



Introduction to New Directions in Early Attachment Research

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The ground-breaking work of Mary Ainsworth and John Bowlby decades ago stimulated many scientists around the globe to conduct research on attachment in infancy, its development and consequences for later life. Findings in this area stressed the importance of close emotional relationships in early life to develop a secure form of attachment to the primary caregiver, and the capacity to explore the world while having a "safe haven" to come back to. Empirical evidence also identified problematic attachment constellations leading to insecure or disorganized styles of attachment. Such constellations not only influence many facets of development in childhood but also predict psychosocial adaptation in later life, for instance the qualities of intimate partnerships, or the relationship towards one's own children. Today, much data on early attachment is available, and an enduring interest in the topic continues. Identification of variations in attachment development between groups characterized, for instance, by atypical rearing contexts, such as conditions of severe deprivation and foster homes, disparity of treatment by gender, or differences in cultural background remain of particular interest to researchers. In addition, there has been a recent focus on the development and evaluation of evidence-based interventions to promote secure attachment in children.

This special section of the ISSBD Bulletin focuses on such new findings in the area of attachment research. We chose this topic not only because we wanted to represent an area of research with a long tradition while giving new scientific input for the future, but also wanted to follow the positive echo and high interest that we received from the readers of our last issue focusing on parenting research. For this special section, we have five feature articles by authors from Hungary, the US, Bolivia, Brazil, Germany, and the

UK which present new and fresh findings in the area of attachment research. These studies are commented on by two experts in the field, Fabienne Becker-Stoll, and Kate Ellis-Davies. In addition, we present three lab reports, in which the authors introduce their work on an intervention program for at-risk infants and toddlers to promote secure attachment (Roben & Dozier), attachment and implicit cognitive/bodily-kinesthetic processes in child-parent relationships (Dykas), and the relation between the marital relationship and parental engagement in child care (Vieira et al.). All of them are great examples of how diverse contemporary topics and methods in attachment research are.

This ISSBD Bulletin also contains the notes from our president, Wolfgang Schneider, along with a report from the 9th ISSBD Africa Regional Workshop on "Consolidating and Extending Early Career Scholars' Capacity to do Research across the Life Span," and the news from the IJBD Editor Marcel van Aken. Finally, we have included a new section in the ISSBD Bulletin: the Book Review – here we will start with a review of a book on "Fathers in Cultural Contexts" thereby also reflecting on attachment and parenting issues.

We hope that the readers of this issue of the ISSBD Bulletin enjoy reading the papers as much as we did when we put this together. We are grateful to all authors of this issue, and thank them for their time, energy, and efforts to write a contribution for the Bulletin. In addition, we thank those members who actively approached us for publication issues or to stimulate new activities of the Bulletin Editorial team, such as organizing and releasing book reviews. All these are important for us because they indicate reception of and interest in the content of the Bulletin – both of which are very welcome!

Gender Differences In Children's Responses To Attachment Story Stems: True Or Artefacts?

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The large number of attachment studies that have been conducted based on behavioral observations in separation-reunion settings (e.g. Ainsworth, Blehar, Waters, & Wall, 1978) have not detected gender effects on frequencies of attachment classifications (e.g. van IJzendoorn, 1995); however, differences between girls and boys have been found in studies examining children's mental representations of attachment relationships by the use of doll figures to elicit attachment-relevant stories. Here, we report data from our study that used a story completion procedure to measure attachment quality in Hungarian preschoolers. In seeking to explain our finding of a gender effect on attachment, we review and discuss potential sources of similar findings by others. In doing so, we hope to raise questions for attachment research and to stimulate further discussion (e.g. Del Giudice, 2009; Pierrehumbert et al., 2009).

Our study

The mother-child attachment of 84 low-social-risk, firstborn children (49 boys, 35 girls) was assessed at 6 years of age by the *Manchester Child Attachment Story Task* (MCAST, Green, Stanley, Smith, & Goldwyn, 2000). MCAST is a doll-play method aiming at eliciting relationship-specific responses from children by presenting 4 attachment-relevant 'distress' story stems to be completed by the child. The coding scheme evaluates the represented attachment relationship as reflected in the characters' behavior, as well as in the organization and coherence of the narrative. In addition, specific aspects of child behavior during story completion are also scored from videotapes. The MCAST coding scheme allows identification of four attachment classifications and disorganization scoring on a 9-point scale. Twenty-nine difficult-to-code cases were control-coded by J. Green resulting in an 89.7% agreement for the four-way classifications. As part of the data collection, children's mental abilities were assessed by the R-WISC, and VQ scores were used to test whether individual variation in language abilities influenced children's capacities to produce coherent narratives. As a measure of contextual risk in the families, maternal reports of major negative life events of

the previous 5 years (e.g. divorce, deaths, severe illness) were collected, and a cumulative *Life Stress Index* (LSI) was computed.

Frequencies of attachment classifications were 42 (50%) secure, 9 (10.7%) avoidant, 3 (3.6%) ambivalent and 30 (35.7%) disorganized, of which the frequency of secure classification was within the range of other published data from story stem assessments. Insecure classifications, however, were predominantly disorganized for both genders (Figure 1). The rate of disorganization was high in our study, but not significantly higher ($p = .26$) than that in the first published data (26.4%; Green et al., 2000). Because of the small number of avoidant and ambivalent children, a two-way secure vs. insecure (mostly disorganized) grouping was used in further analyses. There was a striking difference in the distribution of genders across the secure and insecure groups ($\chi^2 = 8.28$, $df = 1$, $p = .004$; see Figure 1). Nearly 70% of the girls were securely attached, while over 60% of the boys were insecure (47% disorganized).

To assess the contributions of gender, VQ and LSI to attachment insecurity, a binary logistic regression analysis was conducted with all predictors entered in the first step and interaction terms entered in the second. The significant main effect model ($\chi^2 = 16.79$, $df = 3$, $p = .001$) contained two significant predictors only, male gender (Wald = 7.97, $df = 1$, $p = .005$, OR = 4.07) and VQ (Wald = 5.70, $df = 1$, $p < .05$, OR = .91). Thus, boys were 4 times more likely than girls to be insecure (disorganized) and children with higher verbal abilities were somewhat less likely to produce insecure attachment narratives, while cumulative life stress was not significantly related to the 6-year attachment status. Non-significant interaction terms indicated that better verbal capacities facilitated presenting a secure attachment narrative regardless of child gender, thus not explaining girls' higher rate of security.

In the following sections, we attempt to put our finding of a gender-biased distribution of attachment classifications into the context of current literature by reviewing studies assessing attachment using story stem techniques and reporting gender differences.

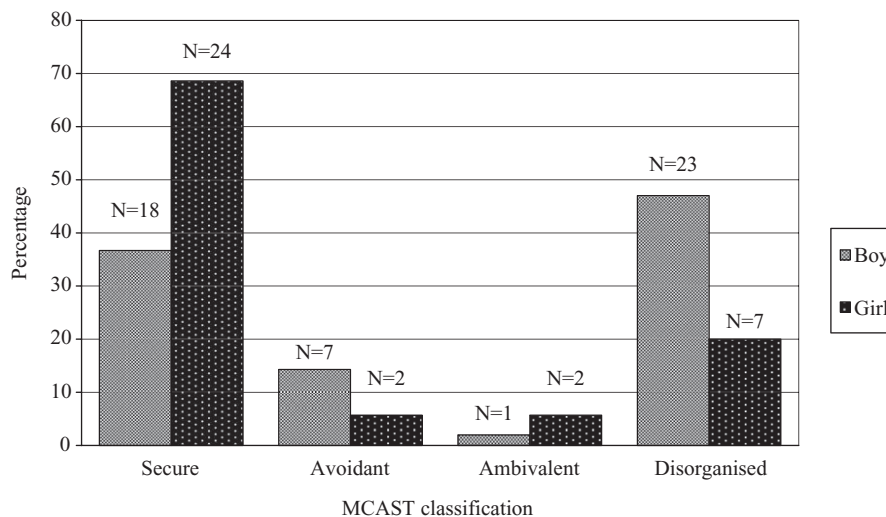


Figure 1. Distribution of attachment classifications at 6 years by child gender (percentages within the genders).

Are Gender Effects Sparse in Childhood Attachment Studies?

Reports on gender effects have been increasing with the growing number of story completion studies using different attachment measures (Q-sort dimensions, a continuous security scale or attachment classifications). In several studies evaluating narratives on *dimensional measures*, girls were found to represent more relationship-oriented themes in more coherent ways, while boys played out more non-interpersonal and aggressive contents (e.g. Laible, Carlo, Torquati, & Ontai, 2004; Moss, Bureau, Béliveau, Zdebik, & Lépine, 2009; Page & Bretherton, 2001; Pierrehumbert et al., 2009; Stadelmann, Perren, von Wyl, & von Klitzing, 2007; Verschueren, Marcoen, & Schoefs, 1996; von Klitzing, Kelsay, Emde, Robinson, & Schmitz, 2000; Woolgar, Steele, Steele, Yabsley, & Fonagy, 2001). At this point, it is not known whether these dimensional gender differences would translate into differential distributions of attachment *classifications*. For example, Verschueren and colleagues (1996) did not find more girls than boys in the secure group despite their higher security scores. However, some other studies that used classifications for evaluating the story stem narratives found biases towards secure attachment in girls and towards insecure/disorganized classifications in boys (Gloger-Tippelt & Koenig, 2007; Kerns, Abraham, Schlegelmilch, & Morgan, 2007; Rydell, Bohlin, & Thorell, 2005).

In our view, the proportion of studies finding gender differences in measures of attachment story stem narratives is not negligible. Gender differences are more common in studies using dimensional measures than in those using classifications. Considering our own results, they seem to be consistent with those of many other doll-play studies in that girls represented more secure mother-child relationships and boys represented more relationship difficulties. Nevertheless, our study, with its high rate (63.3%) of insecurely attached boys, is an outlier among investigations of community samples.

Do attachment story stem narratives represent the true quality of relationships?

In studies conducted in non-clinical populations, gender differences in attachment could not be linked to differential parenting. Either parenting was not measured (e.g. Verschueren et al., 1996) or child gender was not associated with parents' self-reported attitudes (e.g. Stadelmann et al., 2007). Studies conducted with children developing in *adverse* conditions, however, can shed light on potential discrepancies between represented relationship quality and disturbed family environments.

For example, in one study, daughters of depressed mothers represented the highest level of maternal care and the least neglect in comparison to daughters of well mothers, while boys of the depressed mothers portrayed the highest level of neglect and their narratives were the least structured (Murray, Woolgar, Briers, & Hipwell, 1999). Content analysis of narratives in a recent study of clinically referred children with disruptive behavior problems found that daughters of depressed mothers did *not* depict child aggression or sadness (Wan & Green, 2010). Thus, *girls* experiencing disturbed relationships seem to *idealize* relationships in their doll enactments. This view is further supported by findings in a group of children diagnosed with Reactive Attachment Disorder (RAD), where 30% showed secure attachment despite diagnosis. Among RAD children, girls were more likely to be secure and show more organized narratives than boys (Minnis et al., 2009). Based on the above results, we may speculate that enactments by girls are not always reliable indicators of their concurrent relationships. David and Lyons-Ruth (2005, p.14-15), discussing disorganized infant behavior, proposed that "girls' attachment behaviors (...) may underrepresent the degree of difficulty in the mother-daughter relationship" and secure-appearing behaviors "may function as precursors to the [later] controlling [i.e., disorganized] behaviors". Likewise, we may speculate that some preschool-age girls produce secure-appearing story completions, despite being in a dysfunctional relationship, which may inflate the rate

of security among girls. Story completion findings obtained from children in divorced families seem to support this hypothesis: girls rather than boys enacted more attachment behavior and empathy towards the (divorced) father figure, when the father was perceived to be low on parenting support (Page & Bretherton, 2001). Thus, girls might react with increased affectionate/affiliative behavior to relationship disturbances.

Regarding story stem enactments by *boys*, their tendency to give more representations of non-interpersonal actions led more frequently to avoidant classification (Del Giudice, 2008; Rydell et al., 2005). Elevated levels of represented aggression are reflected in higher disorganization scores (Del Giudice, 2008; Pierrehumbert et al., 2009), or in a male bias towards disorganized classification (e.g. Kerns et al., 2007). As opposed to the pattern for girls, family disturbance may increase the frequency of disorganized narratives in boys, as shown by a study of preschool children (Gloger-Tippelt & Koenig, 2007), where 80% of disorganized children were boys. This, together with a reported figure of 86% of disorganized cases being boys in a normal sample by Kerns and colleagues (2007), was similar to our finding, that 77% of all disorganized narratives were produced by boys.

In summary, story stem completion methods are widely used to measure childhood attachment, but the above-reviewed data suggest that, to a presently unknown extent, children's doll-play enactments may not always accurately reflect the true qualities of the relationships experienced by the children with their parents. This "measurement error" seems to occur differentially in the genders; shifting girls' responses towards a more regulated narrative and those of boys' towards a more dysregulated style in stress-inducing doll-play tasks. The above-discussed gender-differentiated responses in the story completion tasks are consistent with a proposal by Del Giudice (2009) regarding the emergence of higher male avoidance vs. female ambivalence at this age. Higher scores of girls on affiliative dimensions (e.g., mother-child interaction, approach) could shift their classifications towards secure and ambivalent categories, while the lack of interaction, and enacted aggression, being more common in boys, could be shifting their classifications towards avoidance and/or disorganization.

Concurrent observational assessments of parent-child interactions are rare, and these have not shown evidence of differential parental treatment of the genders in attachment-relevant domains (see Murray et al., 1999). In our opinion, current literature does not provide an explanation for the gender biases reviewed above. In the following section, we propose some developmental processes that may contribute to a fuller understanding of results of story-stem narratives.

Putative developmental processes responsible for the gender bias in story stem measures

It is striking that gender differences in the enacted behaviors of doll characters strongly resemble gender differences observed in childhood social behavior. These stereotypic differences in aggression, empathy and prosocial behavior are widely regarded as concomitants of

normative development. Individual variations are large within the genders and may be partly linked to differences in children's competence in emotion and behavior regulation, which in turn are correlated with the quality of attachment (Zimmermann, 1999). Even though they are related, attachment and emotion regulation are clearly different constructs. There seem to be indications that in doll-play-induced responses, represented emotion regulation capacities predominate over the evoked attachment-related themes (Stadelmann et al., 2007), which may lead to consistent gender-biases in these assessments. Thus, while story stem completion tasks elicit schemas related to attachment quality and seem to provide relevant measuring contexts, an overlap with another construct, i.e. emotion regulation, reduces their discriminant validity.

The content of pretend play may be another source of emerging gender differences. In a 'child-friendly' play setting (Dunn & Hughes, 2001), boys were characterized by higher rates of violent fantasies in spontaneous pretend play, while other themes did not differentiate the genders. It is possible that gender-related patterns of violence observed in peer interactions and linked to poorer emotion regulation are transferred to doll 'pretend' play, even though story stems do not specifically represent peer relations.

The development of preschoolers' abilities in narrative production could also be considered as a contributing factor to gender-bias in narrative-eliciting assessments. In spontaneous story narratives, girls are more likely than boys to portray characters as 'persons', that is, full mental agents with represented cognitive and emotional states. Developmental pathways of character representation differ for the genders and, at age 5 years, girls still have a notable advantage in structuring a narrative and representing social others (Nicolopoulou & Richner, 2007), which might contribute to girls' evaluations as secure in story stem tasks.

Concluding remarks and future directions

In order to determine whether gender-biased frequencies of attachment classifications are confounded or true reflections of represented relationships in doll stories, deeper knowledge of possible underlying causes and processes leading to gender biases is needed. By understanding better the developmental factors influencing the differential production of attachment narratives in boys and girls, the validity of story stem attachment measures could be further improved. Other researchers have already pointed out that child gender as a moderating factor warrants deeper examination (e.g. Woolgar, 1999). Indeed, there seems to be an increase of publications pointing in the same direction. Besides issues concerning attachment methodologies, further investigations of underlying biological processes resulting in typical gender differences in the targeted age group could significantly enhance our understanding of gender effects in story stem narratives.

We consider that new studies should specifically focus on extensive observations of aspects of everyday caregiving in order to find out if parenting differs for boys and girls in contexts that are theoretically salient for the development of attachment. This work might detect behavioral indices at the levels of interactions and emotion/stress-regulation that could be linked to, and reliably distinguish different



attachment groups. Subsequently, researchers might reach consensus in the 'necessary and sufficient' criteria for identifying the different insecure (avoidant, ambivalent, disorganized) patterns in attachment story completion measures. Both cross-sectional and longitudinal investigations examining correlates of parent-child attachment could benefit from improved and rigorous methods for assessing attachment in early childhood. Doll play techniques are powerful tools for gaining insight into children's hidden and rich inner world; thus studies aiming to answer the questions outlined above could further advance the research and clinical applications of these techniques.

