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# Infant–care provider attachments in contrasting child care settings I: Group-oriented care before German reunification

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## Abstract

Before the reunification of Germany, East German child care authorities instructed care providers to foster peer interactions. We investigated the extent to which group-level (empathy, punitiveness, dedication, and permissiveness) and dyadic-level (attentiveness and responsiveness) measures of the care providers' behavior predicted the security of infant–care provider attachment. In 1987–1989, 40 German 11- to 13-month-olds were observed 1 to 2 days, 2 to 4 weeks, and 3 to 4 months after entry into child care. In Month 5, infants were also seen in the Strange Situation with their primary care providers. Insecure infant–care provider attachments, including high levels of disorganized behavior, were quite common, suggesting that many infants received inadequate care. Secure infant–care provider attachments were best predicted by measures of the care providers' empathy, whereas dyadic-level measures of the care providers' behaviors were not predictive. © 2000 Elsevier Science Inc. All rights reserved.

*Keywords:* Child care; Changes in child care practice; Care provider behavior; Attachment security; Strange Situation

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## 1. Introduction

Little is known about the factors affecting the formation of attachments between infants and professional child care providers. Attachment relationships are believed to be grounded

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in the interactional histories of infants, but it remain unclear how dyadic- and group-level interactions in group settings affect the development of trusting relationships with nonfamilial providers. When infants are observed in laboratory situations with their mothers, care providers, and/or strangers, they typically prefer their mothers, but also direct more attachment behaviors (proximity seeking, contact seeking, calling, and following) to care providers than to strangers (Barnas & Cummings, 1994; Cummings, 1980; Fox, 1977). In child care settings, infants differentiate between stable and nonstable care providers, greeting stable care providers more warmly when they arrive at the center and turning to them more often during the day (Barnas & Cummings, 1994). In the presence of stable rather than nonstable care providers, infants cry less, are soothed more easily, and are more likely to turn to stable care providers when distressed. Such findings raise questions about the formation of infant–care provider attachments when, as in the former East Germany, care providers provided group- rather than infant-oriented care and emphasized peer rather than care provider–infant interactions. These issues were explored in the present study.

Before reunification in 1990, societal rather than individual responsibility for the care of children was emphasized in socialist East Germany (see, for discussion, Ahnert & Lamb, 2001; Lamb & Sternberg, 1992). Exclusive child care within the family was even denounced as a petit-bourgeois aspiration likely to have adverse effects on child development and on the establishment of social relationships (Schmidt-Kolmer & Schmidt, 1962). As in the other East block countries, child care authorities emphasized collectivism (Krupskaia, 1972), with children's behaviors deemed appropriate only when they furthered group aims and goals. East German child care centers were thus expected to introduce group-oriented life experiences by fostering peer interactions rather than individual child–care provider relationships. The official curriculum instructed care providers to direct and control the infants' behavior, even though warm relationships with the children were emphasized. As part of a larger educational system that included kindergartens, schools, and universities, children in child care were organized into age-homogenous groups. Well-organized educational instruction was thus provided to East German children from the very beginning of their lives, with central authorities licensing, administering, and establishing curricula for centers nationwide. Reflecting extreme beliefs about childhood plasticity, care providers were taught about group-oriented caretaking procedures, as well as how to play with and supervise individual infants. Conceptions of caretaking are deeply rooted in German culture, however, and reflect historical processes that began long before the 40 years of Communist rule. As a result, East German educational doctrines are unlikely to have reshaped the basic features of German childrearing in so brief a period of time (Ahnert et al., 1994).

In the present study, we sought to determine whether and how much the patterns of care observed before German reunification were group-oriented as opposed to individual-oriented, whether this affected the numbers of secure and insecure infant–care provider attachments relative to the numbers of secure and insecure infant–mother attachments, and whether both group and dyadic-level measures of care provider behavior predicted variations in the security of infant–care provider attachment.

