CHAPTER 4

Attachment to Child Care Providers

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Children's relationships with care providers are central to the debate on the quality of child care settings and are foremost characterized by childcare provider interactions following guidelines of the educational curriculum. Cognitive and learning theories help to explain the ways in which care providers are involved with the children, passing on knowledge about the world, stimulating language and facilitating learning, and eventually shaping the child–care provider relationship (Hong et al., 2019). Furthermore, some studies have stressed that care providers are also emotionally available and successfully reassure children who seek their proximity when stressful mishaps or peer conflicts occurred throughout the day (more details in Howes & Spieker, 2016). These secure base behaviors of the children and the affective responses of the care providers point to obvious similarities with child-parent attachments, and thus led researchers to examine child-care provider relationships in the framework of attachment theory. In this chapter, we discuss child-care provider attachment or closeness through standardized assessments, reveal their antecedents and peculiarities, report on correlates with child development, and eventually argue that child-care provider attachments differ both functionally and ontogenetically from child-parent attachments.

Description of Child-Care Provider Attachment through Standardized Assessments

Seeking clearer insight into attachment-like phenomena in child care, researchers used the Strange Situation Procedure (SSP; Ainsworth,

Blehar, Waters, & Wall, 1978) or the Attachment Q-set (AQS; Waters, 1995), initially developed to assess mother–child attachment, to further assess child–care provider attachment (Ahnert, 2005). For older children in preschool, researchers captured the connatural construct of closeness using the Student-Teacher Relationship Scale (STRS; Pianta, 2001).

Comparisons of child–parent and child–care provider attachment in young children yielded inconsistent results in terms of the concordance and discordance of these patterns. A meta-analysis (Ahnert, Pinquart, & Lamb, 2006) of nearly 3,000 children from a variety of cultures concluded that secure child–care provider attachments appear less frequently than secure child–parent attachments. Furthermore, the attachments (to mother, father, and care provider) were modestly but significantly intercorrelated, suggesting that children construct intertwined internal working models of significant relationships to adults.

Analyses using the AQS (rated by observers) and SSP revealed similar findings, even though concordance between child–mother and child–care provider attachment was greater in studies using the AQS rather than the SSP. Differences in the behavioral emphases of the two assessments may help explain these discrepancies. The SSP clearly emphasizes securityseeking and proximity-promoting behaviors, which most likely elicit the protective behaviors of mothers. The AQS additionally takes instructional and educational features of the interactions into account, which better characterize care provider behaviors (Ahnert, Rickert, & Lamb, 2000). Overall, the small but significant correlations between child's attachments toward the mother, father, and care provider, as well as distinct discordance between child–parent and child–care provider attachments, suggest that these attachments are functionally adapted to the care environments where they develop.

Peculiarities of Child-Care Provider Attachment

As with parents, attachments with care providers reflect the interactional histories of children, who often spend many hours in child care. However, researchers were puzzled by how the internal working models (IWMs) of these attachments develop and what they mean. For example, Sagi and his colleagues (1995) reported that if more than one care provider cared for a group of children, these care providers were more likely to develop a similar quality of attachment to the children in each group. Howes, Galinsky, and Kontos (1998) found that the security of child–care provider attachment remained the same even when care providers changed. These findings suggest that child–care provider attachments are affected by routine characteristics of the care environment as well as the relationship.

Clearly, child care providers need to divide their attention among several children simultaneously, which makes it difficult to respond

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promptly to each individual child. Consequently, children in group care may have to wait longer for a response or may even be ignored, which in turn may weaken the security of the child–care provider relationship. If secure attachments, however, derive from sensitivity, the promptness of adult responses to individual children, indicated by short latencies, should be the heart of the relationship formation. Care providers' latencies in response to children's needs and how response latency may predict secure attachment in child care, however, remain almost unknown.

