Caring for Our Children,* written by the American Academy of Pediatrics, the American Public Health Association, and the National Resource Center for Health and Safety in Child Care. For example, 36 percent of center rooms met the 1:3 provider-to-child ratio for children six months old, and just 20 percent met the 1:4 standard for those aged 18 months.

How can state child care licensing, subsidy, and quality enhancement policies ensure that babies and toddlers in centers are in small groups with sufficient numbers of providers?

State licensing and monitoring can set and enforce a recommended standard for ratios and group sizes.

States can require that all center care settings including infants and toddlers be licensed and that the youngest child in any group determines the provider-to-child ratio that applies. To improve ratios and group size, states can move toward implementing the recognized, high-quality standards in *Caring for Our Children,* the seminal report of the American Academy of Pediatrics, the American Public Health Association, and the National Resource Center for Health and Safety in Child Care. *Caring for Our Children* recommends that infants through 12 months of age be cared for in group sizes no larger than six, with no more than three babies cared for by one provider. For toddlers 13-30 months, *Caring for Our Children* recommends provider-to-child ratios of 1:4, with a group size no larger than eight. These recommendations assume that in mixed-age groups in child care centers the age of the youngest child in care determines what ratios and group size are applied.[14]

Caring for Our Children Standards		
Age of Child	**Ratios**	**Group Size**
Birth to 12 months	1:3	6 children
13 to 30 months	1:4	8 children
31 to 35 months	1:5	10 children

Other nationally recognized quality program standards have similar requirements, [15] although *Caring for Our Children* reflects the highest standards for infants.

States can provide incentives and resources through their child care subsidy system or through their Quality Rating and Improvement System (QRIS) to help centers work toward better ratios and group sizes, especially centers serving low-income babies and toddlers.

States should help programs move toward implementing better ratios and group sizes whether they do so in concert with requirements in licensing changes or through more incentive-based strategies. In order to improve group sizes and provider-to-child ratios, a center needs to increase and sustain its staff of child care providers. States can raise child care subsidy payments or provide support through grants or contracts with centers, which could be targeted to centers serving low-income children, or available more broadly as an incentive. Another strategy states can use to improve child care quality is QRIS. As of May 2008, 17 states had a statewide QRIS; of these, seven states required that infants be served in smaller groups than toddlers in their QRIS standards, and six states required lower ratios for infant and toddlers in their QRIS standards.[16]

To move toward this recommendation, states may use multiple policy levers, starting from different points. Potential state policies include:

Licensing

- Require in state licensing standards that infants in center-based programs are cared for in groups no larger than six, with ratios of one child care provider to no more than three infants, and that toddlers are cared for in groups no larger than eight, with ratios of one provider to no more than four toddlers.

- Expand the state licensing definition of an infant to include children through 12 months and the definition of a toddler to include children from 13 months through 30 months, to increase the number of children in low-ratio settings.

- Allow mixed-age groups in licensing regulations, so that centers have the flexibility to provide continuity of care for children birth to age 3, and require that mixed groups apply the provider-to-child ratio appropriate to the age of the youngest child in the group.

Subsidy

- Implement direct contracts with center providers that are tied to requirements that centers care for infants in groups no larger than six, with ratios of one child care provider to no more than three infants, and that centers care for toddlers in groups no larger than eight, with ratios of one provider to no more than four toddlers. Provide payment rates to cover the associated costs of maintaining an adequate number of child care providers to implement these ratios and group sizes.

- Raise child care subsidy payments for centers caring for low-income infants and toddlers to sustain the staff salaries needed to care for infants in groups no larger than six, with ratios of one child care provider to no more than three infants, and to care for toddlers in groups no larger than eight, with ratios of one provider to no more than four toddlers.

Quality Enhancement

- Ensure that the standards, design, and incentives of state Quality Rating and Improvement Systems (QRIS) specifically address and encourage low group sizes and high provider-to-child ratios for infants and toddlers in center-based child care, so that the highest level requires groups of infants no larger than six and ratios of one child care provider to no more than three infants, and groups of toddlers no larger than eight, with ratios of one provider to no more than four toddlers.

What are some other recommendations that affect efforts to ensure that babies and toddlers in centers are in small groups with sufficient numbers of providers?

- States will want to ensure that center child care providers also have sufficient training and education to able to respond to the unique needs of babies and toddlers (see Recommendation #2: Ensure that providers and caregivers for babies and toddlers have access to education, training, and support).

- Ensuring adequate numbers of providers in center child care settings with babies and toddlers will also require monitoring and technical assistance, a critical component of any regulation strategy (see Recommendation #9: Monitor and provide technical assistance to infant and toddler providers).

- State policymakers can work to build the supply of quality center child care providers in their state (see **Recommendation #13: Build the supply of high-quality infant and toddler child care**).

Online tools and resources for state policymakers:

Information on current state licensing policies:

- The **National Child Care Information and Technical Assistance Center (NCCIC)**, a service of the Child Care Bureau, has multiple online tools and resources, including a table of state **Child Care Licensing Regulations** by age.