### 1.1. *Attachments to child care providers*

An increasing number of researchers (Ainslie, 1990; Anderson et al., 1981; Goossens & van IJzendoorn, 1990; Sagi et al., 1985, 1995) have used Ainsworth and Wittig's (1969) Strange Situation to assess infant–care provider attachments, even though the measure was developed to explore variations in the patterning of attachment behaviors directed to those primarily responsible for infant care (Ainsworth et al., 1978). According to ethological attachment theorists, contact seeking in emotionally stressful situations is the hallmark of secure attachment (Ainsworth et al., 1978; Bowlby, 1969; Bretherton, 1991; Grossmann & Grossmann, 1990; Lamb et al., 1985; Sroufe & Waters, 1977), and by this definition, it should be possible to identify secure attachments even to child care providers. By contrast, avoidance of those care providers in the Strange Situation is harder to interpret unless one can distinguish between avoidance and disinterest. Van IJzendoorn, Sagi, and Lambermon (1992) have thus proposed using indices of predictive or external validity (such as the quality of later peer relationships or care provider sensitivity) and estimations of the distribution across attachment categories when interpreting infant behavior toward child care providers in the Strange Situation. However, the distribution across attachment categories varies both intra- and interculturally (van IJzendoorn & Kroonenberg, 1988), indices of later peer relationships are seldom obtained, and associations between the sensitivity of child care providers and attachment security have been little studied. The operational implications of van IJzendoorn et al.'s (1992) suggestions are thus unclear.

Avoidance in the service of attachment may involve proximity to attachment figures despite the refusal to interact or seek contact immediately after reunion (Main, 1981). In the course of the Strange Situation, for example, avoidant infants (those in the A1 subgroup) might maintain proximity and self-regulate physiologically by socially referencing their attachment figures (Spangler & Grossmann, 1993). In addition, when the Strange Situation procedure is employed with preschoolers, who have more extensive repertoires of attachment behavior, social referencing may be one index of avoidant attachment (Crittenden, 1990, 1992). Anticipating the possibility that we would observe many avoidant attachments because high rates of insecure-avoidant attachments have been found in other German samples (e.g., Gloger-Tippelt & Huerkamp, 1998; Suess, Grossmann, & Sroufe, 1992; Grossmann et al., 1985; Rottmann & Ziegenhain, 1988), we thus used social referencing to help determine whether infants were avoidantly attached or not attached to their care providers (Bradshaw, Goldsmith, & Campos, 1987; Bretherton, 1992; Camras & Sachs, 1991; Klinnert et al., 1986; Walden, 1991). Specifically, we observed infants twice in the Strange Situation, with care providers playing the role of stranger in the first Strange Situation (before child care entry) and playing the role of mother in the second Strange Situation, five months later. We then compared the levels of social referencing, labeling infants “nonattached” to their care providers when they did not reference the providers more in the second Strange Situation than in the first (see Method section).

In the present study, we observed infants' entry into child care and explored the period right after separation from the parents when a sensitive substitute was most likely to be sought. We assumed that the care providers' attentiveness to individual children might be less pronounced and that less emotional support might be provided to individuals because the

East German curriculum was group-oriented. Both factors would have made it more difficult for infants to form secure attachments to their care providers.

## 2. Method

### 2.1. Participants

#### 2.1.1. Infants

Forty healthy infants were observed prior to German reunification in 1987–1989. They were between 11 and 13 months old ( $M = 12.2$  months,  $SD = 0.8$ ) when they were enrolled in child care, and had been born at full-term. Their Bayley (1993) Mental Development Index (MDI) scores averaged 101.2 ( $SD = 17.2$ ). Up to the time of enrollment in child care, all infants had been reared exclusively in East Berlin families, with their mothers as primary caretakers. A comparison with the sociological microcensus of Berlin (see Statistisches Landesamt Berlin, 1994) indicated that the parents were representative of middle-class families in the Eastern part of the city. Three quarters (30) of the infants were firstborns, and 18 were girls.

#### 2.1.2. Child care centers

Three child care centers located in the middle of East Berlin (Prenzlauer Berg) were involved in the study. They each served between 70 and 120 children who were cared for in large age-homogenous groups averaging 16.2 infants per group ( $SD = 3.6$ ). When the target infants entered their groups, the mean age was 11.2 months ( $SD = 0.9$ ). The care provider–child ratios were between 1:6 and 1:8 in all groups.

#### 2.1.3. Care providers

10 care providers, ranging in age from 24 to 52 years ( $M = 30.1$  years) with between 3 and 30 years ( $M = 12.4$  years) of child care experience, took part in the study. They had all attended specialized 3-year training courses, came from middle-class backgrounds, and were all mothers themselves. Most care providers were the head teachers in the groups studied and each was observed with four infants. Four care providers took care of two target children in the same group at almost the same time, and were observed with another two target children one year later. Six other care providers each cared for four target children in succession. Center directors and researchers believed that the care providers provided good-quality care typical of East German centers prior to reunification.