Antecedents of Child–Care Provider Attachment

In a recent study (Zaviska, Mayer, Deichmann, Eckstein-Madry, & Ahnert, 2020), we therefore explored interaction patterns of child–care provider dyads in group care with a special focus on child proximity seeking and the latencies of the care provider's response. Care providers demonstrated promptness to child proximity seeking as a routine part of their care. Promptness was more frequent, with short latencies of 3–7 seconds and was significantly greater for toddlers than for older children, even though children's proximity seeking did not differ across age. Most interestingly, however, care providers' promptness was not associated with the security of all child–care provider attachment relationships, but only with care provider security to toddlers.

To understand the formation of child-care provider attachment beyond toddlerhood, concepts other than promptness must be investigated. First insights came from a meta-analysis (Ahnert et al., 2006), which found that measures of care providers' group-focused sensitivity (i.e., child-oriented involvement while supervising the entire group) were more strongly associated with attachment security (measured with SSP or AQS) than were measures of the same care providers' dyadic sensitivity (i.e., one-on-one positive caregiving). Ereky-Stevens, Funder, Katschnig, Malmberg, and Datler (2018) recently confirmed these findings. Similar to the prediction of child-parent attachment, the care providers' measures of dyadic responsiveness predicted child-care provider attachment in the small groups of the child care centers, which most likely include infants and toddlers (Ahnert et al., 2006). Larger groups typically consist of children beyond toddlerhood, who can process interactional experiences based on expanded social learning while observing others and not only their own involvement in interactions. Observing peers in a group, including how they interact with the care provider with whom the child is also familiar, might thus become a powerful tool in the formation of security of attachment in child care. That is, how a care provider responds, comforts, and helps other children may influence the child's own experience in shaping the security of attachment and the IWMs derived from it (see Waters & Cummings, 2000).

The idea that older children process the complex social experience in group life with their IWMs better than younger children is in line with considerations about the development of IWMs. That is, IWMs become increasingly stable across childhood while their formations also change (Pinquart, Feußner, & Ahnert, 2012). Perhaps IWMs mature into a more generalized type beyond toddlerhood, which includes accumulated experiences of own and observed behaviors of others in attachment-driven contexts as opposed to the simpler IWM during infancy that only encompasses the child's own behaviors.

Gender Bias in Child-Care Provider Attachment

The formation of child–care provider attachments also appear to vary depending on child gender, which is not typically found in studies of attachment. That is, girls tend to develop secure attachments with their child care providers more often than boys (Ahnert et al., 2006; Ereky-Stevens et al., 2018). There are three possible explanations for this:

- 1. During the formation of gender-based social identity throughout the early years, girls better develop communicative (in contrast to boys' competitive) behaviors and tend to show more positive emotions than boys (Leaper, 2002). This might make interactions and closeness easier with girls.
- 2. The overwhelming majority of care providers are female, and their engagement and educational goals might be a better match to girls' than boys' social identity.
- 3. The gender-mixed groups in child care centers tend to segregate into gender-based subgroups where children favor same-sex over cross-sex interactions (Fabes, Hanish, & Martin, 2003). Given the fact that children process their own relationship experiences and those of others with their IWMs, the gender-based subgroup might reinforce the relationship quality of a child with the care provider.

Future research, however, is needed to understand and reflect on these mechanisms in order to avoid gender bias in child–care provider attachment.

Correlates with Child Development

From numerous studies on the associations between child-care provider attachment or child-teacher closeness and children's development, we

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chose three exemplary studies that go beyond correlational evidence and shed light on the underlying mechanisms of children's (1) cognitive achievement, (2) behavioral adjustment, and (3) stress management.

First, when children's relationships in preschool were characterized as being close, children showed higher levels of classroom participation and pleasure to learn than when they were in more distant relationships (Hamre & Pianta, 2001). The question regarding how child-teacher closeness may predict academic success motivated us to design a study using a priming paradigm (Ahnert, Milatz, Kappler, Schneiderwind, & Fischer, 2013). Preschoolers participated in a laboratory situation in which they worked on computerized tasks thought to govern basic cognitive knowledge. Before each task commenced, however, the image of the child's teacher with whom STRS closeness had previously been measured (i.e., the affective prime stimulus) was displayed for an experimental group of children; a control group was exposed to a neutral prime. Children in the experimental group had shorter solving times than children in the control group the higher the closeness score of the affective prime was. This effect was also evident months later, after children's transition to school. These findings clearly suggest that cognitive processing is much more effective in the psychological presence of close child-teacher relationships, which might eventually lead to higher self-efficacy in the children and more pronounced motivation to learn and achieve.

