

Shared Care: Establishing a Balance Between Home and Child Care Settings

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The onset of regular nonparental care for infants and toddlers has complex psychobiological and behavioral effects on their functioning both at home and in child care centers. Maladaptive behavior on the part of children who spend many hours in child care may reflect not the direct effects of nonparental care but the inability of parents to buffer the enhanced levels of stress experienced in child care. Successful adaptation demands careful equilibration of the contrasting limitations and benefits of the two environments, with parental care characterized by stress reduction and emotional regulation and providers' care characterized by emphasis on cognitive stimulation and behavioral regulation.

According to the two reports under discussion, regular, full-day placement in child care is physiologically stressful for most infants and toddlers (Watamura, Donzella, Alwin, & Gunnar, this issue), whereas a history of extensive out-of-home care predicts externalizing behavior in early childhood (NICHD Early Child Care Network, this issue). These two findings do not mean that nonparental care has direct adverse effects on early development, however. Instead, the effects may best be interpreted in the context of complex changes in children's experiences both at home and in nonparental care settings. As many scholars have noted, experiences at home continue to affect the development of children in child care (Lamb, 1998; Scarr, 1997), although patterns of care at home may change a great deal in response to maternal employment and the initiation of nonparental care (e.g., Clarke-Stewart, 1989; Richters & Zahn-Waxler, 1990). Our goal is to explain the results of the two target papers in the context of the multifaceted psychobiological and behavioral changes that take place when infants and toddlers begin to receive regular nonparental care.

Parental Efforts to Share Children's Care

It is common for parents' beliefs, attitudes, and personal circumstances to affect the types of out-of-home care settings they seek, while parents also restructure experiences at home to facilitate their

children's adaptation to the two settings. In middle-class families, for example, better educated parents tend to select out-of-home care of high quality (Bolger & Scarr, 1995) and prefer center-based care rather than home-based care because they value the enhanced opportunities for cognitive stimulation and education (Johansen, Leibowitz, & Wait, 1996; NICHD Early Child Care Research Network, 1997a; Symons & McLeod, 1994). These associations are moderated by child age, however. Regardless of their educational backgrounds, parents of infants and toddlers (as opposed to parents of preschoolers) emphasize concerns about health and well-being and thus seek environments likely to minimize stress and distress rather than educational opportunities (Britner & Phillips, 1995; Cryer & Burchinal, 1997).

In our research, we have focused on the ways in which parents share care of their children with child care centers and on how toddlers deal with daily transitions between their homes and child care centers. Specifically, in a sample of middle-class German children who were observed throughout the day both at home and, when relevant, in their child care centers, we confirmed that patterns of parental care changed significantly when families used child care centers (Ahnert, Rickert, & Lamb, 2000). Most important, mothers of children in out-of-home care compensated for the time they spent away from their children by interacting at increased intensity when they were with their children in the early morning and evening hours. As a result, the total amount of attention the children received from adults was the same, whether or not they were enrolled in out-of-home care. These parents, confident about their choice of child care, also remained central figures in their children's lives, providing the

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types and amounts of care and stimulation that the children might have missed while at the centers. For example, these mothers made sure to provide the types of intimate interaction that children seldom obtained in child care centers. Even though the parents counted on the centers to provide stimulation and communication, they spent significant amounts of time engaged in those activities as well. In addition, morning hours before child care were used primarily for communication and basic care, whereas evenings were preferred for stimulation and soothing. Bedtime routines provided particularly high levels of intimate emotional exchange.

This careful equilibration of responses to the children's needs at home and in the out-of-home care settings was less apparent when we observed the toddlers' patterns of behavioral distress. Whereas home-reared toddlers were periodically and minimally distressed throughout the day, the toddlers in child care showed heightened levels of behavioral distress around the time they were picked up from child care but not during the hours they were in the centers. These findings are consistent with reports by Nelson and Garduque (1991) and Rubenstein and Howes (1979) suggesting that toddlers in child care behave more negatively when interacting with their parents than with their alternative care providers. In our study, mothers of children in child care tended to respond less promptly to their toddlers' signals of distress than did mothers of children at home, even though these mothers were most concerned about their children's distress. Their failures to respond promptly to distress may reflect (among other possibilities) the consequences of stress at work, competing demands of other chores, or differing maternal interpretations of the distress signals: These mothers might have viewed their toddlers' whining as relief from high levels of distress in child care, for example. Evidently, however, toddlers need sensitive support from their mothers to re-equilibrate emotionally. Lengthy periods spent in child care settings surely exacerbate these needs, making it harder for parents to respond appropriately and threatening the supportive quality of parent-child relationships. Consistent with this interpretation, the NICHD Early Child Care Research Network (1999) reported that mothers behaved less sensitively when their children spent many hours in child care. Furthermore, DeMulder, Denham, Schmidt, and Mitchell (2000) reported that stressful parent-child relationships were associated with angry aggression in preschool, whereas secure attachments to care

providers helped minimize behavior problems and aggression (see also Oppenheim, Sagi, & Lamb, 1988).