- The **National Association of Regulatory Administration (NARA)** studied **state licensing provisions as of 2005**, including child care center ratio requirements.

- The **National Association of Child Care Resource and Referral Agencies** analyzed state licensing and enforcement policies and **developed state rankings** based on recommended guidelines.

Recommended standards to ensure quality child care centers:

- The **American Academy of Pediatrics**, **American Public Health Association**, and **National Resource Center for Health and Safety in Child Care** collaborated to develop national health and safety performance standards called **Caring for Our Children** to help state licensing agencies.

- The **National Association for the Education of Young Children** (NAEYC) accreditation requirements include recommended **ratio provisions**.

Acknowledgments

This work is supported by the Birth to Five Policy Alliance, the Irving Harris Foundation, the John D. & Catherine T. MacArthur Foundation, and an Anonymous Donor.

We also wish to thank our reviewers for their comments and input. While we are grateful to the contributions of our reviewers, the authors are solely responsible for the content.

* The author would like to thank Sheri Azer and Judy Collins for their input and comments on drafts of this research-based rationale.

[1] J. Ronald Lally, Yolanda Ledon Tores, and Pamela C. Phelps, "Caring for Infants and Toddlers in Groups," ZERO TO THREE, **http://www.zerotothree.org/site/PageServer?pagename=ter_key_childcare_caring**.

[2] Ross A. Thompson, "Early Attachment and Later Development," in *Handbook of Attachment: Theory, Research, and Clinical Applications*, ed. Jude Cassidy and Phillip R. Shaver, 1999, 265-286.

[3] *A Science-Based Framework for Early Childhood Policy: Using Evidence to Improve Outcomes in Learning, Behavior, and Health for Vulnerable Children*, Center on the Developing Child at Harvard University, 2007, 8, **http://developingchild.harvard.edu**.

[4] *Young Children Develop in an Environment of Relationships*, National Scientific Council on the Developing Child, 2004, **http://www.developingchild.net/pubs/wp/Young_Children_Environment_Relationships.pdf**.

[5] Helen Raikes, "A Secure Base for Babies: Applying Attachment Theory Concepts to the Infant Care Setting," *Young Children* 51, no. 5 (1996): 59-67.

[6] NICHD Early Child Care Research Network, "Characteristics of Infant Child Care: Factors Contributing to Positive Caregiving," *Early Childhood Research Quarterly* 11, no. 3 (1996): 269-306.

[7] Leslie C. Phillipsen, Margaret Burchinal, Carollee Howes, and Debby Cryer, "The Prediction of Process Quality from Structural Features of Child Care," *Early Childhood Research Quarterly* 12, no. 3 (1997): 281-303.

[8] Carollee Howes, Deborah A. Phillips, and Marcy Whitebook, "Thresholds of Quality: Implications for the Social Development of Children in Center-Based Child Care," *Child Development* 63, no. 2 (1992): 449-460.

[9] Elles J. de Schipper, Marianne Riksen-Walraven, and Sabine A.E. Guerts, "Effects of child-caregiver ratio on the interactions between caregivers and children in child care centers: an experimental study," *Child Development* 77, no. 44 (2006): 861-864.

[10] Howes, Phillips, and Whitebook, "Thresholds of Quality."

[11] Margaret R. Burchinal, Joanne E. Roberts, Laura A. Nabors, and Donna Bryant, "Quality of Center Child Care and Infant Cognitive and Language Development," *Child Development* 67, no. 2 (1996): 606-620.

[12] NICHD Early Child Care Research Network, "Child Outcomes When Child Care Center Classes Meet Recommended Standards for Quality," *American Journal of Public Health* 89, no. 7 (1999): 1072-1077.

[13] *The 2005 Child Care Licensing Study*, National Association for Regulatory Administration and the National Child Care Information Center, 2006, 63-66, **http://naralicensing.org/displaycommon.cfm?an=1&subarticlenbr=104**.

[14] *Caring for Our Children*, *Second Edition*, American Academy of Pediatrics, American Public Health Association, and National Resource Center for Health and Safety in Child Care, 2002, **http://nrc.uchsc.edu/CFOC/HTMLVersion/TOC.html**.

[15] For example, the federal Early Head Start program limits group size to eight with at least two providers per group for children birth to age three; see Head Start Program Performance Standards, 45 CFR 1304.52 (g)(4). NAEYC's accreditation requirements on ratios and group sizes are somewhat similar to those in *Caring for Our Children*, although they do not require set ratios or group sizes and include more possible breakdowns by the ages of children in care in a center. For more information on recommended NAEYC ratios and group sizes, see NAEYC Web site, "Teacher Child Ratios within Group Size," **http://www.naeyc.org/academy/criteria/teacher_child_ratios.html**.

[16] National Infant and Toddler Child Care Initiative, "State Quality Rating and Improvement Systems (QRIS): Inclusion of Infant/Toddler Quality Indicators," 2008.