Author Note

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Attachment Relationships in the Context of Severe Deprivation: The Bucharest Early Intervention Project

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Millions of children worldwide are being raised in institutions because they have been abandoned or orphaned. Formal estimates are underestimates because many low resource countries do not adequately record children's living arrangements. In a first wave of research on the development of children raised in institutions, descriptive studies appearing in the mid-20th century raised concerns about the deleterious effects of these settings on the development of young children. A second wave of research on children reared in institutions has appeared in the past 15 years, following large numbers of adoptions of children from Romania and Russia into Western Europe and North America. This second wave has more carefully documented profoundly toxic effects of institutional rearing on brain and behavioral development.

One of the major areas of focus among institutionalized children in both waves of research has concerned the effects of institutional rearing on young children's capacity to form and sustain attachment relationships. In conditions of deprivation, young children may have limited opportunities to form attachments, and adoptive parents often complain of serious disturbances of attachment in children they adopted out of institutions.

For the past 12 years, the authors have conducted a longitudinal investigation of children who were abandoned at birth and then placed in institutions in Bucharest, Romania. The Bucharest Early Intervention Project is the only randomized controlled trial ever conducted to compare placement

in foster care to prolonged institutional care. This study has allowed us to examine the effects of attachment on the development of severely deprived young children.

Briefly, 187 children between 6 and 30 months of age who had been abandoned at or soon after birth and who were living in 6 different institutions in Bucharest were identified as eligible for the study. They were screened by Dr. Dana Johnson, a neonatologist and pediatrician who directed the Internal Adoption Clinic at the University of Minnesota, to identify children without major genetic syndromes, microcephaly or obvious signs of fetal alcohol syndrome. After screening, 136 children were included in the study. These children were assessed comprehensively across many domains of development including attachment. In addition, we recruited an age- and gender-matched sample of 72 children who had never been institutionalized from pediatric clinics in Bucharest to serve as a typically developing Romanian comparison group.

Following baseline assessment, the children living in institutions were randomly assigned to care as usual or to placement in foster homes that were recruited, trained and supported by BEIP. Foster care was new in Romania when the project began and not widely available, particularly in Bucharest. The study promised to provide data about the effectiveness of foster care in enhancing the brain and behavioral development of young children who had had varying degrees of institutional rearing (see Nelson, Fox & Zeanah, in press, for a full description).



Attachment in institutionalized children

Given that previous research had described serious attachment disturbances in young children being raised in the socially deprived environment of institutions, we considered at the outset that this should be one central focus of the project. Historically, there have been two separate lines of research describing attachment disturbances in young children in institutions that we wanted to include in our research.

Disorders of attachment. Based on the descriptive studies in the mid-20th century, two patterns of seriously disturbed social behavior in children in institutions emerged. In the first, children appear to be emotionally withdrawn, socially unresponsive and emotionally dysregulated. They do not direct attachment behaviors towards adults even at times when they are distressed and aroused. In the second pattern, young children are socially engaging but indiscriminately so. They unhesitatingly approach unfamiliar adults, seek attention and have no reticence about leaving familiar caregivers for strangers. These unusual patterns of abnormal social behavior were both incorporated into successive editions of the *Diagnostic and Statistical Manual of Mental Disorders* (APA, 2013) and the *International Classification of Diseases* (WHO, 1992) as disorders of attachment, known as reactive attachment disorder and indiscriminate or disinhibited attachment disorder. In the second wave of research on institutionalized children, these disorders have been reliably identified in children living in institutions, and in the case of indiscriminate behavior, in children adopted from institutions (Chisholm, 1998; O'Connor & Rutter, 2000; Smyke, Dumitrescu, & Zeanah, 2002). These studies formed the backdrop for further study of these disorders in the Bucharest Early Intervention Project.

In BEIP, we used structured interviews of caregivers to assess signs of both the emotionally withdrawn/inhibited and indiscriminately social/disinhibited type of attachment disorders. In keeping with findings from other research, signs of both types of attachment disorders were far more prevalent in children with a history of institutionalization than in community children who had never been institutionalized (Zeanah et al., 2005). We also showed that observed caregiving quality was associated with the emotionally withdrawn/inhibited type but not with the indiscriminately social/disinhibited type. This was in keeping with findings from adoption studies that signs of indiscriminate behavior persisted long after adoption into high quality caregiving environments (Chisholm, 1998; Rutter et al., 2007).

Classifications of attachment. In the second line of attachment research deriving from early descriptive studies of children raised in institutions, investigators used the Strange Situation Procedure (SSP) to assess classifications of attachment in children living in institutions (Vorria et al., 2003) and children adopted out of institutions (Marcovitch et al., 1997; O'Connor et al., 2003). Findings from these studies consistently indicated increased aberrant classifications of attachment in children with histories of institutional rearing.

When we began BEIP, however, there had been no published studies using the SSP on children living in institutions. Whether to use it was a vexing question because

from our own and others' previous research, we knew that not all of the children would have formed attachments to caregivers due to the large child to caregiver ratios (at least 12:1) in institutions in Romania. And yet, the SSP was developed to assess qualitative differences in attachments that had already formed between young children and their caregivers—not to determine whether or not attachments existed. Ultimately, we decided to use the SSP and to select the child's "favorite" caregiver (defined by staff consensus), or if the child did not have a favorite, to select a caregiver who worked with the child regularly and knew the child well.

Results of the baseline assessments were compelling. In the community children, 74% had secure attachments, 4% had avoidant attachments and 22% had disorganized attachments. In contrast, only 19% of the institutionalized children had secure attachments, 3% had avoidant attachments, 65% had disorganized attachments, and 13% had so few attachments that they could not even be classified. These differences were large and compelling, but it turned out that they did not fully capture the magnitude of differences in children reared in institutions and in families.

Degree of formation of attachment. Dr. Betty Carlson, a psychologist from the University of Minnesota, who was the primary coder of the SSPs and blind to identity of the children, decided that although the SSPs could be classified conventionally, there were many children who she believed had incompletely developed attachments to their caregivers. She developed a 5-point continuous rating scale anchored as follows: 1—no evidence of attachment behavior, 2—barely discernible difference in the child's behavior towards the "attachment figure" and the stranger, 3—a discernible difference in behavior with familiar and unfamiliar adult but passive expression of attachment behaviors, 4—attachment behaviors are present but they are complicated by aberrant behaviors not captured by disorganized behaviors (e.g., twirling around for minutes after initial reunion with the attachment figure), and 5—fully developed secure, avoidant, resistant or disorganized attachment between child and caregiver.

Using this rating scale, Carlson and Alan Sroufe (secondary coder) reliably and blindly coded each dyad in addition to assigning a conventional SSP classification. The results were more revealing than the forced category classifications using the traditional Strange Situation. Every community child was rated as having a fully developed attachment to their mothers, whereas only 3/95 (3%) institutionalized children were rated as having fully formed attachments. Among the institutionalized children, 10% had no discernible attachment behaviors (level 1), 25% had barely discernible attachments (level 2), 31% had passive expressed attachments (level 3) and 32% had seriously aberrant behaviors. Importantly, 29% of level 2 and 24% of level 3 children were classified as securely attached. This suggested to us that the traditional classification scheme that identified institutionalized children as secure in their attachments means something different from secure attachments in home-reared children.

Thus, young children living in institutions were substantially more likely to show signs of attachment disorders, disorganized or unclassifiable attachments and incompletely formed attachments than their home-reared

counterparts. The next question was whether removing children from institutions and placing them in families would ameliorate these disturbances of attachment.

Intervention effects

Intervention. The intervention in BEIP was a high quality foster care network that was created as part of the project (see Smyke, Zeanah, Fox, & Nelson, 2009, and Nelson, Fox and Zeanah, in press). BEIP social workers recruited, trained and supported foster families, actively encouraging them to commit and attach to the young children in their care. These social workers in turn received weekly consultation and support from experienced clinicians at Tulane.

Through 54 months of age, when the formal intervention ended and the foster care network was turned over to local governments in Bucharest, the stability of placements was 87% and objective measures of quality caregiving were significantly higher for children in BEIP foster care compared to children in institutional or other settings (Nelson, Fox & Zeanah, in press).

Disorders. Signs of emotionally withdrawn/inhibited attachment disorders decreased when children were placed in foster care compared to those randomized to care as usual. At 30, 42 and 54 months and at 8 years, signs of this disorder were indistinguishable from never institutionalized children and significantly lower than the children receiving care as usual (Smyke et al., 2012).

Reductions in signs of the indiscriminately social/disinhibited disorder were less robust for children in foster care than signs of emotionally withdrawn/inhibited attachment disorder. They were significantly lower than the care as usual group only at 42 months and 8 years. On the other hand, children placed in foster care before 24 months of age had significantly fewer signs of indiscriminately social/disinhibited disorder (Smyke et al., 2012).

Classifications. At 42 months of age, we repeated the SSP, and blind raters (different from those at baseline) coded the children's attachments to their parents and caregivers. We found that 65% of the community children were securely attached, compared to 49% of the foster care group and 18% of the care as usual group. Further, 10% of the community children, 23% of the children in foster care, and 46% of the care as usual children were classified as disorganized-controlling or insecure-other (Smyke, Zeanah, Fox, Nelson, & Guthrie, 2010). We also showed that children placed in foster care before 24 months of age were significantly more likely to form secure attachments than those placed after 24 months, compatible with there being a sensitive period over the first two years of life for the ability to form an attachment relationship (Bakersman-Kranenberg et al., 2011).

Secure attachment as a protective factor. We found that placement in foster care significantly reduced signs of anxiety and depression in 54-month-old children, although subsequent analyses indicated that this effect was limited to girls (Zeanah et al., 2009). Security of attachment at 42 months was associated with reduced psychopathology and social skills subsequently (Almas et al., 2012; McGoron et al., 2012). We determined that security of attachment at 42 months mediated the intervention effect

of foster placement on reductions of signs of anxiety and depression (McLaughlin et al., 2012). Additional analyses indicated that boys who formed secure attachments to their caregivers at 42 months also had reductions in signs of anxiety and depression. This established clearly that the mechanism of the intervention was forming secure attachments to foster parents.

Summary

Attachment was severely compromised in children abandoned at birth and placed in institutions in Romania. Recovery was facilitated by placement in foster care, but those placed before 24 months of age were significantly more likely to form secure attachments. Those who formed secure attachments were more likely to have better social and psychiatric adaptations subsequently.

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Attachment in Foster Children: Recent Findings and Future Directions

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In 2010, 408,425 children in the United States of America and 60,451 children in Germany were living in foster care (Child Welfare Information Gateway, 2012; Statistisches Bundesamt, 2011). The reasons for placement most often include neglect, physical maltreatment and emotional maltreatment with a majority of foster children experiencing multiple forms of maltreatment (Oswald, Heil, & Goldbeck, 2010).

Both early adversity and disruptions in caregiving put foster children at risk for developing a variety of social, psychological, and behavioral problems (Lawrence, Carlson, & Egeland, 2006; Oswald et al., 2010). Several studies report the prevalence of clinically relevant mental health problems in this population, between 30 and 60% (e.g., Clausen, Landsverk, Ganger, Chadwick, & Litrownik, 1998; Minnis, Everett, Pelosi, Dunn, & Knapp, 2006; Stein, Evans, Mazumdar, & Rae-Grant, 1996; Tarren-Sweeney & Hazell, 2006). Moreover, foster children often show delays in different developmental areas, for example in cognitive, psychomotor and language development (Leslie, Gordon, Ganger, & Gist, 2002; Leslie et al., 2005; Pears & Fisher, 2005). Neurobiological studies of maltreated children highlight the moderating role of stress regulation: early adversity influences the activity of the hypothalamic–pituitary–adrenal-(HPA) axis leading to altered patterns in stress regulation (Gunnar & Fisher, 2006; Gunnar & Vazquez, 2001; Gunnar & Quevedo, 2007; Kertes, Gunnar, Madsen, & Long, 2008) and may thereby cause persistent cognitive and socio-emotional deficits.

According to attachment theory (Bowlby, 1969/1982, 1979, 1980b), the formation of secure attachments with their new caregivers may be one factor by which children sustain or return to adaptive trajectories. Recent research on normative parent-child relationships showed that developing a secure attachment relationship with a caregiver has long-term benefits for children (for a review see Thompson, 2008). The attachment figure in a secure attachment relationship provides a “secure base” from which to explore as well as a “safe haven” to which to return for comfort (Ainsworth, Blehar, Waters, & Wall, 1978). Thereby, the child learns within the attachment relationship how to regulate negative emotions and which strategies to use when faced with stressful situations (Cassidy, 1994; Spangler & Zimmermann, 1999; Waters et al., 2010). Referring to foster children, it is assumed that positive attachment relationships with new caregivers

may buffer negative consequences of early adversity and thereby enhance resilience in children (Rutter, 1990; Werner, 2000).

However, the development of a secure attachment relationship can be complicated in the context of a difficult and unstable family environment (e.g., Dozier & Rutter, 2008; Vaughn, Egeland, Sroufe, & Waters, 1979). First, all foster children spending at least the first months of life in their birth families developed an attachment towards their primary caregiver. Therefore, placement in foster care always means a loss of the primary attachment figure which may cause depressive withdrawal, resistance to care, an inability to be soothed, or excessive clinging behavior (Bowlby, 1980a; Robertson & Robertson, 1989). Also, the majority of foster children have been exposed to various forms of maltreatment and neglect by their biological parents (e.g., Oswald et al., 2010). Since maltreatment and neglect constitute risk factors for the development of both insecure (Egeland & Sroufe, 1981; Finzi, Ram, Har-Even, Shnit, & Weizman, 2001; Lyons-Ruth, Connell, Grunebaum, & Botein, 1990) and disorganized attachment (see van IJzendoorn, Schuengel, & Bakermans-Kranenburg, 1999 for a meta-analytic synthesis), most foster children carry negative internal working models suited to the relationship with their biological parents into the new relationship (Milan & Pinderhughes, 2000). These difficulties often alienate and unsettle new caregivers and may reduce the ability of foster parents to act as a secure base for their foster child (Stovall & Dozier, 2000; Stovall-McClough & Dozier, 2004). According to Stovall-McClough and Dozier (2004), foster parents tend to complement foster children’s attachment behavior, instead of recognizing the children’s underlying needs for nurturance.

Attachment in foster children: recent findings

Despite Bowlby’s (1980a) early focus on consequences of separation and loss, it is only recently that researchers have begun once again looking at children being separated from their primary caregivers and placed in new families. Moreover, compared to institutionalized and adopted children (van den Dries, Juffer, van IJzendoorn, & Bakermans-Kranenburg, 2009), few studies have investigated attachment in foster children. In a recent meta-analysis, van den Dries et al. (2009) identified eight studies investigating



attachment security and three studies investigating attachment disorganization in foster children (see Table 1 for all included studies, measures and core results¹). As most studies had no control group, van den Dries compared them with normative data on non-adopted controls (van IJzendoorn et al., 1999; van IJzendoorn, Vereijken, Bakermans-Kranenburg, & Riksen-Walraven, 2004). In this set of studies, a significant effect size was solely found for attachment disorganization ($d=.41$, $CI=0.07-0.74$) whereas a non-significant effect size was found for attachment security indicating that foster children showed more disorganized attachment compared to normative samples but are as securely attached as children reared by their biological parents (van den Dries et al., 2009) (see Table 1).

However, all studies reported by van den Dries et al. (2009) used only one measurement point so that no conclusion can be drawn concerning the process of attachment development in foster children. To date, two studies published in three papers² (Bernier, Ackerman, & Stovall-McClough, 2004; Stovall & Dozier, 2000; Stovall-McClough & Dozier, 2004) investigated how foster children become attached to new primary caregivers (see Table 1 for further details on measures and core results). The parents were asked to report infants' behavior when being distressed (e.g., hurt, scared, and separated from the caregivers) and parents' reactions to the child's behavior (Stovall & Dozier, 2000). Results revealed that stable attachment behavior emerged within two months of placement and significantly predicted attachment *behavior* (Bernier et al., 2004; Stovall & Dozier, 2000; Stovall-McClough & Dozier, 2004) but not attachment *classification* in the strange situation (Bernier et al., 2004) as assessed 1 to 12 months after placement. Additionally, it was found that 45% and 46% of the children showed secure attachment patterns whereas 20% and 41.7% had disorganized attachments, respectively. Overall, the results suggest that stable attachment patterns can emerge relatively quickly highlighting the special significance of the first months of placement (Bernier et al., 2004; Stovall & Dozier, 2000; Stovall-McClough & Dozier, 2004).