Limits to Care Providers' Abilities to Buffer Against Adverse Responses

For several reasons, care providers may have limited opportunities to modulate these adverse effects, however. First, infant-care provider attachments are less likely to be secure than are infant-mother attachments, even though care providers from high-quality centers appear more sensitive than mothers in one-on-one free-play situations. Presumably, levels of sensitivity decrease in group care settings because care providers have to divide their attention among children and are often unable to respond promptly and effectively (Goosens & Melhuish, 1996; Goosens & van IJzendoorn, 1990). Second, there is growing evidence that gender concordance affects the quality of attachments between children and nonmaternal care providers. Schoppe, Diener, Brown, and Mangelsdorf (2002) recently reported that father-son attachments formed more easily than did father-daughter attachments. Similarly, a recent meta-analysis revealed that care providers—who are overwhelmingly female—develop secure relationships with girls more often than with boys (Ahnert, Pinquart, & Lamb, 2003). Of course, boys who are unable to form secure relationships with their care providers cannot benefit from the supportive buffering that might moderate the displays of aggression that are more problematic in boys than in girls even at early ages (e.g., Rubin et al., 1998; Shaw et al., 1994). Third, different care providers in multiadult groups tend to develop relationships of similar quality with each of the infants and toddlers in the group (Sagi et al., 1995), and the quality of infant-care provider attachments remains stable even when the care providers change (Howes, Galinsky, & Kontos, 1998). This suggests that the quality of relationships with care providers is shaped by behavior directed toward the group as a whole rather than by interactions with individual children. As a result, the emerging relationships between care providers and children reflect the characteristics and dynamics of the group, whereas infant-parent attachments seem to be influenced more directly by the behavior of the dyadic partners. In addition, toddlers who are securely attached to their mothers do not necessarily have secure attachments to their care providers (Ahnert & Lamb, 2000; Ahnert, Lamb, & Seltenheim, 2000). If similar factors shaped the development of infant-parent and

infant–care provider attachments, we would expect carryover effects, with the security of primary attachment relationships shaping the security of secondary relationships (see Bowlby, 1973). Finally, care providers not only fail to respond effectively to toddlers' patterns of distress but (perhaps as a result) are seldom sought out in that regard once children have adjusted to child care (Ahnert & Lamb, 2000).

For these reasons, it seems that infant–mother and infant–care provider attachments are functionally and ontogenetically different. Adopting a pedagogical perspective, care providers focus on cognitive stimulation and on minimizing misbehavior to promote group harmony. By contrast, parents are better attuned to their children's emotions and can thus anticipate their children's reactions to child care and take steps to minimize the associated distress. Because emotional management is central to early development and to parent–child relationships, parents continue to have the greatest influence on socioemotional development even when children spend many hours in child care (NICHD Early Child Care Research Network, 1997b).

Manifestations of Distress in Child Care

From this perspective, the total amount of nonparental child care experienced by children might only be an indicator, rather than the direct cause, of increases in problem behavior, assertiveness, disobedience, and aggression (NICHD Early Child Care Research Network, this issue). When mothers are not as effective in dealing with manifestations of distress by toddlers in greatest need of reassurance, toddlers may return to child care the next day inadequately reassured and thus with lower emotional thresholds that are reflected in increased endocrine levels (Watamura et al., this issue). Repeated daily experiences of this sort may constrain the development and elaboration of coping capacities as well as other socially competent behaviors. Consistent with this interpretation, angry-aggressive children (mostly boys) have higher levels of cortisol than children who engage in more appropriate social interactions and are well liked by their peers (Tout, de Haan, Campbell, & Gunnar, 1998). In addition, there is growing evidence that diurnal neuroendocrine rhythms are altered by child care experiences such that high cortisol levels are evident in the afternoons when children spend long hours in child care settings (Dettling, Gunnar, & Donzella, 1999; Tout et al., 1998; Watamura et al., this issue). The maladaptive behavior reported by researchers such

as the NICHD Early Child Care Research Network (this issue) may thus reflect the inability of parents to buffer the enhanced levels of stress experienced by their infants and toddlers.

The adjustment to child care can be elucidated by close examination of responses to the initiation of child care, although few researchers have done so. For example, Fein, Gariboldi, and Boni (1995) reported that levels of negative affect, immobilization, and self-soothing 6 months after enrollment in child care by Italian infants and toddlers were predicted by measures of immobility and reduced positive affect at entry but not by variations in the care providers' behaviors, even though care providers comforted, maintained proximity to, and initiated interactions with unhappy infants more than with other infants throughout the period of adjustment. This suggests that care providers have limited capacities to reduce infants' stress. Similarly, German infants who were enrolled in child care between 12 and 18 months of age (late entry) rather than before 12 months (early entry) had higher levels of irritability and negative mood over the first 4 weeks after enrollment both at home and in the centers (Rauh, Ziegenhain, Müller, & Wijnroks, 2000). Rauh and her colleagues reported that abrupt familiarization with child care prolonged negative emotions and made the children's adaptation more difficult, especially when enrollment was late. However, when mothers familiarized their children to child care in a more leisurely manner and accompanied their children in the center for several days, adjustment was easier.