### 2.2. Procedures and measures

#### 2.2.1. Overall procedure

One week before the infants entered child care, infants and mothers were videotaped in Ainsworth's Strange Situation, with their future care providers acting as strangers in the procedure. Following almost two weeks of adaptation, during which they attended child care part-time and in the company of their mothers, the infants were all enrolled full-time for

about 40 hr per week. Five months later, the infants were observed in the Strange Situation again, with the care providers in the role of “mothers.” In each case, the care providers had been identified in advance as the care providers who would assume primary responsibility for the infants’ care, albeit in multicare provider group settings.

When the infants arrived at the child care centers and entered the group, they were videotaped for 30 min. Ratings of sensitivity during dyadic interactions between the target infants and the primary care providers, as well as global ratings of care provider behaviors in the group, were later made using the videotapes. In the analyses, we distinguished among observations on the first or second day (Time 1), between weeks 2 and 4 (Time 2), and during the third and fourth months (Time 3) after enrollment.

### 2.2.2. *Assessments of attachment qualities*

The security of the infants’ attachments to their mothers and primary child care providers was assessed in research settings outside the homes and child care centers using both Ainsworth’s classificatory system (see Ainsworth et al., 1978) to distinguish among the three major categories of attachment (secure [B], avoidant [A], and ambivalent [C]), as well as Main and Solomon’s (1990) ratings of disorganized [D] behavior. In addition, infants were designated “nonattached” to their care providers when they did not socially reference the care providers more in the second than in the first Strange Situation—that is, when they did not use the by-then-familiar care providers as sources of disambiguating information when confronted by a stranger.

The patterns of attachment were classified by the first and third authors, who had both been trained by Karin Grossmann (University of Regensburg) and had achieved agreement of nearly 90% with her. Grossmann had previously established reliability of over 90% with Main in 1976 and with Sroufe in 1993. More than 42% of the 80 tapes were recoded by one of the raters, and the most problematic tapes (about 6%) were coded by all three raters. In addition, Fabienne Becker-Stoll (University of Regensburg) rechecked ratings of all infants with disorganized features, and assigned all those with ratings greater than five to the [D] category. The interrater agreement for the major categories was 89% (Cohen’s kappa = 0.82). The coders were blind with respect to ratings of the care providers’ behavior.

### 2.2.3. *Dyadic-level measures of care provider behavior*

Because it may sometimes be impossible for care providers in group settings to respond promptly and appropriately even when the infants’ signals have been perceived and interpreted correctly, we modified Ainsworth’s sensitivity scale (Ainsworth, Bell, & Stayton, 1974; German translation by Grossmann, 1977) to assess care provider sensitivity during dyadic interactions with the target infants. Specifically, we constructed two rating scales (5-point scales), one focused on *Attentiveness* and the other on *Adequate Responsiveness*, to assess the two dimensions tapped by the original scale. On the *Attentiveness* scale, ratings of 1 were assigned when the infants’ signals were ignored while ratings of 5 were assigned when even subtle signals received responses. On the *Adequate Responsiveness* scale, minimal responses or rejections were scored 1 whereas well-tuned and timely responses were scored 5. The two coders who rated the tapes, and who were blind with respect to the infants’ attachment assessment, achieved high levels of agreement (*Attentiveness*: 82%, Cohen’s

kappa = 0.78; *Adequate Responsiveness*: 94%, Cohen's kappa = 0.86). Scores on both scales were highly correlated with scores on Ainsworth's original sensitivity scale ( $r = 0.87$  and  $r = 0.89$ ) assigned by two additional coders who rated 20 randomly chosen tapes.