Pursuing Mary Ainsworth's work (e.g., Ainsworth et al., 1978; Ainsworth, Bell, & Stayton, 1991) on antecedents of individual differences in attachment quality, numerous studies examined contributing factors to the developing parent-child-relationship in normative and high-risk samples. There is compelling evidence that attachment security is primarily influenced by parents' sensitivity and state of mind (e.g., Ainsworth, 1985; Grossmann, Grossmann, Spangler, Suess, & Unzner, 1985; see also De Wolff & van IJzendoorn, 1997 for a meta-analytic review). Disorganized attachment is assumed to be the product of parents' unresolved states of mind as well as frightened, threatening, dissociative and disrupted parental behavior (for a meta-analytic synthesis see Madigan et al., 2006). Moreover, individual determinants of disorganization, such as genetic factors or infants' temperament, have been widely discussed (e.g., Lakatos et al., 2000; Spangler & Grossmann, 1993; Spangler, Fremmer-Bombik, & Grossmann, 1996; Spangler & Grossmann, 1999; Spangler, Johann, Ronai, & Zimmermann, 2009; van IJzendoorn & Bakermans-Kranenburg, 2006).

In contrast, less is known about the factors contributing to attachment of children placed in foster care. Findings

from Dozier, Stovall, Albus, & Bates (2001), Cole (2005a) and Oosterman and Schuengel (2008) provide first evidence that positive caregiving quality may also foster the development of secure attachment in foster children: foster children's attachment security was related to foster caregivers' state of mind (Dozier et al., 2001), to foster parents' own traumatic experiences (Cole, 2005a), and to parental sensitivity (Oosterman & Schuengel, 2008). However, the results concerning sensitivity are contradictory. Swanson, Beckwith, & Howard (2000) found associations between caregivers' intrusiveness and attachment security, but no effects for sensitivity or hostility. Cole (2005a) found an inverse correlation between maternal involvement and foster children's attachment security. Due to these equivocal findings, it is speculated that other variables, such as commitment and motivation of foster parents (Bates & Dozier, 2002; Cole, 2005b) or child characteristics, such as age at placement, severity of early adversity, or temperament, may be important factors explaining variability in foster children's attachment. The findings concerning age at placement, however, are somewhat mixed as later-placed children have been found to have less secure relationships in some studies (Stovall & Dozier, 2000; Stovall-McClough & Dozier, 2004) while other studies found no age effects (Cole, 2005a; Oosterman & Schuengel, 2008). A recently published study by De Schipper, Oosterman and Schuengel (2012) found evidence for a moderating effect of children's temperament on the association between parental sensitivity and foster children's attachment quality. Results indicate that shy children may benefit more from sensitive parenting. For less shy children, no differences in attachment security were found to depend on foster parents' sensitivity.

Although the data presented so far give a first impression of how children form new attachments in foster care, several questions remain unanswered. First, except for one study (Oosterman & Schuengel, 2008), all studies were conducted in the U.S. Contrary to the American welfare system, long-term foster family placements are more common in Europe, especially since domestic adoption rates are rather low in most countries (e.g., Statistisches Bundesamt, 2011). In Germany, around 2.5% of foster children are reunified with their birth parents within a period of one year (e.g., Erzberger, 2003; Rock, Moos, & Müller, 2008) compared to 51% of American foster children (Child Welfare Information Gateway, 2012). Such differences in permanency planning may lead to different developmental trajectories and outcomes. This seems to be an important area for future studies.

Second, most studies investigating attachment in foster children have been exclusively restricted to younger children placed in the first two years of life. However, the majority of children entering foster care are older than the population of foster children included in recent research: in 2010, the median age of children entering foster care in U.S. was 6.7 years (Child Welfare Information Gateway, 2012); in Germany, 84.6% of the foster children entering foster care in 2011 were older than 12 months with the majority (49.5%) being between 1 and 9 years of age (Statistisches Bundesamt, 2011). As it appears that children placed later may have more difficulty trusting in caregivers, even those who are sensitive and accessible (e.g., Cole, 2005b; Dozier et al., 2001; Oosterman & Schuengel,

Table 1. Recent Studies on Attachment of Foster Children.

Cross-sectional Studies				
Source	Sample	Age at Study	Measures	Core Findings
Cole (2005a)	46 FC (placed < 3 months)	10 to 15 months	<ul style="list-style-type: none"> Attachment quality (SSP) Infant temperament Infant development Caregiver support Parenting stress Home environment Caregiver unresolved childhood loss and trauma 	<ul style="list-style-type: none"> 67% secure attachment 28% attachment disorganization Security negatively correlated with caregiver sensitivity Security associated with positive caregiving environment, absence of both emotional maltreatment and sexual abuse in the caregiver's own childhood
Dozier et al. (2001)	50 FC (placed between 0 and 20 months)	12 to 24 months	<ul style="list-style-type: none"> Attachment quality (SSP) Foster parents' state of mind 	<ul style="list-style-type: none"> 52% secure attachment 34% attachment disorganization Concordance between foster parents' state of mind and child's attachment quality Age at placement not related to attachment quality
Lamb et al. (1985)	6 FC 6 comparisons	8 to 32 months	<ul style="list-style-type: none"> Attachment quality (adapted SSP) 	<ul style="list-style-type: none"> 33% secure attachment patterns (comparisons 50%)
Oosterman & Schuengel (2008)	61 FC (placed between 0 and 69 months)	26 to 88 months	<ul style="list-style-type: none"> Attachment security (AQS) Parental sensitivity Symptoms of Disordered Attachment Behavior Problems 	<ul style="list-style-type: none"> Mean attachment security .34 Security predicted by parental sensitivity (when controlled for attachment disorder symptoms) Age at placement not related to attachment security
Ponciano (2010)	76 FC (65% placed < 12 months)	3 to 39 months	<ul style="list-style-type: none"> Attachment security (AQS) Maternal sensitivity Experience as foster parent Child's placement status 	<ul style="list-style-type: none"> 57% secure attachment Security predicted by maternal sensitivity and less experience of foster mother
Rodning et al. (1991)	7 FC 25 comparisons	3 and 9 months (caregiving) 15 months (SSP)	<ul style="list-style-type: none"> Attachment quality (SSP) Maternal behavior (a 3 and 9 months of age) Home Environment 	<ul style="list-style-type: none"> 28.5% secure attachment patterns 57% attachment disorganization Maternal behavior (especially at 3 months of age) related to attachment security
Swanson et al. (2000)	12 FC (kinship) 35 comparisons (placed between 0 and 12 months)	18 months	<ul style="list-style-type: none"> Attachment quality (SSP) Caregiver's emotional availability (sensitivity and intrusiveness) 	<ul style="list-style-type: none"> 67% secure attachment 45% attachment disorganization Caregiver's intrusiveness but not sensitivity associated with attachment security and disorganization Attachment neither predicted by time in placement nor continuity of caregiver
Longitudinal Studies				
Source	Sample	Design	Measures	Core Findings
Stovall & Dozier (2000)	38 foster children (placed between 5 and 28 months)	Data collection immediately after placement	<ul style="list-style-type: none"> Attachment behavior (diary) Attachment quality (SSP, n=20) 	<ul style="list-style-type: none"> Initial attachment behavior related to strange situation scales 60% secure attachment, 20% attachment disorganization in SSP
Stovall-McClough & Dozier (2004)		SSP: 3 to 4 months after placement	<ul style="list-style-type: none"> Foster parents' state of mind Risk score 	<ul style="list-style-type: none"> Secure attachment behavior predicted by age at placement, risk status and foster parents' state of mind
Bemier et al. (2004)	24 foster children (placed between 6.5 and 19 months)	Data collection immediately after placement SSP: 1 to 12 months later	<ul style="list-style-type: none"> Attachment behavior (diary) Attachment quality (SSP) 	<ul style="list-style-type: none"> Initial attachment behavior related to SSP behavior scales but not to attachment patterns 45.8% secure attachment, 41.7% attachment disorganization in SSP Initial instable attachment behavior related to disorganized attachment in SSP

Note. FC: Foster Children; AQS: Attachment Q-sort; SSP: Strange Situation Procedure.

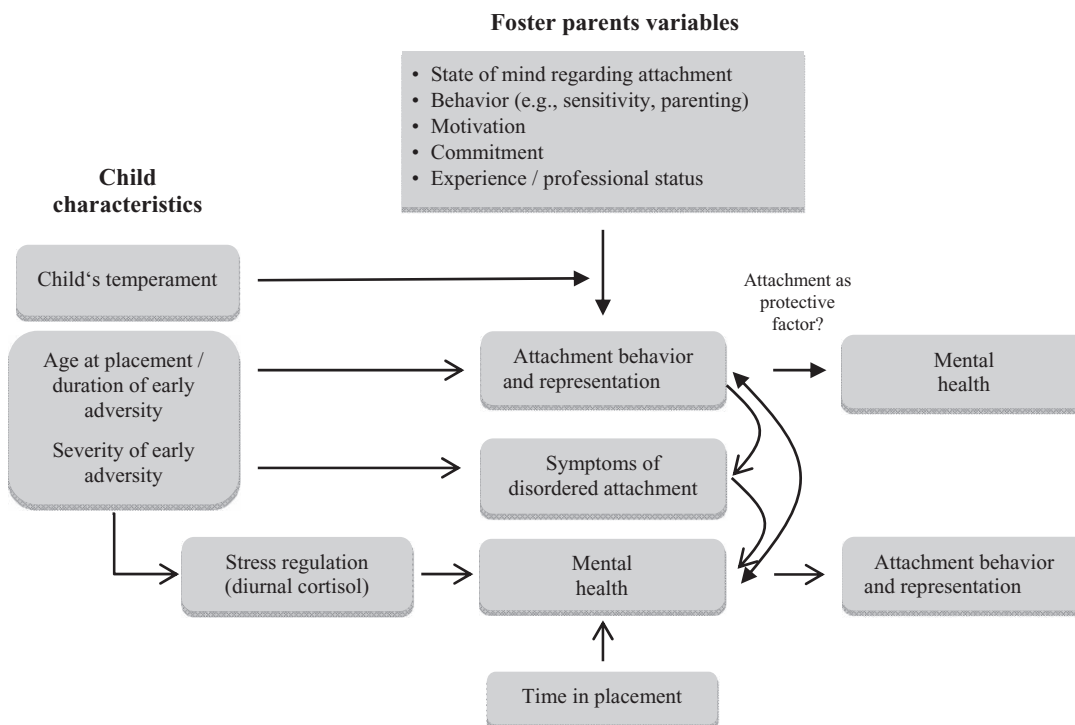


Figure 1. Theoretical framework of study 1 and 2

2008; Stovall & Dozier, 2000; Stovall-McClough & Dozier, 2004; van den Dries et al., 2009), studies investigating late-placed children are needed.

Third, all studies described so far examined attachment security by using behavioral measures of attachment. However, it is assumed that the internal working model of attachment is organized on different levels (e.g., a procedural and a representational level), which are largely independent of one another (e.g., Spangler & Zimmermann, 1999; Zimmermann et al., 2000). Whereas the attachment representation represents a more general model of self and attachment relationships, attachment assessed on a behavioral level mainly reflects the experience-based behavioral pattern within one specific attachment relationship (Main, Kaplan, & Cassidy, 1985; Zimmermann et al., 2000). With regard to foster children, the question arises if and how attachment behavior towards the foster parent, and the attachment representation based on experiences with biological and foster parents, are related and how both levels of attachment contribute to children's adjustment (Oosterman & Schuengel, 2008). Although two studies assessed attachment representations in (former) foster children (Ackerman & Dozier, 2005; Nowacki & Schölmerich, 2010), to date, there are no studies investigating the interplay of both levels of attachment.

Finally, due to few and mixed findings concerning determinants of foster children's attachment, it seems to be important to investigate factors influencing the formation of secure attachments to new caregivers in order to develop well-adjusted prevention and intervention programs for foster children, foster families and child welfare social workers (Dozier, 2005; Dozier, Albus, Fisher, & Sepulveda, 2002; Dozier, Dozier, & Manni, 2002). Specifically, studies investigating the interplay of different factors are needed.

Attachment in Foster Children: New Findings

Picking up on these open research questions, we conducted two studies investigating attachment in foster children in collaboration with the lab of Prof. Dr. Katja Nowacki (University of Applied Science, Dortmund, Germany). In both studies, foster children's attachment was examined in the context of other potentially related constructs (symptoms of disordered attachment, stress regulation, mental health). Moreover, diverse potential factors contributing to individual differences in children's development were analyzed, i.e. placement characteristics (age at placement, time in placement, severity of early adversity) as well as foster family characteristics (e.g., main caregiver's behavior and state of mind, professional status of foster parents, parenting stress, motivation and commitment). The theoretical framework of our studies is illustrated in Figure 1.

Study 1 (Bovenschen et al., in prep.; Nowacki et al., in prep.) represents a cross-sectional study including 50 foster children in long-term foster care between 3 and 8 years of age. The children were placed in their current foster family at between 0 and 77 months of age. At the moment of study assessment, time in placement ranged between 1 and 95 months.

Core results show that in contrast to recent studies (van den Dries et al., 2009), foster children showed both less secure attachment behavior and more disorganization on a representational level than children in low-risk samples. Surprisingly, no correlations were found between attachment behavior and representation although both were related to emotional and behavioral problems. Differential effects were also found regarding determinants of individual differences in attachment: Severity of early adversity was solely related to the general model of self and attachment relationships, but not to the behavioral

pattern observable in interaction with the primary caregiver (Bovenschen et al., in prep.).

In Study 2 (Spangler, Nowacki, & Bovenschen, 2012),³ we used a longitudinal design to describe foster children's attachment formation and psychosocial adjustment throughout the first year of placement. The sample consisted of 59 foster children who were placed with their current caregivers at between 12 and 72 months of age. The foster families were contacted three times within the first year of placement. Contact at the end of the first six months of placement showed increasing attachment security, both observable in the child's behavior with the primary caregiver (Gabler, 2013) and in the general working model of attachment (Bovenschen, 2013). However, even six months after placement, attachment security was still lower than in low-risk-samples.

Again, similar to study 1, child-related variables such as number of previous placements and severity of early adversity explained variability in children's attachment representation (Bovenschen, 2013) whereas children's attachment behavior was negatively associated with number of placements solely initially upon placement (Lang, in prep.). However, it was found that foster parents' sensitivity and parenting stress as well as parenting style predicted positive changes in attachment behavior (Gabler, 2013; Lang, in prep.). Thus, the dyadic attachment *behavior* seems to be mainly influenced by caregiving experiences in the new family whereas the general attachment *representation* is mainly determined by early adversity in the biological family and number of placement disruptions. In line with results of De Schipper et al. (2012), a moderating effect of the child's temperament on the association between parenting and attachment security was found (Lang, in prep.).

Results indicate that especially children with high negative affectivity and low surgency may benefit from positive parenting (Lang, in prep.; Patalakh, 2012), a tendency that may be explained in terms of the differential susceptibility hypothesis (Cassidy, Woodhouse, Sherman, Stupica, & Lejuez, 2011; Ellis, Boyce, Belsky, Bakermans-Kranenburg, & van IJzendoorn, 2011). Interestingly, not until 12 months after placement were attachment and mental health found to be related, indicating that only after a certain time, perhaps a year, may secure attachment relationships buffer the negative effects of early adversity demonstrated by lower levels of emotional and behavior problems (Gabler, 2013; Lang, in prep.).

Conclusions

Although the data presented so far shed light on attachment development in foster children, there are several research questions that need to be addressed in future studies. First, it seems to be important to examine mechanisms of attachment development in foster children in longitudinal studies including different aspects of the caregiving environment as well as child characteristics. Thereby, we could gain insight into how different factors independently influence the child's behavior, how different factors are related and if differential effects are found for specific subgroups of foster children. Studies need to include foster children placed beyond the first two years of life to compare outcomes of early- and late-placed children. Based on our

differential findings depending on which level of attachment is assessed, it would be intriguing to investigate different levels of the internal working model of attachment, i.e. to assess both attachment behavior and representation, if possible. Finally, cross-cultural studies are needed so that the role of child welfare policy for positive outcomes may be determined.

Notes

1. The study of Chew (1998) is not included in table 1 as the data were not available.
2. The samples of both studies were overlapping (K. Chase Stovall-McClough, personal communication).
3. This study was funded by the German Research Foundation (2010-2012).