Because observed behaviors do not always reflect levels of stress reliably, Ahnert, Gunnar, Lamb, and Barthel (2003) used cortisol measures to track the adaptation to child care and reported that adjustment was in part dependent on the quality of prior infant–mother attachment relationships. Although infant–mother attachment security was unrelated to cortisol levels at home while children were becoming familiarized with child care, securely attached toddlers had markedly lower cortisol levels than insecurely attached infants, suggesting that secure infant–mother relationships buffered the stressfulness of entry into child care. When the daily mother–child separations began, however, cortisol levels were similarly elevated in securely and insecurely attached toddlers. The importance of parental support in managing the toddlers' stress levels was also evident in the fact that infant–mother attachments remained secure or shifted from insecure to secure when mothers spent more days adapting their children to child care. Sensitive

parents, who were in tune with their children before enrollment in child care, may have had difficulty accepting increased displays of negative emotions after enrollment. Because parents cannot expect care providers to manage their children's distress adequately, however, they need to intervene by responding sensitively to distress when they are with their children.

Contrasts and Similarities Between Homes and Child Care Settings

It is surprising that distress during the transition to nonparental child care has only been studied intensively in Europe, where child care is generally of higher quality than in the United States (Scarr, 1998). In many European countries, well-educated professional care providers work in closely supervised and regulated centers, and national policies makes it possible for most children to begin out-of-home care as toddlers or preschoolers so that parent-child relationships are well established before shared care begins (Lamb, 1998; Lamb, Sternberg, Hwang, & Broberg, 1992). The contrasting roles of home and child care settings are even more obvious in Europe than in the United States, however. Differences between individual as opposed to group care are complemented by differences between stress-reducing and emotional-regulating care patterns at home as opposed to cognitive stimulation and behavioral regulation in the centers. It is interesting that several attempts have been made historically to minimize those contrasts in Germany (Ahnert & Lamb, 2001). Under the communist regime (1949-1989), for example, East German families were encouraged to learn how to raise their children from child care centers, continuing a tradition that began in the 19th century, when the first European child care centers served as "schools for mothers." In contrast, West German child care centers before German reunification were encouraged to emulate family patterns of care, with quality evaluated using measures of good mothering. As reported earlier, however, care providers are not substitute mothers. They do not function like mothers and children do not treat them like mothers (except, perhaps, when the quality of home care is extremely poor).

We can now begin to understand both the specific potentials of the two care environments and the ways in which families and child care centers may complement each other. Certainly, differences between the two environments prompt us to ask whether parents and care providers understand the

contrasts and the implications for parent-care provider partnerships. High agreement with respect to child care issues is a good predictor of fewer behavioral problems in children (e.g., Elicker, Noppe, Noppe, & Fornter-Wood, 1997), but mutual appreciation is not inevitable. Care providers seldom see parents as partners, perhaps perceiving themselves as professionals who have greater expertise regarding child care (Shpancer, 1998); less frequent parent-care provider contacts might be beneficial in such situations. Parents' attitudes about care providers are generally positive despite the care providers' negative attitudes, suggesting that parental ratings of satisfaction may not be reliable indicators of partnership and child care quality (Clarke-Stewart, Gruber, & Fitzgerald, 1994). In any event, contrasts between the two ecologies of care cannot easily be negotiated and bridged by parents and care providers, suggesting that the characteristics of both environments must be considered when evaluating developmental trajectories.

Conclusion

In this article we have attempted to explain why children might behave maladaptively when they spend many hours in child care. Adaptive behavior is largely a function of the balance between the stresses and supports experienced by children. This balance can easily be disrupted when stress is not modulated by supportive parent-child relationships because parents lack adequate opportunities or misinterpret their children's distress signals. Clearly, children need to spend sufficient amounts of time with parents who can interact sensitively and respond appropriately to their emotional needs. Parents who use child care must recognize that they cannot keep their families stress free and they need to address their children's negative emotions to foster their confidence and security, especially when the children are developmentally vulnerable (e.g., preterm infants) or highly irritable. Even though the group care environment might help infants develop better coping skills in the long run (Fox, Henderson, Rubin, Calkins, & Schmidt, 2001), parents need to foster shared-care patterns that carefully address the needs of individual children.

Home remains the center of children's lives even when children spend considerable amounts of time in child care, and thus child care has no main effect (positive or negative) on parent-child relationships as long as the relationships are supportive: Poor-quality child care adversely affects parent-child relationships when parent-child relationships are

inadequate, however (NICHD Early Child Care Research Network, 1997b). In other words, poor-quality relationships at home magnify the adverse effects of the high stress levels associated with child care. Although it might be desirable to limit the amount of time spent in child care, it is much more important for children to spend as much time as possible with supportive parents.

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