Second, there is also firm scientific evidence that children who experienced lower attachment security at home are prone to greater externalizing behavior in child care. Greater and more regular exposure to other children in child care centers than is typically experienced at home or in the neighborhood might result in increased amounts of unregulated peer interactions. This could be particularly problematic for children who have limited social competence, which is true for children with lower attachment security at home. Buyse, Verschueren, and Doumen (2011) showed that the insecure children's behavioral maladjustment (specifically, aggressive behavior) was buffered by higher levels of preschool teacher sensitivity. If peers are the cause of behavioral problems, teachers must use group-oriented strategies and respond to adverse peer interactions, not only to the child who misbehaves. For example, Zaviska and colleagues (2020) conducted a longitudinal study following children after child care entry and showed that the earlier and better that children with lower attachment security at home established a child-care provider attachment, the better they were supported during their peer encounters, and the better their behavioral adjustment was. Interestingly, this association was not significant for children with secure child-mother attachment.

Third, current research also provides evidence that child–care provider attachment can influence children's stress management. In a recent study (Eckstein-Madry, Piskernik, & Ahnert, 2020), we hypothesized that care providers in child care might be able to help 3- to 5-year-old's from socioeconomically disadvantaged families with limitations in stress regulation to achieve better regulation. We explored the children's diurnal cortisol rhythm based on 12 saliva samples taken across 3 days a week. These were on Sundays, when the children spend all day at home, and on Mondays and Fridays, when the children spend a substantial amount of time in preschool. Unfortunately, these children had significantly lower AQS scores with their mothers than with their care providers. They also displayed elevated stress in the form of heightened diurnal cortisol release and flatter diurnal cortisol decline (particularly on Sundays), reflecting lower capacities to regulate stress as compared to their peers from families with more socioeconomic resources. Most importantly, greater attachment security to the care providers was associated with greater diurnal cortisol decline, which was particularly obvious on Fridays in children from socioeconomically disadvantaged families.

Conclusion

This chapter provides evidence that child–care provider attachment is both functionally and ontogenetically different than child-parent attachment. In other words, the formation of secure child-care provider attachments emerges differently for children of different ages and gender. Attachment formation in child care seems to be predominantly shaped by care provider behaviors toward the group as a whole. Measures of care providers' dyadic sensitivity (as it is with parents) only predict child-care provider attachment in small groups of infants and toddlers. Measures of care providers' group-focused sensitivity, however, are more strongly associated with secure child-care provider attachment after toddlerhood and reflect the circumstances of the child care setting and the unique role of child care providers. This means that children's social observational learning of how a care provider responds to peers in the group probably adds to the child's own experience in shaping the security of attachment and the IWM that derives from it. In the context of child care, IWMs might be predominantly a more broadly representational type of IWM and less individualized. Furthermore, current research provides detailed evidence on how attachment in child care can affect children's cognitive performance, behavioral adjustment, and stress management. These attachments are less likely to be secure than child-parent attachments, however, despite being influential.

The ontogenetically different process of attachment formation, however, puts greater challenges on the professional practice of child care providers. We thus further need to identify relevant types of care provider

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behaviors that best promote secure child–care provider relationships and closeness (e.g., van Schaik, Leseman, & de Haan, 2017). As supportive child–care provider relationships are desirable both early and later in the educational process, it is extremely important to assess child–care provider relationships broadly with security of attachment and closeness included.