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The Relevance of Cross-National Studies on Early Attachment: Research Advances in Latin America

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Cross-national research in the study of child-parent relationships is key as it allows us to pursue pressing issues in attachment theory and research. Understanding specific adaptations to diverse environments, as well as common solutions, in early attachment relationships is central to the field. Conducting cross-national studies offers an opportunity to (1) test core hypotheses in the field that have been suggested as universal (e.g., are the sensitivity-security and the security-competence links ubiquitous?). Importantly, research in nations other than Western industrialized countries presents an occasion to access sectors of the population whose living conditions are different from those of samples typically studied. Studies of families experiencing extreme poverty, with different living arrangements that include extended relatives, and/or that have been impacted by war and displacement are some examples; (2) study attachment relationships beyond infancy into early childhood, when cultural influences begin to show more clearly as other developmental achievements such as the use of representational systems gain momentum. The access to language, for instance, may open the door to a variety of cultural practices that could impact either the development of attachment relationships or their inter-connection with other developmental domains; (3) investigate the validity of established instruments and procedures in different contexts. Also cross-national research pushes us to use diverse methodological approaches, if we are to investigate specific contextual manifestations of child-mother relationships. Methodologies employed need to allow for the detection of such manifestations; and (4) evaluate commonly presented references to differences in maternal and/or cultural practices, preferences and values. Dissimilarity between samples from different countries is assumed to reflect cultural variations that presumably impact attachment relationships. Key for cross-national research is the study of the relations between what caregivers say they prefer

or value and what they actually do. Research on parental preferences is important but does not entirely address the issue of cultural specificity.

Research on early attachment in Latin America has gained momentum in the past few decades. Interest in the field and significant advances have both increased since the pioneering work of Robin Harwood in Puerto Rico (Harwood, 1992; Harwood, Schoelmerich, Schulze, & González, 2003), and Germán Posada in Colombia (Posada et al., 1995; Posada, Jacobs, Carbonell, Alzate, Bustamante, & Arenas, 1999; Posada, Carbonell, Alzate, & Plata, 2004). Today, research has expanded to include studies concerned with the intergenerational transmission of attachment in Mexico (Gojman, Millán, Carlson, Sánchez, Rodarte, González, & Hernández, 2012), the association between parental attachment security and children's socio-emotional development in Argentina (Richaud de Minzi, 2010), and testing the universality hypothesis regarding the secure base phenomenon in Colombia and Peru (Posada et al., in press).

Many challenges remain, however. Most researchers work individually, in relative isolation from one another, often lacking institutional support (Causadias, Sroufe, & Herreros, 2011). To overcome this state of affairs, a group of researchers from Latin America, Spain, and the United States created in 2009 an attachment research network to promote basic and applied research in the region, develop joint projects, and share research experiences by convening a biannual conference (Causadias et al., 2011). As a result of this initiative, a handbook on theory, methodology, and clinical applications of attachment in Spanish is currently in press, and will showcase chapters on theoretical issues, assessment instruments, and intervention paradigms and projects (Torres, Causadias, & Posada, in press). Here, we present a succinct review of some research activities that are *currently* being conducted in Latin America. It does not pretend to be an exhaustive account; rather, it is a sample of



ongoing attachment studies at different stages of execution. We organized this review by research topics and briefly describe basic information about each project. We end by considering the relevance of attachment studies in Latin America and some existing limitations in implementing research.

Quality of care and the organization of attachment behavior at different ages and in different conditions

Francisca Herreros is completing a study on caregivers' sensitivity, level of attachment formation, and attachment security among 41 infants (12-24 months) living in two orphanages in Chile. An adaptation of the Maternal Behavior Q-set (MBQS; Pederson & Moran, 1995) is used to assess sensitivity; other instruments include the Carlson's (2002) Attachment Formation rating scale and the Ainsworth's Strange Situation procedure (Ainsworth, Blehar, Waters, & Wall, 1978). As expected, preliminary analyses show a higher prevalence of disorganized attachment among children in both orphanages (27.3% vs. 9% and 37.5% vs. 9%) in comparison with non-institutionalized Chilean infants from a previous study (Lecannelier, Kimelman, González, Núñez, & Hoffman, 2008). Surprisingly, about half of the sample (51.2%) of institutionalized children displayed secure attachment during the Strange Situation, well above the 17.1% average reported on a recent meta-analysis on attachment among institutionalized children (Bakermans-Kranenburg et al., 2011). Furthermore, 63.5% of Chilean infants showed a fully formed attachment to their primary caregiver, and received a significantly higher rating on the Attachment Formation Rating than infants from orphanages in Romania (3%, Zeanah, Smyke, Koga, & Carlson, 2005) and Ukraine (24%, Dobrova-Krol, Bakermans-Kranenburg, vanIJzendoorn, & Juffer, 2010).

Magaly Noblega in Peru is studying the associations among maternal sensitivity, attachment security, and preschoolers' social competence in a sample of 30 child-mother dyads. Children were 4-6 years of age and from a middle-class background in Lima. Participants were observed at home for two hours and in playgrounds for one hour, and both maternal and child behavior were described by trained observers with the Maternal Behavior for Preschoolers Q-Set (MBPQS; Posada, Kaloustian, Richmond, & Moreno, 2007) and the Attachment Q-Set (AQS; Waters, 1995). Social competence was assessed with the Spanish version of the Social and Behavioral Competence scale (SBCS; Dumas, Martínez, LaFreniere, 1998); mothers completed this questionnaire. Preliminary results indicate that sensitivity and security are significantly associated ($r = .63, p < .01$); both sensitivity and security were found to be significantly related to the aggression scale of the SCBS ($r = .38, p < .05$ and $r = .36, p < .05$, respectively); no significant associations were found for the competence and withdrawal scales.

In an ongoing study about the effects of war and displacement on attachment relationships, Olga Carbonell and Sandra Plata in Colombia are examining the effects of exposure to armed conflict and forced displacement on caregivers' sensitivity, children's organization of attachment behavior, parents' childrearing practices, and parents' beliefs

and attitudes towards their caregiving role with children from 2 to 5 years of age. Currently in the phase of data collection, this study entails observation of 10 dyads, and mothers have been interviewed at their homes. Three assessment waves are included. Each assessment consists of two 2-hour home visits to gather information on both parental sensitivity with the MBQS (Pederson & Moran, 1995) and MBPQS (Posada et al., 2007) and child secure base behavior with the AQS, (Waters, 1995), as well as a semi-structured interview about parental perceptions of their childrearing practices, beliefs, and attitudes towards their role as caregivers. The interview also inquires about their perceptions of the psychological harm and potential emotional consequences to their children from trauma caused by armed conflict and displacement. Initial coding of the interviews revealed that, in addition to experiencing armed conflict and displacement, 8 out of 10 interviewed mothers reported being maltreated during childhood and stated that they do not wish to emulate this behavior with their children. They reported using discipline strategies that include reasoning, restriction of privileges, ignoring the child, time-out, scolding, threats to hit, and threats to tell the child's father. Yet 7 out of 10 mothers reported that they use physical punishment as a last resort when other practices have failed; they also recounted experiencing ambivalent feelings when punishing their children.

Children's attachment representations

Andrés Fresno is examining attachment narrative representations in maltreated children in Chile. Using a sample of 99 (51 maltreated, 48 non-maltreated) 3-7 year-olds from low socioeconomic status, Fresno and his team are contrasting the narratives that maltreated children produce when presented with the Attachment Story Completion Task (ASCT; Bretherton, Ridgeway, & Cassidy, 1990) with those stories produced by non-maltreated children. The stories are analyzed using the ASCT Q-Sort scoring system (Miljkovitch, Pierrehumbert, Bretherton, & Halfon, 2004). Also, researchers are interested in testing whether attachment (in)security varies as a function of both type and severity of maltreatment. Preliminary findings show that maltreated children scored significantly higher on the hyperactivity, $F(1,94) = 12,76, p < .001$, and disorganized dimensions of attachment, $F(1,94) = 21,51, p < .001$, obtained by the ASCT Q-Sort in comparison with non-maltreated children (Fresno & Spencer, in preparation).

Sandra Plata, Olga Carbonell, and Germán Posada have gathered data to investigate the associations between the structure of attachment-related narratives and secure based behavior in a sample of 83 3.5 year-old Colombian preschoolers. Children were observed both at home (2.5 hours) and at a playground (two 1.5-hour visits), and their behavior was described with the AQS (Waters, 1995). Children's narratives were gathered with the ASCT (Bretherton et al., 1990). Analyses indicated that children with higher scores when using mother as a secure base (i.e., security) during interactions, as described by trained observers, produced narratives organized (i.e., scripted) in ways that represent/illustrate the secure base phenomenon, as rated independently ($r = .43, p < .01$; Plata, 2012). Further, regression analyses controlling for demographic variables indicated that maternal sensitivity, assessed with the MBPQS (Posada

et al., 2007), significantly accounts for security and scriptedness variance ($\beta = .44, p < .05$ and $\beta = .28, p < .05$, respectively).

Ethnic differences in childcare and attachment

Rodrigo Cárcamo in Chile is finishing a study on the effects of daycare on the quality of infant-mother attachment (4-10 months of age) from two low-income populations: Chilean Indian (Mapuches) and Non-Indigenous Chilean mestizos. Employing a sample of 110 families (41 Mapuches, 69 Non-Indigenous), Cárcamo and his team are gathering information to assess the quality of the home environment (HOME; Caldwell & Bradley, 2003), maternal behavior (MBQS version 3.1 Pederson, Moran, & Bento, 1999), and attachment during stress (ADS; Massie & Campbell, 1983) in two home visits before attending daycare, and two visits after infants have spent 8 months in daycare. At daycare centers, researchers assess caregivers' sensitivity (de Kruif et al., 2007) and the quality of the daycare center (Harms, Cryer, & Clifford, 2003). Cárcamo expects to find an increase in the risk of developing insecure child-mother attachment relationships among children who spend more hours in daycare centers with lower quality and with less sensitive caregivers. In addition, they are exploring whether ethnic differences in responsiveness and involvement exist between the groups.

Conclusions

Bowlby (1982) and Ainsworth (1969) proposed that attachment relationships are species characteristic in humans. They also emphasized that behavior operates within a specific environment. Thus, although attachment relationships are hypothesized as characteristic of all infants regularly looked after by a caregiver, they are also hypothesized to be culturally sensitive. In Latin America many different cultures present researchers with an opportunity to investigate specific adaptations to those diverse societies when studying child-mother attachment relationships.

Early attachment research in this region is slowly, but surely, increasing in diversity and productivity. Progress, however, is still insufficient. The sample of projects examined illustrates its potential to address central issues in attachment theory and research, e.g. the impact of specific experiences such as war, displacement, maltreatment, and poverty in a particular cultural context on the development of child-mother relationships. This is important because, although there is ample evidence on the effects of some adverse experiences (i.e., maltreatment) on attachment in the United States and Europe, little is known about how these processes develop in Latin America and whether they lead to similar outcomes.

Thus, Herreros's preliminary finding that institutionalized Chilean children display significantly higher proportions of secure attachment and higher ratings of attachment formation in comparison with European samples may suggest potential protective processes associated with the quality of institutional care in Santiago, or with Chilean cultural capital. In order to elucidate this type of findings that suggest significant national differences on

attachment, researchers in the region should directly assess cultural processes and examine how they affect, are affected by, and/or interact with development of attachment in early childhood. It has been suggested that in order to advance our knowledge about the contribution of culture in adaptation and maladaptation, it is vital to assess cultural processes directly and developmentally, instead of inferring them based on nationality or ethnicity and approaching them as fixed categories (Causadias, in press).

While several projects are currently ongoing in Chile, Colombia, and Peru, we were unsuccessful in obtaining information about research in other countries, despite our efforts. In addition to limitations concerned with communication, this might reflect difficulties faced by researchers in a region where countries are likely to differ in their emphases on investment in academic institutions and funding agencies. It is relevant to note that most of the studies reviewed are or were conducted by researchers who received their graduate training in the United States or Europe. This highlights the need to prioritize the training of researchers, if we are to further promote empirical research in the Latin American region. This seems crucial to support and encourage new generations of attachment scholars. A related issue is the language in which most scientific research is published. The fact that English proficiency among Latin American researchers is somewhat limited may constrain their ability to develop and participate in international partnerships, use the scientific literature, pursue training in English-speaking countries, and/or publish their work in English-based journals.

In sum, cross-national studies on early attachment relationships in Latin America have the potential to contribute to the expansion and elaboration of theory and research. The sample of projects presented reflects a growth in interest and productivity in the region, even if slow. Although not the only strategy, the creation of an attachment research network can be helpful in this endeavor. Improvements in the quality of undergraduate and graduate training are fundamental to accomplish these goals.

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Processes Evaluation of Naturalistic Observation and Unintentional Injury. Preventive Intervention in Early Infancy

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The Local Government Diagnostic of Childhood and Adolescence of Bogotá-Colombia (Secretaria Distrital de Integración Social, SDIS, 2012) states that domestic accidents are the third leading cause of violent death in children and adolescents aged 0-17 years in the capital. Between 2002 and 2011, the population most affected by such fatalities were young children. Several studies have shown that children who live in chronic poverty are more prone to accidents and that when an accident occurs, it comes at an economic cost to the family, either with the loss of important human capital, or the cost of emergency medical care and ongoing treatment, which, in turn, both cause and perpetuate poverty (Maurice, Lavoie, Chapdelaine, Bélanger Bonneau, & Ellison, 1997; Peden et al., 2008).

It is known that the patterns of damage suffered by young children arising from domestic accidents is recurring, and that control efforts which have been found to be effective are those based on the results of research. Intervention in this area requires consistent and coordinated action, beyond the specific field of health, in a multisectorial process including civil, private and government sectors (Paes & Gaspar, 2005; Peden et al., 2008). Analyzing the experiences of intervention to address this problem, from an objective point of view, is consistently recommended to governments around the world (Khandker, Koolwal, & Samad, 2010, WHO, 2010).

Ingram et al. (2012) conducted a systematic review of interventions for the prevention of accidents. In 57 articles analyzed, seven facilitating and limiting factors were identified. Among the facilitating factors found to relate to the approach used in the current research were: message targeting, adopting small changes, the characteristics of those participating in the intervention (who performs it), access to equipment, behavioral change, and incentives.

Some limitations observed were: complex interventions, cultural barriers, socioeconomic barriers, physical and behavioral barriers, and limitations of people who performed the intervention.

In the majority of countries where risk assessments of domestic accidents are conducted, self-reporting questionnaire forms are used (Hatfield et al., 2006; Patel, Devalia, Kendrick, & Groom, 2008; Robertson, Rivara, Ebel, Lymp, & Christakis, 2005; Yorkston, Turner, Schluter, & McClure, 2005). This technique is widely implemented as a research method because it allows for data to be obtained and processed quickly and efficiently (Anguita, Labrador, & Campos, 2003; Robson, 1993). However, research conducted with data collected through surveys may have biases arising from errors made during the design of the questionnaire or during its application, as well as biases introduced by the interviewer or attributed to the interviewee (Anguita et al., 2003). In other countries, such as Cuba, techniques like structured interviews and naturalistic observations have been used to evaluate the risk and the quality of the development environment for children between zero and five years of age.

There are two general forms of intervention for the prevention of domestic accidents suffered by children under six years of age. One form is passive intervention, related to prevention strategies derived from fulfillment of lawful duty, which establishes rules to prevent household accidents (Peden et al., 2008). The second form is known as active intervention and assumes that the prevention of childhood injuries involves action on the part of parents and caregivers. Under this type of intervention, it is suggested that those responsible for the care of children should anticipate, act, and take responsibility for the safety of their children in daily life. For this, we must take into account



three dimensions: quality of childcare, environmental care in child development, and the physical and emotional closeness between the caregiver and the child that ensures constant monitoring (Peden et al., 2008).

Within the model of active intervention, and in response to the situation of domestic accidents suffered by children in early childhood in Bogotá, the Safety Environments Module (SEM) intervention was designed (Ortiz, 2009) as part of the public health program in the city. This program seeks to make the family environment more positive and stimulating for children. Intervention in the family environment is a process of formation aimed at pregnant women and adults responsible for the care of children between zero and five years old who live in Bogotá, seeking to strengthen family activities that promote the generation of environmental improvements which support adequate child development (SDIS, 2011).

The present research was developed in cooperation with the local government of the city of Bogotá, by the Center for Psychological Studies CEP-Rua, Federal University of Rio Grande do Sul in Brazil, and the Development, Affectivity and Cognition Research Group (DACRG) of Pontificia Universidad Javeriana in Bogotá, Colombia. The aim of the study was to evaluate the process of intervention and data collection through naturalistic techniques. The SEM intervention process (Ortiz, 2009) was evaluated using a pre-experimental quantitative and qualitative methodology (Hernández, Fernández & Baptista, 2010), with a post-intervention assessment. Within an ecological theory, naturalistic observations are crucial for the study of early experiences (Tudge & Hogan, 2005). The study of caregiving interactions during early childhood through the use of naturalistic observation techniques has been shown to be an optimal means of charting universal emotional development, and its particularities (Posada, Carbonell, Alzate, & Plata, 2004).