#### 2.2.4. Group-level measures of care provider behavior

Care provider behavior was also assessed using an adaptation of Arnett's (1989) Global Rating Scale of Caregiver Behaviors (see also Layzer, Goodson, & Moss, 1993). Four dimensions were originally tapped by 26 items, but the internal consistency of the scales was poor. We thus developed an additional five items and, after determining that the resulting correlation matrix had an adequate measure of sample adequacy ( $MSA > 0.8$ ), factor analyzed the data together with data reported in Ahnert and Lamb (2000). A principal components analysis with varimax rotation explained 70% of the variance with a 4-factor solution. Factor 1, best described as *Empathy*, replaced the former dimension, Positive Relationship, and explained 38% of the variance. Factor 2 resembled the former dimension, *Punitiveness*, and explained 20% of the variance. The Detachment-Attachment dimension was replaced by factor 3 (*Disinterest* vs. *Dedication*) which explained 6% of the variance. Factor 4, which resembled the *Control* vs. *Permissiveness* dimension, explained 6% of the variance. All four dimensions were coherent, with Cronbach's alphas ranging between 0.93 (empathy) and 0.70 (permissiveness).

*Empathy* tapped the care providers' sensitivity to the infants' individuality and attentiveness to the infants' needs (e.g., Item 14: Pays positive attention to the children as individuals; Item 7: When children misbehave, explains the reason for the rule they are breaking). By contrast, *Punitiveness* indexed the high value placed on obedience (e.g., Item 4: Places high value on obedience; Item 10: Speaks with irritation or hostility to the children). *Disinterest* vs. *Dedication* captured interest and involvement in the children's activities (e.g., Item 21: Doesn't seem interested in the children's activities; Item 13: Spends considerable time in activities not involving interaction with the children). *Control* vs. *Permissiveness* assessed supervision, limit setting, and awareness of developmental limitations (e.g., Item 15: Intervenes when children come into conflict and misbehave; Item 27: Sets limits for some activities; Item 30: Arranges toys for better accessibility).

The care providers' behavior was rated from the videotapes on these 31 items using 5-point Likert scales (ranging from *not at all* to *very much*) by three coders who were blind with respect to the infants' attachment classification. Their ratings were highly correlated ( $r = 0.89$ ). Ratings were transformed to four Stanine scales to assure normal distributions on 9-point scales.

### 3. Results

#### 3.1. Controlling for care provider behaviors

Because the 40 infants were cared for by ten care providers, we had to determine whether scores for the four infants observed with the same care provider could be treated as independent. We computed intraclass correlations (Winer, 1971) among scores for four

Table 1  
Patterns of attachment of mothers and child care providers

	Attachment classification					Total
	Secure [B]	Insecure-avoidant [A]	Insecure-ambivalent [C]	Disorganized [D]	Nonattached	
Care provider	8 (20%)	9 (22%)	4 (10%)	15 (38%) <sup>a</sup>	4 (10%)	40 (100%)
Mother	20 (50%)	15 (38%)	3 (7%)	2 (5%) <sup>b</sup>	—	40 (100%)

*Note.*

First infant-mother classifications of this sample (38 infants) were reported by Ahnert, Meischner and Schmidt (2000). At that time, 2 infants appeared unclassifiable but were later assessed as D/A2 and D/B2 by F. Becker-Stoll. The remainder were classified as follows: 15 A1/A2, 9 B1/B2, 9 B3/B4 and 3 C1/C2. Two B2 infants whose mothers initially declined participation in the research were later added to the sample.

<sup>a</sup> 5 D/A1, 3 D/A2, 4 D/B2, 2 D/B4, 1 D/C2.

<sup>b</sup> 1 D/A2, 1 D/B2.

dyads (the four children per care provider) on each of the six care provider behaviors observed 1 to 2 days, 2 to 4 weeks, and 3 to 4 months after the infants' entry into child care. These estimates of the variance within the dyads over time should be low relative to the variance between the dyads if the care providers behaved differently with different infants, whereas measures of behavior with each infant should be stable over time. Of the ten coefficients for each behavior; coefficients for empathy ranged between  $r = -0.08$  and  $r = -0.03$ ; for punitiveness between  $r = -0.32$  and  $r = -0.25$ , for dedication between  $r = -0.18$  and  $r = -0.11$ , for controlling behaviors between  $r = -0.30$  and  $r = -0.15$ , for attentiveness between  $r = 0.02$  and  $r = 0.08$ , and for responsiveness between  $r = 0.02$  and  $r = 0.12$ . Because most of these coefficients were both weak and negative, thereby revealing much higher variances between than within the dyads, the analyses suggested that the 40 care provider–infant dyads could be considered independent in further statistical analyses.