REFERENCES

- Ahnert, L. (2005). Parenting and alloparenting: The impact on attachment in human. In S. Carter, L. Ahnert, K. E. Grossmann, S. B. Hrdy, M. E. Lamb, et al. (Eds.), *Attachment and bonding: A new synthesis* (pp. 229–244). Cambridge, MA: MIT Press.
- Ahnert, L., Milatz, A., Kappler, G., Schneiderwind, J., & Fischer, R. (2013). The impact of teacher-child relationships on child cognitive performance as explored by a priming paradigm. *Developmental Psychology*, 49, 554–567.
- Ahnert, L., Pinquart, M., & Lamb, M. E. (2006). Security of children's relationships with nonparental care providers: A meta-analysis. *Child Development*, 77, 664–679.
- Ahnert, L., Rickert, H., & Lamb, M. E. (2000). Shared caregiving: Comparisons between home and child-care settings. *Developmental Psychology*, 36, 339–351.
- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). Patterns of attachment: A psychological study of the Strange Situation. Hillsdale, NJ: Erlbaum.
- Buyse, E., Verschueren, K., & Doumen, S. (2011). Preschoolers' attachment to mother and risk for adjustment problems in kindergarten: Can teachers make a difference? *Social Development*, 20, 33–50.
- Eckstein-Madry, T., Piskernik, B., & Ahnert, L. (2020). Attachment and stress regulation in socioeconomically disadvantaged children: Can public childcare compensate? *Infant Mental Health Journal*. [Epub ahead of print]
- Ereky-Stevens, K., Funder, A., Katschnig, T., Malmberg, L.-E., & Datler, W. (2018). Relationship building between toddlers and new caregivers in out-of-home childcare: Attachment security and caregiver sensitivity. *Early Childhood Research Quarterly*, 42, 270–279.
- Fabes, R. A., Hanish, L. D., & Martin, C. L. (2003). Children at play: The role of peers in understanding the effects of child care. *Child Development*, 74, 1039–1043.
- Hamre, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Devel*opment, 72, 625-638.
- Hong, S. L. S., Sabol, T. J., Burchinal, M. R., Tarullo, L., Zaslow, M., & Peisner-Feinberg, E. S. (2019). ECE quality indicators and child outcomes: Analyses of six large child care studies. *Early Childhood Research Quarterly*, 49, 202–217.
- Howes, C., Galinsky, E., & Kontos, S. (1998). Child care caregiver sensitivity and attachment. *Social Development*, *7*, 25–36.
- Howes, C., & Spieker, S. (2016). Attachment relationships in the context of multiple caregivers. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment:*

Theory, research, and clinical applications (3rd ed., pp. 314–329). New York: Guilford Press.

- Leaper, C. (2002). Parenting girls and boys. In M. Bornstein (Ed.), Handbook of parenting: Vol. 1. Children and parenting (pp. 189–225). Mahwah, NJ: Erlbaum.
- Pianta, R. C. (2001). STRS. Student-Teacher Relationship Scale. Lutz, FL: Psychological Assessment Resources.
- Pinquart, M., Feußner, C., & Ahnert, L. (2012). Meta-analytic evidence for stability in attachments from infancy to early adulthood. *Attachment and Human Development*, 14, 1–30.
- Sagi, A., van IJzendoorn, M. H., Aviezer, O., Donnell, F., Koren-Karie, N., Joels, T., & Harel, Y. (1995). Attachments in multiple-caregiver and multiple-infant environment: The case of the Israeli kibbutzim. *Monographs of the Society for Research in Child Development*, 60, 71–91.
- van Schaik, S. D. M., Leseman, P. P. M., & de Haan, M. (2017). Using a groupcentered approach to observe interactions in early childhood education. *Child Development*, 89, 897–913.
- Waters, E. (1995). The Attachment-Q-Set (Version 3.0). Monographs of the Society for Research in Child Development, 60, 71–91.
- Waters, E., & Cummings, E. M. (2000). A secure base from which to explore close relationships. *Child Development*, 71, 164–172.
- Zaviska, N., Mayer, D., Deichmann, F., Eckstein-Madry, T., & Ahnert, L. (2020). Care providers' promptness in group care: Relations to children's attachment and behavioral adjustment. Manuscript submitted for publication.