Method

Participants

Sixteen caregivers between 23 and 55 years of age ($M = 33.9$, $SD = 8.7$) living in vulnerable sectors of Bogotá with children between zero and five years old, participated in the SEM intervention. Caregivers were visited after the intervention by three observers (from a group of 21 trained psychologists who worked executing public interventions for at-risk families in the city). They were instructed to conduct naturalistic observations using the instruments selected. Another five technicians were trained in the SEM intervention for development as described in the protocol.

The caregivers were 14 women (87.5%) and 2 men (12.5%). Twelve were mothers (75%), two fathers (12.5%) and two grandmothers (12.5%). On average, participants had 8.1 years of education (minimum = 2 years, maximum = 16 years) ($SD = 4.3$). Six participants were single (37.5%), two married (12.5%) and eight cohabiting with a partner (50%). The caregiver participants were responsible for the daily care of six girls (37.5%) and 10 boys (62.5%). The average age of the children was 41.7 months ($SD = 10.6$) (minimum = 24 months; maximum = 60 months). Two of the children were first-born (12.5%), 10 were the second birth within their families (62.5%), and four were born third (25%).

Instruments

Survey of multiple indicator cluster 3 (MICS3). This survey was based on recent international agreements regarding early childhood protection (UNICEF, 2006). The questions were drawn from the optional modules related to support for learning, father's support for learning, non-adult care, durability of housing, housing stability and whether or not the home was located within a slum.

Maternal behavior Q-Sort – MBQS. The instrument was adapted for this study by replacing the term 'mother' with the term 'caregiver'. This term is consistent with results reported by Bowlby which referenced the caregiver-figure of attachment as any person representing the role of principal caregiver or primary caregiver. (Bowlby, 1989). The instrument describes the behavior of the caregiver, reporting on the quality and frequency of the observed behaviors during interaction between the caregiver and child in the natural context, lasting for a period of at least two hours.

Register for the risk of accidents in the home. This is a checklist originally described by Gorrita and Gorrita (2008), in this study, three risky situations reported as common in Bogotá were added to the original nineteen items, as follows: a) sharp corners of furniture at the child's height, b) free access to unprotected or poorly secured windows; and c) overcrowding, i.e. homes that sleep more than three people in a room. This instrument assesses the conditions of risk observed through a visit at home.

Questionnaire on the accident antecedents in the domestic context. This questionnaire was also developed by Gorrita and Gorrita (2008). Each item is a closed question about the occurrence, in the home, of one of nine accidents (six original and three new), that has been suffered by a child family member between zero and five years old.

General evaluation of the safety environments module (SEM). This is a self-evaluation that each participant fills out after each SEM intervention session. Participants evaluate each of the 11 statements related to the implementation, content and logistics, according to their level of agreement or disagreement in a scale of five levels. The form also asks them to write down strengths and weakness of the intervention in a descriptive way.

Procedures

The local governmental entity responsible for the implementation of social policy in the city of Bogotá collaborated in the development of this research, facilitating the participation of the public workers.

Training. Participating psychologists partook in activities enabling them to develop or improve skills necessary to perform, characterize and evaluate systematic observations on the quality of early care interactions and the child development environment using the instruments selected. Based on their performance during the training, and from inter-observer reliability observations obtained therein, a group of observers were selected to participate in the research project. Five technicians performed the SEM intervention

Table 1. Resource summary, contents and short-term results of the sem intervention.

Resources	Activities	Short-term results
-A group of participants of lower socioeconomic status who are caregivers of children aged from birth to five years.	Session 1—Warm and affectionate meeting. Modeling the needs of children; differences between the ways of expressing those needs; identifying conflicts between caregivers and the needs of children.	Recognitions of child's signals and needs. -Perception of the child as an active subject and different from the adult.
-Trainers: technicians trained in Module Safety Environments (ratio not exceeding 1 trainer for 10 participants).	Session 2—I grow-up safe. In a matrix, according to four basic areas of development, including: -Identify the child's key skills.	-Recognition of the child's developmental processes, both in scope and limitations, and consistent environmental adjustment.
-Logistical coordination of activities.	-Identify the accident risks for children according to age. -Associated preventive measures.	
	Session 3—My home is a safe place. Making a plan of the participants' house where they identify safe areas and dangerous areas for young children.	-Remain alert to risks in the environment and eliminate or reduce those risks.
	Session 4—My city is a safe place. Analysis (accidents, causes, consequences and prevention of five cases that exemplify different types of common accidents in the city.)	-Protection of the child's development.

after a 16-hour training course that followed the intervention protocol.

Initial contact with the population. Through an initial contact protocol, the study objectives, nature of their possible participation, and the study procedure were explained to each potential participant. This protocol allowed for the information to be presented uniformly, and for the selection of caregivers with adequate availability and good health as participants.

Performing the safety environments module intervention. The Safety Environments Module (SEM) intervention seeks to promote behavioral changes in primary caregivers through educational processes, with the aim of improving safety conditions for children in the home. The intervention encourages caregivers to take action and adjust their behavior and the physical environment to improve safety and the fulfillment of the child's needs. A summary of the resources, the four sessions and the general content of the SEM intervention, and the variables that this intervention seeks to impact in the short term, are shown in Table 1.

Making home visits. For the evaluation of the process of naturalistic observation of early development environments, information gathered from 16 visits to the homes of participants was used. In carrying out the home visits, it was taken into account that: 1. The schedule should be set for times in which the caregiver participant has at least two hours to welcome visitors; 2. The visits should be scheduled at a time when the child (0 to 5 years) will be present; 3. The visit should take place in a location where the child spends most of its time with the participating caregiver; 4. The

timing should allow observation of routine of care for the child participant; 5. The visits are to be conducted by three trained observers with the necessary materials to make the observation; 6. Taking into account the family's availability times, observers should be assigned an equal rotation in observation visits; 7. Investigators should follow research ethics and information management to ensure integrity and security of the data.

A team of three trained observers was assigned to perform each visit. Two observers made the visit to describe the caregiver-child interaction using the MBQS, while the third observer assessed the risk of domestic accidents, the antecedents of domestic accidents, and the selected indicators of MICS3.

Results of the assessment processes of naturalistic observation and the safety environments module intervention: quality of the information obtained through naturalistic observation

Inter-observer reliability was calculated by comparing the individual descriptions of each observer on the caregiver's behavior described by the MBQS, processing in The Attachment Q-Set: Hypertext Advisor (Waters, Posada & Vaughn, 1994). Scores on inter-observer reliability between 0.68 and 0.97 were obtained (M = 0.90, SD = 0.06). These scores were compared with scores of inter-observer reliability from two research projects conducted by the DACRG developed with similar populations.

The first comparisons were made with data from the study of 10 families displaced by war living in Bogotá



Table 2. Main strengths and weakness in the process of collecting the information as reported by the observer team.

<i>Logistical Aspects</i>
<p>Strengths:</p> <ul style="list-style-type: none"> - Having a register form in each instrument with qualitative observations made by observers, allowed them to record events that were not anticipated in the listed items. -Good interpersonal relationships among observers. -Observers explained to families the nature of the study and their participation when they did not understand it. -The families were given identification observers' cards. -The experience qualified the technicians to engage in new areas of work. <p>Limitations:</p> <ul style="list-style-type: none"> -Families were notified of visiting assignments only the evening prior. -Families distrusted groups of observers composed of three men. -Two or three observers were assigned to the same family in some visits, for pre-test and post-test. -Some families were not well informed about the study and had misconceptions. -After leaving the family home, observers found no suitable places to fill out forms. -Observers had unanticipated expenses and travel time. -Some observers disliked contractual changes to their working conditions. -Imbalance in the allocation of visits within the group of observers.
<i>Methodological Aspects</i>
<p>Strengths:</p> <ul style="list-style-type: none"> -Home visits let observers become acquainted with the family's living conditions. -The questionnaires were adjusted to the reality of the city and families. -Self-confidence in having the necessary skills to make observations in the environment and use the instruments provided. -Decrease in the time it took to fill out the forms after each visit. -Families were waiting for observers, keeping appointments, and allowing observers to enter their everyday dynamic. <p>Limitations:</p> <ul style="list-style-type: none"> -Some items of the questionnaire on quality of the developmental environment were not adjusted to the reality of the city. -Some families suffered extreme necessity or emergency, affecting observation. -Some items in the MBQS were difficult to classify. -Some families were not expecting the observers, and they were tense and suspicious.

(Carbonell, Plata, & Bermudez, 2012), which found that inter-observer reliability scores were between 0.66 and 0.91 ($M = 0.81$, $SD = 0.08$). Comparing the above scores with those obtained in the current study, it was observed that the average inter-observer reliability of the observations made here was significantly higher than that of the observations made in the study of families displaced by war in Bogotá ($t(34) = 3.77$, $p < 0.05$).

The same procedure yielded similar results when comparing the scores obtained in this study with those obtained in 82 home visits made in a study by Posada et al. (1999), conducted in the city of Bogotá with a sample in similar socioeconomic conditions ($M = 0.86$, $SD = 0.08$) ($t(106) = 3.31$, $p < 0.05$). These results indicate that scores of inter-observer correlation obtained in the 16 naturalistic observations made in this study, using MBQS, was higher than those reported in two studies in Bogotá with similar samples.

Continuing with the analysis of the quality of the collected data, the correlation between two scores across the instruments was calculated to register overcrowding at home (more than three people sleeping in one of the rooms of the visited household). The MICS3 has an indicator that evaluates this variable and the Register for the risk of accidents in the home, and also poses questions about it. Pearson's correlation index was calculated, and the results indicated that there was a high and significant correlation between the scores of both items ($n = 16$, $r = 0.73$, p

< 0.01). This means that the two items are highly related, that is, when overcrowding was reported in one of the items, the other indicator also tended to appear in a directly related way.

Strengths and limitations of the information gathering process reported by observers

Once the process of data collection was complete, inquiries were made regarding each observer team's strengths and limitations in the process of gathering information. Questions were posed regarding logistics (collection, service of process and delivery of instruments, location of the homes of the families visited, communication within the team) and methodological aspects of the naturalistic observation process (applicability of the instruments in the context of the families visited, understanding of the items). The main contributions of the observer group are presented in Table 2.

Evaluation of the safety environments module intervention process

Information obtained during the implementation of the Safety Environments (SEM) intervention was analyzed to determine the participants' satisfaction, as well as the strengths and limitations of this process. From the participants' self-evaluation obtained at the end of each session



Top: Some caregivers who participated in the intervention. Bottom: One session of work with the technicians, in a practice session about the classification of the Maternal Behavior Q-Sort.

of the intervention, a high degree of satisfaction ($M = 4.5$ points in all 11 questions in a scale of five levels, with five as a maximum) was reported with aspects such as the content of the sessions, the usefulness of the activities, the materials used, and the setting of the meeting. They reported that the technicians who performed the evaluation demonstrated an expertise on the issues; they stated that having a methodological group experience helped in their learning process; and they praised investigators' punctuality on the intervention sessions schedule; and they concluded that the intervention made them interested in attending other similarly-themed meetings for parents or caregivers of young children.

Qualitative results on the implementation of the intervention

At the end of each session of intervention, participants were asked to write down the session's strengths and weakness in a descriptive way. The importance of the topics discussed was highlighted by some of the participating

caregivers. They affirmed that it is important for them to look more closely at the environments in which their children are being raised. Participants said: "we learned more ways of caring for the children according to their age and possible interventions to keep in mind"; "I remembered that each stage of the child's life is unique, and there are new ways of caring for them. [I learned about] the dangers children are exposed to at different ages." They even reported learning of things beyond just preventing accidents in the home: "We learned things, understood much, it was the best workshop, we saw things we did not know about (...) things we sometimes overlook but that are elementary in the day-to-day lives of our children"; "a good experience, thanks for teaching us to be better parents"; "we learned very much, I feel good"; "all of the lessons were positive"; "it was a great learning experience to put into practice from now on."

Other strengths reported by the participants refer to the group dynamic in the activities: "The experience of everyone serves to prevent accidents"; "To share with others and to learn from them is important." The participants were encouraged to express their opinions and listen to others,



Ceremony for certification of government workers capacitated in naturalistic observation techniques. Behind the table, from left to right: from Colombia, Olga Alicia Carbonell and Jenny A. Ortiz; from Chile, Felipe Lecannelier; from Colombia, Sonia Carrillo and the policy maker for the early infancy in Bogotá 2010-2012 Maribel Monroy Delgado.

highlighting some positive elements from the encounter: "To talk with other parents about accidents that can happen to our kids." The participants reported learning about specific topics from each session, for example, in the session where zones of risk for accidents were studied in the home, one participant noted as a strength of the visit: "The plan showing the risks and potential risks in our home was useful."

Among the limitations, there were reports about the activities and the educational level of some participants: "The activities encourage reflection, but some tasks require reading skill, and some participants do not how to read." They also reported that the area where some of the sessions took place wasn't entirely adequate, and some suggested the caregivers be given a snack: "It is very cold"; "They did not offer us refreshments at any of the meetings," and "They could offer coffee or something to eat."

From each of the intervention sessions, an analysis of the strengths, limitations and areas for improvement was made on the SEM intervention protocol. Among the most significant adjustments were: the inclusion of activities to create a friendly climate before the main activities of the intervention; identification and description within the intervention protocol of the main activities and the required tasks to be performed at home; some images used during the first session were removed for being ambiguous about the objectives of the intervention; and in the developmental matrix used in session two (about children's development level, linked accidents likely to occur at home) the areas of social and emotional development were combined to match the participants' analysis.

Discussion

The processes assessment results reflect the fact that caregivers were satisfied with the activities developed. They reported

feeling satisfied with the topics, activities, technicians, and the learning achieved by the group, while also recognizing the importance of conducting such interventions. These process assessment results support the continuity of the intervention and strengthen future studies of impact assessment, as reported in Ingram et al. (2012). Participants said that what they learned in the meetings could be applied to their own parenting experiences, especially to prevent and protect against hazards and accident risks to their children. That shows that the SEM intervention, performed according to the protocol described, has a desirable response from participants, and satisfies similar objectives in early development interventions to those suggested by Bronfenbrenner (1974, 1993).

In regards to active involvement of caregivers in the intervention, the results were also consistent with the approach of Peden et al. (2008), which suggests that an active type of preventive intervention requiring action on the part of the caregiver inspires caregivers to anticipate, act and be accountable for the day-to-day needs of their children.

The data obtained pertaining to inter-observer reliability in MBQS, which assesses caregiver sensitivity, were significantly higher when compared with data from inter-observer reliability of previous studies in Bogotá with socio-demographic similarities. These results reflect the possibility that the scores on caregiver sensitivity may be biased by observers. This potential bias may stem from the fact that observers are technicians associated with the agency responsible for intervention, and despite having been trained rigorously, they do not necessarily have the profile required of researchers to work with an instrument like the MBQS, that requires a micro-analytical perspective on the behaviors of caregivers during interaction with children. Nevertheless, it is possible to conclude that technicians involved in the public sector of the city have very good skills to systematically collect information using tools

based on naturalistic observation to identify the risks of accidents, and to investigate interaction and development indicators in care settings.

Further studies are required to explore other methodological strategies in the context of process evaluation of public intervention, developed by the workers responsible for the intervention. In pursuing one of the central aspects of emotional security and survival of children, the quality of parental care (Bornstein & Putnick, 2012; Schneider & Ramirez, 2008), new evaluation interventions are being developed by investigators from the present study. It is important to note that this study considers State-University co-responsibility, or intervention-investigation, as a great opportunity to improve the city with programs for early childhood intervention based on scientific knowledge and evidence. As noted by Davidson, Rosenberg and Moore (2003), scientific knowledge and social intervention must create meeting points that can protect young children and promote their healthy development effectively. It is encouraging to know that the results based on antecedents and risk of accidents at home, safety environments, and quality of care in early infancy, before and after the Safety Environments Module intervention, will be described in a future report about the impact evaluation of this intervention.