### 3.2. Infant attachments to care providers as compared to their mothers

Table 1 shows that the infants were more likely to have secure attachments to their mothers (50%) than to their care providers (20%),  $\chi^2(1, N = 80) = 7.9, p < .001$ . Whereas few (5%) of the insecure infant-mother attachments were disorganized those patterns were strikingly more frequent (38%) in infant–care provider attachments,  $\chi^2(1, N = 80) = 12.6, p < .001$ . In addition, 10% of the infants did not form any attachments to their primary care providers. Because only 10 care providers were studied, it was not possible to determine whether certain care providers were more likely to form particular types of attachment with the infants in their care, but it is worth mentioning that disorganized [D] and insecure-avoidant [A] relationships were distributed across care providers whereas the [B] attachments tended to characterize specific care providers. Six of the eight secure infant–care provider attachments involved the same two providers, to each of whom three infants were securely attached.

Table 2  
Individual-level and group-level measures of care provider behaviors as related to attachments

	Infant-care provider attachment								
	Secure [B]			Insecure [A & C]			Disorganized [D]		
	Day	Week	Month	Day	Week	Month	Day	Week	Month
	1–2	2–4	3–4	1–2	2–4	3–4	1–2	2–4	3–4
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
<i>Individual-level</i>									
Attentiveness <sup>a</sup>	2.0 (1.5)	1.7 (0.9)	1.3 (0.5)	1.2 (0.1)	2.0 (1.1)	1.0 (0.2)	1.4 (1.0)	1.5 (0.9)	1.7 (0.8)
Adequate	2.0 (0.5)	1.7 (0.9)	1.8 (0.5)	1.2 (0.1)	1.7 (1.0)	1.2 (0.9)	1.3 (0.7)	1.2 (0.6)	1.7 (0.8)
Responsiveness <sup>a</sup>									
<i>Group-level</i>									
Empathy <sup>b</sup>	5.0 (1.9)	5.2 (1.4)	5.6 (0.5)	3.4 (0.8)	3.5 (1.6)	3.9 (0.6)	3.0 (1.5)	3.2 (1.6)	3.0 (1.1)
Punitiveness <sup>b</sup>	3.8 (1.4)	4.6 (1.4)	4.8 (1.8)	5.0 (0.5)	5.5 (2.0)	5.2 (0.5)	4.3 (0.9)	5.1 (1.7)	4.8 (1.5)
Disinterest vs. Dedication <sup>b</sup>	4.8 (1.4)	5.2 (1.3)	4.8 (1.9)	5.2 (0.5)	4.3 (1.8)	4.6 (0.5)	5.5 (1.8)	5.4 (1.8)	4.8 (1.8)
Control vs. Permissiveness <sup>b</sup>	5.5 (0.5)	6.2 (0.8)	6.9 (1.2)	5.2 (1.7)	5.9 (0.5)	5.3 (1.0)	4.7 (1.4)	5.3 (1.7)	4.8 (1.2)

Note. <sup>a</sup> Data ranges on 5-point scales.

<sup>b</sup> Data ranges on 9-point scales. Data were z-transformed for MANOVA.

### 3.3. Factors associated with the security of infant–care provider attachment

In order to determine whether care provider behaviors predict variations in the security of attachment, we focused on dyadic-level measures of interaction with the target infants, as well as on group-level measures of interactions with the group. As the numbers of resistant-ambivalent [C] attachments were small, we combined them with the avoidant [A] patterns into a single insecure attachment category, and excluded the nonattached infants ( $n = 4$ ) from further analyses (see Table 2).

A two-way (Attachment: secure, insecure, and disorganized; Time: 1–2 days, 2–4 weeks, 3–4 months after enrollment) repeated measures MANOVA with all care provider behaviors as dependent variables revealed a significant between-subject effect for attachment,  $F(12, 58) = 33.9, p < .001$ , and a significant within-subject effects for time,  $F(12, 124) = 4.3, p > .001$ , and a significant Attachment X Time interaction,  $F(24, 256) = 5.8, p > .001$ . Subsequent univariate analyses of variance (ANOVAs) revealed significant effects for attachment only on the ratings of empathy,  $F(2, 33) = 6.8, p = .003$ . Inspections of the means suggested that secure infant–care provider attachments were more likely when care providers supervised the group empathically. Significant univariate effects for time on the ratings of empathy,  $F(2, 66) = 12.3, p < .001$ , and permissiveness,  $F(2, 66) = 5.5, p < .05$ , indicated that levels of empathy and permissiveness increased over time. Univariate Attachment X Time interactions for empathy,  $F(4, 66) = 11.2, p < .001$ , and permissiveness,  $F(4, 66) = 7.2, p < .001$ , suggested that increasing levels of empathy and permissiveness fostered secure infant-care provider attachments (Table 2).