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Comments on the five Feature Articles

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Thirty-five years after Mary Ainsworth's "Patterns of attachment" was first published in 1978 (Ainsworth, Blehar, Waters & Wall, 1978), this bulletin shows how attachment research has developed and spread all over the world. The five papers in this bulletin address attachment research projects in Latin America, Romania, Hungary, Germany and Brazil. Most of these projects aim to understand children in situations where their attachment development is highly jeopardized. At a young age children addressed in these papers are placed in foster care or orphanages, and may be exposed to armed conflict, unintentional injury or maltreatment. Only one paper (Toth et al.) addresses a methodological question assessing children's attachment representation and understanding gender differences. This shows how attachment research has developed from assessing attachment patterns towards enhancing the development of secure attachment in high risk developmental contexts. Despite Bowlby's early focus on consequences of separation and loss, it is only recently that researchers have begun to observe and follow children separated from their primary caregivers and to develop attachment-based interventions for young children. This was exactly what John Bowlby asked for, when he expressed the need for research on clinical and therapeutic intervention based on attachment theory (Bowlby 1988).

In order to analyze and comment on the papers in this Bulletin, it is useful to look at a late work of John Bowlby, the paper "Developmental Psychiatry Comes of Age" (1988) in which he claimed to think of vulnerability and resiliency in terms of developmental pathways. He draws a helpful and far-reaching picture of individual pathways, which are "...being determined by the interaction of the personality as it has so far developed and the environment in which it then finds itself" (p. 6). He shows the importance of considering both early (adverse) life-events and contemporary influences. This framework helps us to understand and interpret longitudinal findings of continuity, and also of change in attachment behavior and/or representation, especially for children with high-risk histories. Besides these theoretical statements Bowlby asks concretely for the development of attachment-based interventions and even more for prevention programs, which aim to lead these pathways in the direction of secure and healthy development. The papers discussed here demonstrate how Bowlby's ideas have been realized in quite different areas of attachment research so far, but they also raise important methodological and theoretical questions and challenges to be addressed in future research.

Munoz and colleagues report on the process evaluation of an intervention program that seeks to transform the

family environment into one that is positive and stimulating for children. The Safety Environments Module (SEM) intervention was designed as a part of the public health program in Bogotá, Colombia. It aims at promoting behavioral changes in primary caregivers through educational processes, with the purpose of improving safety conditions for children in the home. The central aim of the study was to evaluate the process of intervention and data collection through the use of naturalistic observation techniques. Sixteen caregivers of children aged 1 to 5 in vulnerable sectors of Bogotá were observed in their home environment by trained psychologists using the Maternal Behavior Q-Sort (MBQS), along with a register for the risk of accidents in the home, and the SEM intervention performed by trained technicians. After each session of intervention, participants were asked to write down strengths and weaknesses of the sessions via a questionnaire. First results show that caregivers displayed high engagement in the intervention and reported learning about specific risk for accidents. The authors of this paper conclude that families in severe poverty need an active type of preventive intervention to provide security for their children. From an attachment point of view, the promotion of safe conditions at home may be a first and very basic intervention that may not only prevent domestic accidents but may also set the stage for the development of secure attachment relationships. If parents learn to look more closely at the dangers their children are exposed to at different ages and how to protect them, they eventually may also become more sensitive to their children's emotional needs. This notion is supported by the feedback of some of the participating caregivers who reported that an important result of the intervention program was that they have learned things that go far beyond just protecting their children from accidents. Another important aim of this intervention project was to examine the quality of attachment-relevant information obtained by observers during the home visits. With regard to the MBQS, which assesses caregiver sensitivity, scores on inter-observers ranged between 0.68 and 0.97 ($M=0.90$, $SD=0.06$) which is higher than the scores reported in previous studies in Bogota with socio-demographic similarities ($M=.81-.86$). The authors assume that this may be due to the fact that in these studies observations were made by technicians associated with the agency responsible for intervention, who despite having been trained intensively, do not necessarily have the profile to work with a demanding instrument like the MBQS. In our view, however, these results show that attachment measures like the MBQS can be successfully applied by trained technicians in preventive intervention programs, thus making it possible to evaluate



such programs, in particular with regard to attachment-related outcomes (e.g. changes in the caregivers' sensitivity). Furthermore, the use of attachment-related observation measures during home visits may improve the quality of the intervention by sensitizing technicians to the significance of attachment needs.

Two papers in this bulletin deal with attachment formation and development in foster children. **Bovenschen** and **Spangler** give an overview of recent findings on attachment in foster children. Although there is a growing body of research on how children form new attachments in foster care, longitudinal studies, especially on different aspects of the caregiving environment as well as child characteristics, are scarce. Furthermore, the authors report first findings of two German samples of children in foster care. Based on their results, they accentuate the need to consider different levels of attachment organization concurrently in order to gain a more complete understanding of attachment formation and development and its impact on psychosocial development. Foster parents' sensitivity and parenting stress as well as parenting style predicted positive changes in attachment behavior of the children, but were revealed to be largely unrelated to the general attachment representation. This suggests that dyadic attachment behavior seems to be mainly influenced by the quality of caregiving in the new family whereas the general attachment representation is more strongly determined by early adversity in the biological family and number of placement disruptions.

Interestingly, in foster children attachment behavior and representation were revealed to be largely independent from each other although both were related to emotional and behavioral problems. Results like these demonstrate that the understanding of attachment processes will remain incomplete when not taking into account the interplay between different levels of internal working models at different time points. Longitudinal studies are needed to determine how attachment behavior and attachment representation in foster children develop over the course of time, and how this developmental process is influenced by earlier and current risk and protective factors. Furthermore, age at placement into foster care seems to be an important variable to be considered in future research.

Zeanah, Fox and **Nelson** suggest that foster care placement can be an effective intervention for abandoned or orphaned children who are being raised in institutions. They discuss the results of the Bucharest Early Intervention Project (BEIP) which compares placement in foster care to prolonged institutional care in a randomized controlled trial. The intervention in this project was a high-quality foster care network that was created as part of the project. Through 54 months of age, when the formal intervention ended and the foster care network was turned over to local governments in Bucharest, the stability of placements was 87% and objective measures of quality caregiving were significantly higher for children in foster care compared to children in institutional or other settings. At 42 months of age children in foster care were more likely to be securely attached and they demonstrated fewer signs of attachment disorders than did institutionalized children, especially when they were placed in foster care before 24 months of age. Furthermore, placement in foster care significantly reduced signs of anxiety and depression in 54-month-old children. In line with Bowlby's notion of developmental

pathways, subsequent analysis indicated that this effect was mediated by having formed secure attachments to foster parents by the age of 42 months. This study demonstrates that training and supporting foster families as well as actively encouraging them to commit and attach to the children in their care can be an effective intervention to prevent serious attachment disturbances in orphaned or abandoned children. This suggests that even severely deprived young children have the capacity to form and sustain secure attachment relationships when placed into high quality caregiving environments. Interventions like this should serve as a guide for the development, implementation and evaluation of attachment based intervention programs for children at risk. In this regard, more longitudinal research is clearly needed to gain a more complete understanding of the mechanisms of attachment development in different subgroups of foster children.

Moreover, **Zeanah et al.** focus on important methodological challenges when examining attachment in high risk samples. They propose that the conventional classification of the Strange Situation Procedure (SSP) may be of limited use in the study of institutionalized children because it is not always clear whether or not they have completely formed attachment to their caregivers. In order to overcome this problem they developed an additional scale that assesses the degree of attachment formation. While all community children were rated as having a fully developed attachment to their mother, only 3% of the institutionalized children were rated as having fully formed attachments (classified conventionally, 74% of the community children and 19% of the institutionalized children had secure attachments). **Zeanah et al.** state: "This suggested to us that the traditional classification scheme that identified institutionalized children as secure in their attachments means something different from secure attachments in home-reared children." From our point of view the distinction between the degree of formation of attachment and the quality of attachment is crucial one when studying children that may have severe difficulties in forming attachments (e.g. institutionalized children, children with severe attachment disorders, traumatized children, or children that have suffered the loss of a primary attachment figure).

Toth, Lakatos and **Gervai** investigate, in contrast to all other papers in this Bulletin, the gender differences in attachment story stem narratives in 6-year-old Hungarian children. The three authors explain that Story Stem Completion Methods are widely used to measure childhood attachment, but the findings suggest that children's doll-play enactments may not always accurately reflect the true qualities of the relationships experienced by the children with their parents. Higher scores of girls on affiliate dimensions may shift their classifications towards secure and ambivalent categories, while the lack of interaction and enacted aggression, being more common in boys, could be shifting their classifications towards avoidance and/or disorganization. As **Toth et al.** argue, these gender differences in story stem measures may simply reflect a "measurement error" which seems plausible, given the fact that widely used and well validated attachment measures like the Strange Situation or the Adult Attachment Interview in general do not find any gender differences regarding attachment classification. Despite the fact that gender differences in attachment security at any age are not

expected in terms of the assumed universal and evolutionary based function of attachment, it is very interesting to look for alternative explanations: As the authors suggest, the differences might be the result of an overlap with other constructs (e.g. gender-specific emotion regulation or gender-specific conformity in social situations), elicited by the setting and/or the projective nature of the method. Future work should provide comprehensive analyses of discriminant validity with alternative measures on different levels in the targeted age group (e.g. one-hour separation for attachment behavior, Child Attachment Interview for attachment representations). It might also be necessary to take a closer and critical look at the validity of similar projective methods for different age groups (such as the AAP).

Another important aspect of the development and the “coming of age” of attachment theory and research is a cross-cultural view: Though the foundations of the theory suggest universal processes of attachment behavior and organization, as well as adaptation to different environments, all of which are supposed to emanate from in human nature, the vast majority of research still focuses on samples in first-world countries. The only way to distinguish universal human behavior from culture-dependent effects is to expand research to other parts of the world and compare attachment-related outcomes. **Causadias** and **Posada** give an overview over research projects currently in progress in Chile, Columbia and Peru. The projects investigate quality of care, attachment security and institutionalization in early childhood as well as the effects of war and displacement on attachment, pre-schoolers’ attachment narrative representations in the face of maltreatment, and ethnic differences in childcare and attachment. The authors point out that attachment research has surged in Latin America; even so, many challenges remain, especially concerning the cooperation between attachment researchers.

Three main conclusions can be derived from this overview of contemporary international attachment research. First, since the beginnings of attachment research (Ainsworth

et al. 1978) enough empirical evidence has been generated from longitudinal research to prove how important the development of secure attachment in early childhood is for further lifelong adaptation. Second, there is a steady increase in attachment-based intervention programs for children at risk, especially for children facing the loss or disruption of attachment to parental figures. Early attachment-based intervention has the largest impact on developmental pathways. Providing secure attachment to at least one person in the first years of life has proved to be one of the most important protective factors for both physical and psychological wellbeing. Attachment-based intervention later in the course of life is much less effective, at least when early attachments were disrupted (Bowlby, 1988). Third, although attachment research and intervention have spread in different countries and cultures, longitudinal attachment research still is needed (Becker-Stoll, Fremmer-Bombik, Wartner, Zimmermann, & Grossmann, 2008). We need empirical attachment research to address the unresolved questions concerning the interaction of attachment behavior and attachment representation at different developmental stages and to make sure that attachment-based intervention programs are effective and helpful – both for the children and for their attachment figures.

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Early Attachment Research: New and Recurring Themes

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The attachments forged in early childhood forecast an array of developmental outcomes. Together the impact and longevity of attachment have ensured a continued focus on research questions asking how attachments form, and what determines difficulties in the formation and maintenance of attachment. In this issue of the ISSBD, the contributing authors examine perennial themes within the field of attachment, and the advances to and within these themes in recent years.

In Toth, Lakatos and Gervai's article, of the evidence for and the meaning of sex difference in attachment are discussed. Moreover the methods by which researchers examine attachment, and the biases that may be produced as a result are examined. One question is whether gender differences are robust. It is also central to determine whether noted gender effects are an artefact of measurement bias, or a genuine phenomenon. This question becomes particularly relevant for the method of story stem, where general skills of language and symbolic representation are called upon in the telling of attachment-relevant stories.

The authors note that the non-attachment developmental skills required for the story paradigm may themselves be associated with attachment. While this may be the case, caution is then needed in assigning gender differences in the story paradigm to attachment gender differences. A future line of inquiry in this regard would be to contrast attachment focused and non-attachment focused storytelling skills.

The multitude of studies emerging from cross-national Latin American research is described by Causadias and Posada. They introduce attachment research from Peru, Chile, and Colombia on topics such as variations in day care, effects of deprivation, and the testing of universals in attachment theory.

In the Colombian studies, 7 of 10 mothers had experienced maltreatment as a child. Cumulative risk from compounded risk factors is relevant for this discussion, and should refocus our attention on interventions that account for the high rates of multiple risks in children displaced by conflict. In further studies, it would be beneficial to consider bilingual children and those from mixed cultural backgrounds. Throughout the studies described by Causadias and Posada, maternal sensitivity was demonstrated as a buffer, whilst maltreatment increased the incidence of disorganized attachment.

The extreme challenges faced by those children raised in Bucharest-based institutions are captured in the work of Zeanah, Fox and Nelson. The Early Intervention Project, a randomized controlled trial, compares the effects of fostering and institution-based childrearing on attachment security.

Bovenschen and Spangler examine child-centered variables (such as number of placements, age of placement, and

working models of relationship representations) which are central to the discussion of foster care and attachment.

Munoz, Blanco, Suarez, Plata, Silva and Koller outline an intervention that aims to bolster parental attunement and attachment status, leading to a reduction in domestic accidents. Children's emotional well-being is developed within a context where physical needs (including safety) are established. The intervention described by Munoz appears to train parents to recognize, and appropriately respond to, infant cues, and plan ahead for the provision of child safety in the home.

The commonality running across these articles is the examination of recurring themes relevant to attachment, including parental sensitivity (; M. S. Ainsworth, 1979; adversity's effect on attachment; Goldsmith & Alansky, 1987; Lyons-Ruth & Jacobvitz, 2008), and psychobiology within the formation and maintenance of attachment (Cowan, 1997; McElwain & Booth-LaForce, 2006). Zeanah, Fox and Nelson, and Bovenshen and Spangler note that the buffering effects offered up by appropriate caregiving, and the differential susceptibility partly resulting from children's characteristics, enable the discussion of disadvantage and attachment to move beyond the blunt and pessimistic classification of early disadvantage and poor attachment. Below is a discussion of recent work on these new, and recurring, themes.

Sensitivity

Attachment has long been viewed as a reciprocal process between caregiver and infant (Robson, 2006). That said, Ainsworth describes maternal behavior as capable of largely shaping infant behavior (M. S. Ainsworth, 1979). Sensitivity in parenting has been considered the cornerstone for later mother-infant attachment (Dunst & Kassow, 2008). Indeed, research continues to demonstrate the continuity of parental sensitivity, as well as its relation to later attachment (Behrens, Hart, & Parker, 2012; Behrens, Parker, & Haltigan, 2011; Bigelow et al., 2010). In recent years the processes of sensitive parenting have attracted renewed research interest. For example, mind-mindedness comprises language used by parents which explores the emotional experiences of cognitions of their children, during interactions. Laranjo, Bernier and Miljkovitch (2008) sought to demonstrate mind-mindedness at 12 to 15 months. More recently Meins et al. (2011) advocated a multidimensional approach. Within this approach mind-mindedness that was appropriate and included mental state, mental processes, level of emotional engagement, the manipulation of others' emotions, and speaking for the infants, were examined as qualities of mind-mindedness that determined

the predictive association between mind-mindedness and later parent-infant attachment. Sensitive parenting in response to infant distress has been shown to demonstrate particular power in predicting later attachment (Leerkes, 2011). The clinical implications of mind-mindedness is demonstrated in the findings of studies examining mind-mindedness in parents with depression (Pawlby et al., 2010).

Fathers

In a recent meta-analysis Lucassen et al. (2011) examined studies involving 1,355 father-infant dyads that looked at the sensitivity of fathers' parenting and attachment. Fathers' sensitivity combined with stimulating play predicted the security of later infant-father attachment. Moreover, levels of paternal sensitivity did not vary significantly over the years of research. Wolff and Ijzendoorn's (2006) meta-analysis found antecedents of sensitive parenting, such as mental health, parent-parent relationship quality, and family support, to be similar for mothers and fathers.

Attachment research has long contained the theme of fathers. That said, fathers' role in the formation of attachment has gained an increasing weight of interest for those studying early attachments. Within this theme of paternal roles in early attachment there are further areas of interest, including the specific predictive role of father-infant attachment for later well-being (Zhang, 2012); predictors of father-infant attachment; neurobiology and father-infant attachment; and the impact of paternal mental health on the family system (Sethna, Murray, & Ramchandani, 2012).

Research exploring fathers has diversified in the last few years to include an array of factors influencing father-infant attachment. Examples of recent research themes include the role of fathers' perceptions of their own importance in parenting and later attachment (Persson, Fridlund, Kvist, & Dykes, 2011); fathers' ability to adapt their behavior to be infant-directed (Rutherford & Przednowek, 2011); sensitivity within fathers' parenting to impact father-infant attachment in later development (Bögels & Perotti, 2011; Verissimo et al., 2011); and paternal mental health (J. H. Goodman, 2008; W. B. Goodman et al., 2011; Sethna et al., 2012). Whilst caregiver mental state was considered within the cross cultural work described by Causadias and Posada, the cultural variation in fathering and its relation to attachment remains under-explored. Similarly, when gender differences are discussed within the work of Toth, Lakatos and Gervai, it is the child's gender that is the primary focus.

Non-traditional families

The rise of process accounts in recent years, such as interactional models and dynamic systems theories, has in part aided the move to look further than the traditional family for a single factor in mother-infant dyads. Scientific advances in assisted reproduction have allowed a redefinition of the traditional family structure. Same-sex parenting couples, and single parents (from conception), are examples of family structures that have become increasingly common in western society (M. D. S. Ainsworth, 1979). Research into this rising proportion of families has repeatedly

demonstrated that it is family system processes, rather than the composition of a family, that determines the security of attachments formed.

IVF With recent advances in fertility treatment, recent research has considered fathers' and mothers' response to this non-traditional induction into parenthood, and its effect on attachment. Assertions that non-biological parents may demonstrate different levels of biological and behavioral attachment to their infant have not been supported in recent decades of research (Hjelmstedt & Collins, 2008). Assistive reproduction per se has not shown itself to predict stability of attachment. For example, fathers had comparable levels of attachment regardless of the conception being assisted or not (Hjelmstedt & Collins, 2008). Fathers where conception occurred through IVF were, however, more anxious, at 2 months postpartum. Supporting parents through the process of IVF, into the postpartum period, is therefore warranted.

Same-sex parenting. Changes in recent decades to the legal and cultural context have enabled lesbian as well as gay individuals to parent through adoption, as well as through assisted reproduction. Significantly, this has facilitated understanding of same-sex parent-infant attachment from infancy. In studies of the parenting and attachment in same-sex parenting families, it has been repeatedly shown that it is not the composition of the family that is predictive of outcome. Sensitivity and expressed warmth, seen as foundations for attachment, have been demonstrated in comparable degrees in same-sex parents (Golombok & Badger, 2010; Golombok, Tasker, & Murray, 2006).

Instead of structure or sexual orientation of parents, it is the processes that affect all parent-infant dyads that are implicated. Namely the mental health of parents; perceived support; parents' relationship quality; and the presence of adversity that are associated with risks for parenting and attachment (Goldberg & Smith, 2011; Tornello, Farr, & Patterson, 2011). Same-sex parents are more likely to face several of these measures of adversity. Firstly, the social climate towards same-sex relationships has been shown to affect the anxiety and depression scores of same-sex parents within the first year of adopting (Goldberg & Smith, 2011). When individuals held negative self-images about themselves, the effect of negative social climate was exacerbated for mental health. A similar result was found (Tornello et al., 2011) in recently considered predictors of parenting stress in gay adopting fathers. Social support, combined with a positive gay identity, predicted parenting stress in new gay fathers. In future issues, the focus on alternative family composition and processes would be a valuable contribution.

Adversity

Topical research examining adversity and attachment include those processes involved in parental mental health issues and infantile risk. In addition to attachment considered as an outcome measure of risk, attachment has also continued to be considered an ameliorating factor when predicting outcome through adversity. When considering the examples below of current research into adversity, the themes of process, goodness-of-fit, vulnerability and resilience continue to be central (Lamb, 2012).



Mental health. The study of fathers and attachment shows how mental health issues of parents that may directly and indirectly impact attachment. Postpartum paternal depression may be evident in 4-25% of first-time fathers (Madsen & Juhl, 2007). Depressed fathers interacting with their infants were shown to demonstrate a pattern of reduced speech concerning the infant's experiences; increased speech related to the father's experiences, and increased negativity. This profile has been described as demonstrating impaired resources available for providing emotional support to the infant and mother. Reiterating the system process at play, fathers with post-natal depression were more likely to have partners who also suffered postnatal depression. Rates and severity of paternal postnatal depression may be particularly acute in contexts where there has been difficulty in the birth of the infant, such as in preterm delivery. Maternal psychopathology has continued to demonstrate stable prevalence and negative outcomes on mother-infant interactions. Mental health issues of parents impact the ability of parents to be consistent, accessible and sensitive to their infants. To best understand and aid these families it is useful to employ family system accounts that concurrently examine the paternal, maternal, infant and contexts to promote child well-being (Lamb, 2012).

Infant health. Infants who are born preterm experience physical onslaughts from the causes and consequences of preterm birth (van IJzendoorn & Bakermans-Kranenburg, 1996). Infant attention and emotion regulation have consistently been shown to be affected following preterm birth. In addition, once born preterm they may spend weeks or months within neonatal intensive care units (NICU), rather than spending their formative months in a home setting (Flacking et al., 2012). Parents of preterms are unable to perform many of the caring behaviors associated with parenting, such as bathing. Accordingly parents are more likely to view the infant as not *theirs* while the infant remains in the NICU. Alongside the biological and social challenges arising from preterm birth, there are also social-economic risk factors associated with preterm birth. These factors are known challenges to development in general. Stress is an example of such a factor. High levels of stress are associated with preterm birth, reduced sensitivity in parenting, and postnatal depression. Udry-Jorgensen et al., (2011) examined perinatal risk factor, infant reactivity and maternal controlling behaviors as predictors of attachment. Infants with increased perinatal risk were more likely to be insecurely attached by 12 months. Korja and colleagues (Korja et al., 2010; Korja et al., 2009) examined interactions within the first 6 months post preterm birth (corrected) and later attachment status at 2 years. The differences between terms' and preterms' relational patterns observed during interactions were found to be most predictive of attachment security. Indeed, Cox, Hopkins and Hans (2000) demonstrated that maternal representations of the infant, over and above intracranial haemorrhage (ICH) were the strongest predictors of mother-infant attachment at 19 months.

The work described by Bovenschen and Spangler, and Zeanah, Fox and Nelson, tackle the impact of social deprivation, institutionalization, and removal from the biological caregiver. Preterm populations are particularly relevant for cross-cultural discussions of attachment. International

variations in prenatal care, protocol for the treatment of preterms, and postnatal support deliver a catalogue of questions regarding the universality of risk, and the cumulative risks such infants face in the task of forming attachments.

Personality. Studies employing transactional accounts of attachment include those that incorporate infant temperament and parental personality into models of attachment. The infant and parent in such models may contribute mutually to each other's vulnerability and resilience to adversity. (Cassidy, Woodhouse, Sherman, Stupica, & Lejuez, 2011; Ellis, Boyce, Belsky, Bakermans-Kranenburg, & van IJzendoorn, 2011; Stupica, Sherman, & Cassidy, 2011). In Mangelsdorf and Frosch's (1999) questioning of the separation of temperament and attachment into separate constructs, it is the goodness-of-fit between infant and caregiver personalities that determines security of attachment (van IJzendoorn & Bakermans-Kranenburg, 2008; Wong, Mangelsdorf, Brown, Neff, & Schoppe-Sullivan, 2009). In their study of 8-month-olds, those with insecure attachment scored higher on temperamental indices for reactivity and distress (Mangelsdorf, McHale, Diener, Goldstein, & Lehn, 2000). Secure attachment and a non-irritable personality in such accounts is an example of a good fit in parent and infant, resulting in such outcomes as active infant exploration of the environment (Boom, 2008) and adaptive social referencing (Aktar, Majdandžić, de Vente, & Bögels, 2012).

Psychobiology

Recent accounts of adversity and attachment commonly implicate psychobiology, through processes that directly or indirectly are implicated in neurobiology. While psychobiology has been examined in attachment research for more than the last 15 years, there has been an upsurge in the interest in psychobiology within attachment research. In social biosocial accounts of development "experience gets under the skin," with the psychobiology of the infant and parent producing differential susceptibility of the infant in facing challenges within their environment. Psychobiology accounts of attachment have sought to uncover the neurobiological underpinnings of human attachment (Atzil, Hendler, & Feldman, 2011; Atzil, Hendler, Zagoory-Sharon, Winetraub, & Feldman, 2012). Transactional accounts of attachment that incorporate psychobiology have largely focused on the production and effect of oxytocin in the parent-infant system.

Oxytocin has been implicated in the activation of areas as broad as the amygdala, insula, and inferior frontal gyrus (Riem et al., 2011). In turn these areas of activation are implicated in parenting and attachment-relevant behaviors of facial expression detection (Strathearn, Li, Fonagy, & Montague, 2008); attention to eyes; and responsiveness to sounds of distress (Riem, Bakermans-Kranenburg, van IJzendoorn, Out, & Rombouts, 2012). Impaired production of the hormone oxytocin is seen as implicated in less-optimal mother-infant bonding and a deprivation of social stimuli needed for stable attachment (Nagasawa, Okabe, Mogi, & Kikusui, 2012). In turn, these summed susceptibilities to environment and dopaminergic, serotonergic and oxytonergic systems are implicated in the transmission of

risk and susceptibility for disorganized attachment (Luijk et al., 2011; Luijk et al., 2010).

Moving on from associative accounts of oxytocin associated with increases in contact, and vice versa, recent studies have administered double-blind administration paradigms for oxytocin. Fathers administered oxytocin, before interactions with their infants, demonstrated high levels of social reciprocity, acknowledging of infant attention, positive vocalizations, and encouragement of infants in the social context (Weisman, Zagoory-Sharon, & Feldman, 2012). Such accounts aim to link variations in parenting sensitivity with systematic variations in oxytocin, in order to describe oxytocin as a mechanism for physiologically preparing the dyad for social engagement (Feldman, Gordon, Schneiderman, Weisman, & Zagoory-Sharon, 2010; Feldman et al., 2012).

The potential for oxytocin in therapeutic applications is currently the focus of multiple areas of research. However, we must be careful not to fall into circular accounts that are centered solely on correlational associations between neurodevelopment and attachment. With oxytocin now beginning to be examined in mothers and fathers with depression, it is especially noteworthy that the reduced oxytocin and lesser attention to infant's cues may be reducing distress. If this is the case then removing the defense strategy, without reducing the underlying cause for the defense, could cause distress rather than improve interaction. Whilst the studies within this issue do not directly address neuroendocrine models of attachment formation, the contribution of such factors in evaluating intervention models, as in the Munoz et al. article would seem to provide valuable contributions.

Family process over family structure

As Schaffer (1988) stated, there is more than one way to make a baby, and a family. Research has grown to reflect this reality. While in previous decades traditional families were the focus of a significant proportion of attachment studies, the proportion of 'non-traditional' families continue to increase. Interactional and dynamic accounts are needed. Such approaches are tasked with integrating the array of direct and indirect factors influencing attachment into process accounts that promise greater insight into infant attachment (Lamb, 2012).

Attachment research has diversified the samples and methods utilized in order to examine the processes between the social, cognitive and biological factors that are involved in a parent's ability and inclination to parent in a consistently responsive and sensitive manner. Within this issue cultural context has been embedded within the questions asked of how attachments are formed. Similarly, adversity has been unfolded as a term to differentiate between the lack of a secure caregiver, parental mental state, war and displacement, and institutionalisation. The importance of these specific areas of adversity and challenge are demonstrated when we contrast the compounding and buffering variables found across and within these challenging circumstances.

Research has expanded to such diverse areas as family law (Ludolph, 2009; Main, Hesse, & Hesse, 2011; Rivas, Handler, & Sims, 2009), mental health (Fletcher, 2009), and

neonatal care (Johnson, 2008) may be impacted. Work to develop interventions with demonstrated efficacy and impact are exemplified within the Munoz et al article. It is important to recognize the need for adaptive and specific interventions; for example, in the samples describing environments of war and forced displacement the caregivers' mental state must be central to supporting the development of sensitive and consistent caregiving.

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Reports from the Lab

Attachment and biobehavioral catch-up: An evidence-based intervention for at-risk infants and toddlers

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In the first years of life, young children are dependent on their parents not only for meeting their basic needs and safety, but also for help regulating their physiology, attention, behavior and emotions (Hofer, 2006). When infants and young children experience caregiving failures through adverse conditions such as neglect, maltreatment, and exposure to violence, they are at risk for many problems, including challenges with self-regulation and disorganized attachment (e.g., Bernard, Butzin-Dozier, Rittenhouse, & Dozier, 2010; Gunnar & Vazquez, 2001). We have followed several populations of at-risk children, studying the effects of early adversity on development in early childhood. Early life challenges lead children to adapt in a variety of ways that can be associated with negative long-term consequences. The Attachment and Biobehavioral Catch-up (ABC) is a 10-week intervention that specifically targets several key issues with parents of very young children. The goal of ABC is to enhance parents' capacities for interacting with their children in nurturing, synchronous, and non-frightening ways.

Intervention Targets

Nurturance. Parents provide nurturance when they attend directly to their children's need (expressed as sadness, worry, hurt, or need for closeness) by offering reassurance physically (e.g., hugging, picking up, patting back), verbally (e.g., "Are you ok?"), or with facial expression. Nurturance can be challenging to provide to children who have experienced early adversity, as they often act in ways that fail to elicit nurturance. Children who experience disruptions in care after about a year of age are especially likely to turn away from parents rather than to seek out nurturance when distressed (Stovall-McClough & Dozier, 2004). Children's behaviors elicit complementary behaviors from parents (e.g., when the child turns away from the parent when distressed, the parent is less likely to provide reassurance).

When parents respond in nurturing ways, children develop expectations that they can depend upon them; such children are most likely to develop secure, organized attachments (Ainsworth, Blehar, Waters, & Wall, 1978; Carlson, 1998; Dozier, Stovall, Albus, & Bates, 2001). Children who have parents who are emotionally unavailable when they are distressed, or are frightening (at any time, regardless of whether children are distressed) often develop disorganized attachments (Lyons-Ruth, Bronfman, & Parson, 1999; Schuengel, Bakermans-Kranenburg, & van IJzendoorn, 1999). Disorganized attachments are of particular concern because they are associated with a host of problematic outcomes, most especially an increased risk for behavioral dysregulation as seen in externalizing problems (Fearon, Bakermans-Kranenburg, van IJzendoorn, Lapsey, & Roisman, 2010; Madigan, Moran, Schuengel, Pederson, & Otten, 2007).

Synchrony. Synchrony can be defined as smooth interactions in which parents follow their children's lead. Children whose parents behave in more synchronous ways develop stronger self-regulatory capabilities than children whose parents are less synchronous (e.g., Harriot & Waugh, 2002; Raver, 1996; Rocissano, Slade, & Lynch, 1987). When parents are too passive (e.g., ignoring a child's actions) or too intrusive (e.g., directing or leading the child's actions), children miss the opportunity for interactions that build a sense of control over the environment and over their own ability to regulate. Children of neglecting parents and children in foster care are at particular risk for developing self-regulation problems. Such children show a more blunted pattern of cortisol production compared to children from low-risk environments (Bernard et al., 2010; Bruce, Fisher, Pears, & Levine, 2009) and are more likely to demonstrate behavioral dysregulation (e.g., Pears & Fisher, 2005).

Attachment and biobehavioral catch-up intervention

The ABC intervention was designed to help parents provide nurturing care and engage in synchronous interactions with their infants. Sessions are implemented by parent coaches who provide parenting training in the parent's home for weekly one-hour sessions over a period of 10 weeks. Although session content is guided by a manual, the parent coach's primary role is to provide "in the moment" feedback about the parent's interactions with his or her child. Throughout all sessions, the parent coach observes the parent's behavior and makes comments on behaviors that relate to the intervention targets. For the most part, these comments are positive in nature, describing how the parent behaved in line with an intervention target and how this behavior is likely to support the child's development (e.g., "Wow, she fell down and you went right over and picked

her up – what a great example of nurturance! She’s learning that she can count on you.”). At other times, the parent coach may make suggestions as a way to scaffold the parent’s behavior, or may gently challenge the parent when he or she behaves in a non-synchronous, non-nurturing, or frightening way. This frequent “in the moment” feedback focuses attention on the target behaviors, which is expected to enhance the parent’s understanding of the content and support the parent in practicing the target behaviors. Along with “in the moment” comments, parent coaches provide video feedback to highlight parents’ strengths, challenge weaknesses, and celebrate changes in behaviors.