#### **4. Discussion**

The research reported here began as a study of infant-mother and infant-care provider attachments in East Germany before reunification. At that time, the authorities disapproved of attachment theory, which they feared might undermine popular acceptance of nonmaternal care, even though paid maternity leaves of at least one year ensured that most infants only entered full-time child care in large age-homogeneous groups at around 12 months of age. In such circumstances, care providers were often overwhelmed by widespread manifestations of infant distress, and so an “adaptation phase” during which mothers remained with their children was introduced shortly before reunification and has been retained (BMFSFJ, 1994).

The analyses reported here suggest that infant-mother attachments were more likely than infant-care provider attachments to be secure, even though many infants were insecurely attached to their mothers. Studies throughout Germany both before and after reunification (see review by Gloger-Tippelt, Vetter, & Rauh, 2000) suggest that this cultural pattern persisted despite extensive attempts to reshape child rearing conditions in East German families (Ahnert, Meischner, & Schmidt, 2000).

Interestingly, furthermore, infant-care provider attachments were even less likely to be secure than those that the same infants formed with their mothers. Many of the insecure infant-care provider attachments were so designated because infants displayed disorganized behavior (Main & Solomon, 1990) but although some of those attachments would have been labeled secure; if we had forced all attachments into one of the major categories [A, B, C] without regard for disorganized behavior, the differences between infant-mother and infant-care provider attachment security would still have been statistically significant. This suggests that the East German care regimes were associated with insecure attachments in general as well as with disorganized behavioral patterns in particular.

The fact that 38% of the infant-care provider attachments were disorganized is noteworthy because only 15% of the infant-mother attachments in “typical” middle-class samples are so designated (van IJzendoorn, Schuengel, & Bakermans-Kranenburg, 1999). From an ethological point of view, Main and Solomon (1986, p. 164) described disorganization as the simultaneous activation of incompatible behavioral systems which pervasively suppress affect. Can children’s experiences clarify the meaning of disorganized behavior in Ainsworth’s Strange Situation? Although disorganized attachments may sometimes be associated with prolonged and repeated child-mother separations (Solomon & George, 1999), there is no reason to believe that separation necessarily causes these behavior patterns. Instead, researchers have linked disorganization to disturbed patterns of caregiving, and have shown that disorganization may reflect experiences with care providers who fail to terminate heightened activation of the attachment system, especially when the dyad perform under distress. As a result, disorganized behavior should be more likely when care providers’ behaviors appears frightening or frightened to the infants (Lyons-Ruth, Bronfman, & Parsons, 1999; Main & Hesse, 1990; Schuengel, Bakermans-Kranenburg, & van IJzendoorn, 1999; Solomon & George, 1999; van IJzendoorn et al., 1999), as they might have done in East German care facilities. It is unclear, however, how East German care providers might have fostered disorganized behavior. One might speculate that, when many infants entered child care at the same time, infants and care providers had to function under stress, especially

when basic needs had to be met. In such circumstances, care providers might have raised their voices, spoken harshly, or behaved insensitively. The age-homogeneous nature of the groups might have exacerbated the structures of the situation, and the developmentally inappropriate emphasis on peer play in infancy, which is best not overstructured by adults (Howes, 1997), might also have led care providers to interact inappropriately with individual infants in their care before German reunification. In contrast, infants were more likely to develop secure relationships to those care providers whose group-regulating behaviors were combined with empathy, supported by increasing levels of permissiveness. One might speculate that these care providers might have reflected their own personal attitudes about motherhood rather than by the official curriculum (see also Rauschenbach, Beher, & Knauer, 1995). An unpublished study conducted by Rottmann and Ziegenhain (1988) in West Berlin at around the same time also revealed no association between the security of infant–care provider attachment and care provider sensitivity, however, suggesting that the findings we obtained might not be specific to the preunification conditions in East Germany.

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