Target behaviors are presented sequentially across the first 6 sessions of the intervention, with sessions 1 and 2 focused on providing nurturance when children are distressed, sessions 3 and 4 focused on behaving in synchronous ways (or following the child’s lead with delight), and sessions 5 and 6 focused on avoiding intrusive and frightening behavior. Despite session-specific topics, these targets are addressed across sessions through frequent “in the moment” commenting whenever opportunities arise. Given that parents’ own attachment experiences may also interfere with the ability to provide nurturing or synchronous care, or avoiding frightening behavior (van IJzendoorn, 1995), sessions 7 through 10 are further tailored to address the needs of each parent. In sessions 7 and 8, the parent coach discusses how the parent’s experiences with his or her own parents may influence the parent’s current interactions with children. In particular, the parent coach helps the parent identify possible “voices from the past” that may interfere with responding sensitively to children’s distress, interacting synchronously with the child, and avoiding intrusive and frightening behaviors. Sessions 9 and 10 help consolidate gains made through the prior sessions and celebrate change.

Recent evidence for ABC

We have found evidence supporting the efficacy ABC in two independent samples. One sample included foster children and comparison children. Foster children were randomly assigned to the ABC intervention or a control intervention designed to enhance cognitive and linguistic development. Like ABC, the control intervention took place in the parents’ home for one hour per week for 10 weeks. Following the intervention, foster children were assessed annually until they were 6 years of age. As expected, parents who completed the ABC intervention demonstrated enhanced synchrony compared with parents in the control intervention (Bick & Dozier, 2013). Foster children in the ABC intervention demonstrated cortisol patterns that were not significantly different from the comparison children who were not in foster care, but were significantly different from children in the comparison intervention, suggesting that ABC could be effective in helping foster children regulate biology in ways more characteristic of children who had not experienced early adversity. Foster children in ABC also showed more advanced executive functioning on the Dimensional Change Card Sort when compared to foster

children in the control intervention (Lewis-Morrarty, Dozier, Bernard, Terraciano, & Moore, 2012). These results suggest that ABC is effective in helping regulate both biology and behavior in at-risk children.

Our second sample included children, all under 2 years at the time of enrollment, and their birth parents, referred by agencies working with child protective services. All parents were enrolled in the city’s program that was intended to divert children from foster care because of identified needs and/or concerns that children were at risk. Domestic violence, parental substance use, homelessness, and child neglect were the conditions noted most often. Compared to children assigned to the control intervention, children who participated in ABC showed lower rates of disorganized attachment (Bernard et al., 2012); 57% of children in the control intervention were classified as disorganized, whereas only 32% of children in ABC developed a disorganized attachment. Moreover, children in the ABC intervention also showed a more normative diurnal pattern of cortisol production (Bernard, Dozier, Bick, & Gordon, 2013).

There are additional recent findings in manuscript preparation suggesting lasting effects up to 5 years of age on biological regulation, an influence of ABC on amount of anger expressed in a challenging task, and additional biological indicators of risk (e.g., ERP, telomeres), plus the ways in which ABC and changes in parenting behaviors can mitigate that risk.

Future directions

Dissemination. The dissemination of ABC, and the need to demonstrate effectiveness in addition to efficacy, is a growing focus of our lab. The study of dissemination and implementation science (e.g., Southam-Gerow, Rodriquez, Chorpita, & Daleiden, 2012) highlights many of the critical issues that need to be addressed in moving interventions to larger service systems. As the interest in ABC grows, we strive to balance the benefits of providing the service to more families while also maintaining adherence and fidelity to the model.

We have become more interested over time in the benefit of giving live feedback to parents. We found that the frequency of “in the moment” comments is associated with parental synchrony in subsequent sessions and in post-intervention assessments (Meade & Dozier, 2012). However, although parent coaches generally find it easy to implement manual content and theory, the practice of “in the moment” feedback is far more challenging. We have taken several steps to promote dissemination success and select coaches who we believe will succeed at “in the moment” comments, beginning with careful screening of potential parent coaches that includes asking potential coaches to practice “in the moment” feedback with several proposed vignettes. Preliminary findings suggest there is a strong association between success during the screening and actual use of “in the moment” comments during sessions (Meade, Roben, & Dozier, 2013). Once selected, parent coaches take part in a multi-day, in-person training and continue to receive weekly supervision for a year that includes coding and review of “in the moment” feedback. ABC is being



Current Infant Caregiver Lab members. Back row: Teresa Lind, Julie Hoyer and Brittany Platzke. Front row: Caroline Roben, EB Meade and Mary Dozier. Not pictured: Kristin Bernard and Allison Wallin.

implemented in multiple sites both nationally and internationally. Although anecdotal evidence suggests success in several locations, results from ongoing randomized controlled studies of ABC outside of the University of Delaware are not yet available.

Continued ABC research. There are several ongoing lines of investigation in the lab. We continue to follow several of our populations and investigate important additional outcomes such as emotion regulation, peer relations, and continued physiological effects. We are looking at the expansion of the intervention to additional groups of families (such as children adopted internationally) and toddlers in foster care who may have ongoing behavior problems. The research thus far demonstrates the efficacy of a brief, home-based intervention for infants who experience early adversity on attachment, parenting, emotion expression, and physiological regulation, and we expect that the intervention will have lasting effects on the trajectories of at-risk children.

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Attachment and Implicit Cognitive/Bodily-Kinesthetic Processes in Child-Parent Relationships

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Considerable theory and research indicates that attachment processes play a significant role in child-parent relationships (Bowlby, 1969/1982, 1973; see Cassidy & Shaver, 2008, for a review). Evidence suggests, for example, that parents' stable social-cognitive representations of attachment (i.e., representational models of attachment) guide their processing of information about the child-parent relationship, which, in turn, contributes to parents' behavior towards their children (Main, Kaplan, & Cassidy, 1985; see Dykas, Ehrlich, & Cassidy, 2011, for a review). Similarly, much data lend support to the idea that child attachment security emerges in families where a parent serves as both a secure base from which a child can confidently explore his/her environment, and as a safe haven to which the child can return in times of need and/or distress; Bowlby, 1973; see also Waters & Cummings, 2000). To date, developmental researchers have made many notable advances in understanding how attachment processes are related to child-parent relational dynamics. In our laboratory, we are currently aiming to add to this rich literature by examining how different implicit cognitive and bodily-kinesthetic processes may mediate putative associations between parent/child attachment and parent/child relational functioning. In this report, I am pleased to describe two studies underway and a few preliminary findings.

Study 1: attachment and implicit caregiving cognitions

Many researchers contend that parents possess different social cognitions about their parenting competencies/behaviors, as well as about their children (e.g., Bugental & Johnston, 2000). Furthermore, such cognitions are believed to guide parental behavior and contribute distally to children's social-emotional functioning. In several studies, for example, parents who have reported possessing negative *explicit* (i.e., consciously available) social cognitions related to caregiving and their children (e.g., negative self-reported attributions, beliefs, perceptions, and expectations) have been more likely than other parents to engage in maladaptive caregiving behaviors (see Bugental & Johnston, 2000). Other studies also indicate that parents who report difficulties dealing with the demands and pressures of being a parent behave less sensitively towards their children (e.g., Leerkes, & Crockenberg, 2006). Although these explicit maladaptive parental social cognitions may emerge under a variety of different circumstances, it is believed that they may stem in large part from parents' own representational models of attachment (see Dykas et al., 2011, for a review).



Indeed, parents who possess negative representations of attachment experiences and relationships may be inclined to form and report negative attributions, beliefs, perceptions, and expectations about themselves as parents and about their children (Dykas et al., 2011; see also George & Solomon, 2008).

Although several studies have examined associations between parents' explicit caregiving cognitions and caregiver attachment, parenting behavior, and/or child social-emotional outcomes (see Dykas et al., 2011, for a review), very little research has examined how parents' *implicit* caregiving cognitions are linked to parent- and child-attachment-related variables. This lack of research is surprising given the widespread belief that many social-cognitive processes and phenomena lie entirely outside the realm of conscious awareness and function to process social information in an automatic and uncontrolled manner (see Gawronski & Payne, 2010, for a review). For example, social psychology research indicates that many individuals possess attitude biases about objects, people, and places of which they are purportedly unaware. A variety of data also indicates that some people revise their memory for interpersonal events over time in an uncontrolled, automatic manner (Schacter, 1996; Wells & Loftus, 2003). If these types of implicit social cognitions exist in individuals in non-caregiving-related contexts, we expect that they also exist in parents and play a significant role in calibrating the caregiving behavioral system by governing the ways in which parents behave towards their children. We also expect that because social cognition is often biased, parents' representational models of attachment contribute to the quality of parents' implicit caregiving cognitions.

In a new study, we are recruiting mothers and their five-year-old children. We are assessing mothers' representational models of attachment using a narrative-based procedure and well-known measures of adult attachment style. We are assessing mothers' implicit care-giving cognitions using three novel measures: One experimental measure taps into mothers' implicit attitudes about their children; the second measure taps into mothers' implicit attention to positive and negative maternal characteristics; and the third measure taps into mothers' implicit reconstructive memory for child-parent interaction and child behavior. In addition to these measures, we have included standard assessments of self-reported maternal depression, observed maternal emotional availability, and mother-reported child psychosocial functioning.

Although data analysis is currently ongoing, some initial findings suggest that mothers' representational models of attachment are linked to their implicit caregiving cognitions. For example, mothers who demonstrate more negative implicit attitudes about their children are more likely to report greater attachment-related avoidance ($r = .31$), even after controlling for maternal depression. Furthermore, these negative, attachment-related implicit attitudes about children are linked to child functioning, such that mothers who demonstrate more negative implicit attitudes about their children are more likely to report relational aggression in their children ($r = .24$). My research team and I are intrigued by these initial findings and look forward to completing data analyses in the upcoming months.

Study II: bodily-kinesthetic precursors to infant secure attachment

According to contemporary attachment theory, individual differences in infant attachment security reflect the quality of infants' underlying representational models of attachment (Weinfeld, Sroufe, Egeland, & Carlson, 2008). More precisely, researchers contend that over the course of repeated daily experiences within the home, infants acquire vast knowledge about their parents' abilities to provide a secure base and safe haven. This knowledge then becomes internalized in infants' representational models of attachment, and such representational models of attachment, in turn, guide infants' attachment behavior towards their caregivers (Bowlby, 1973). Thus, positive secure base experiences with a caregiver should contribute to both secure representational models of attachment (i.e., representational models of a loving and supportive parent who supports freedom of exploration and protection from danger; Bowlby, 1973) and secure patterns of attachment behavior; in contrast, negative secure base experiences should contribute to both insecure representational models of attachment and insecure patterns of attachment behavior.

Given these key propositions, researchers have frequently examined whether caregiver behavior (i.e., parents' sensitivity to their children's attachment related needs) is linked to infant attachment quality (see Belsky & Fearon, 2008, for a review). It is well known, however, that associations between caregiver behavior and infant attachment security are relatively modest, and there are likely a variety of other caregiver-related factors – beyond straightforwardly observed patterns of parental sensitivity – that contribute to individual differences in infant attachment security (Belsky & Fearon, 2008). It is possible, for instance, that mothers and fathers unknowingly express involuntary *implicit* behaviors in the presence of their children (e.g., unstable muscle movements) and that such unconscious implicit caregiving behaviors, in turn, contribute to individual differences in infant attachment security. On the basis of current research, we further believe that several physiological processes mediate these distal links between implicit caregiving behaviors and infant attachment. For example, positive implicit parental behaviors may contribute positively to children's attachment-related stress-response thresholds and ability to self-regulate emotional states, whereas negative implicit parental behaviors may not (see Polan & Hofer, 2008). These implicit caregiving behaviors may also be embodied by the infant, eventually priming the infant to express either secure or insecure patterns of attachment (see Barsalou, 2008, for a review of how physical experiences can be embodied and contribute to personal behavior).

To examine links between implicit caregiving behavior and infant attachment, a colleague (Dr. Christina Leclerc) and I just launched a short-term longitudinal study. In this study, we are recruiting infant-mother dyads when infants are age 10 months. During the first phase of the study, infants and mothers engage in a standard free-play procedure, which will allow us to assess each mother's degree of emotional availability and secure base/safe haven provision. Using a set of semi-structured tasks, we are also examining implicit maternal behaviors. In one of these tasks, for example, we ask mothers to watch a relatively



A baby preparing for data collection.

uninteresting nature film, ostensibly as part of a research project on “nature and psychology.” Although mothers’ reception to this video will vary, we expect – on the basis of pilot testing – that watching this video will instigate negative feelings within the mother (e.g., frustration, agitation). In another task, we instruct mothers to engage in a relatively uncomfortable posture position while holding their child and completing a set of mock surveys. For all tasks, we are using different physiological measures (e.g., measures of subtle body movements) and microanalytic coding schemes to assess implicit caregiving behavior. During the second phase of this study, we will be assessing infant attachment when infants are age 12-months using the Strange Situation procedure (Ainsworth, Blehar, Waters, & Wall, 1978). We look forward to examining whether and how implicit caregiving behaviors contribute to individual differences in infant attachment security. Please stay tuned!

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Dr. Matt Dykas (far right) and his research assistants at the Relationships Across Development Laboratory.

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Relation between Marital Relationship and Parental Engagement in Child Care

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Babies have an inborn drive to bond with other human beings. Because the type of attachment the child will develop usually depends significantly on the quality of parental involvement, one of the current trends of research is the study of the effect of the marital relationship on parents' involvement with their children (Dessen & Braz, 2005; Lamb, Pleck, Charnov, & Levine, 1985; Silva & Picininni, 2007). Whereas couples who have a satisfactory relationship are better able to support and take care of their children, marital conflicts may hinder the parent-child relationship.

This report describes a study, in which data were collected through a set of questionnaires answered by parents individually, of the relation between marital relationships and parental engagement in a sample of Brazilian families as part of a larger partnership between researchers at the Laboratory of Health Psychology, Family and Community (LABSFAC) and at the Center for Studies and Research in Child Development (NEPeDI) in the Psychology Department of the Federal University of Santa Catarina (UFSC), Brazil, and two Canadian institutions: University of Montreal (UM) and University of Quebec in Montreal (UQAM).

The work developed by LABSFAC (www.labsfac.ufsc.br) has explored children's health, family, and community. Professors Maria Aparecida Crepaldi, Carmen More and Luciene Borges coordinate this lab, which since 2007 has an agreement with UQAM that includes visits, conferences, bilateral research, scholarship, and thesis supervision.

The Center for Studies and Research in Child Development (NEPeDI) (www.nepedi.ufsc.br) is coordinated by Professor Mauro Luís Vieira. It develops research on parenting, child development and health. Professor Ana Maria de Oliveira Faraco also participates in this research center.

Details of the study

Participants were 208 parents (half mothers and half fathers) living in Southern Brazil. The couples selected were at least 18 years of age, had lived together for at least six

months and had a son or daughter between the ages of four and six years at the outset of the study.

The following instruments for data collection were used: a) A questionnaire on parental engagement (QEP - "Questionnaire d'engagement paternel," developed by Paquette, Bolté, Turcotte, Dubeau, & Bouchard, 2000). The questionnaire was validated in Canada with a sample of 850 parents from bi-parental families with a child between 0 and 6 years of age. QEP has seven dimensions: *emotional support* (12 items), *openness to the world* (9 items), *basic care* (9 items), *physical play* (7 items), *evocations* (6 items), *discipline* (4 items) and *home tasks* (9 items); b) The Revised Conflict Tactics Scales - CTS2 (Straus, Hamby, McCoy, & Sugarman, 1996), used to measure intimate partner aggression. The questionnaire uses an 8-point Likert scale (from zero to twenty times over the last year) that provides an estimated frequency of the occurrence of aggressive behaviors. It includes five dimensions: *physical assault* (twelve items), *psychological aggression* (eight items), *negotiation* (six items), *injuries* (six items), and *sexual coercion* (seven items); c) Floreal: This questionnaire was originally conceived by Prof. Marc Bigras, from UQAM, specifically for the larger project for the aiming to investigate aspects of the marital relationship and sources of conflict both between the couple alone and in the child's presence. With regard to the marital relationship, the instrument assesses five dimensions using a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). Dimensions are: *marital harmony* (8 items); *negative reciprocity* (9 items), *avoidance* (8 items), *reciprocity* (2 multiple choice questions), and *jealousy*, (3 multiple choice questions).

Results and discussion

Parental engagement. Means of the overall engagement of fathers and mothers were compared, and it was found that maternal engagement ($M = 3.82 \pm .24$) was significantly higher than paternal engagement ($M = 3.37 \pm .46$) ($Z = 8.03, p < .001$).

In order to perform comparisons between dimensions of the instrument for each participant (mother and father), the Mann-Whitney test was used, and almost all dimensions showed significant differences between fathers and mothers, with the exception of the *physical play* dimension. Mothers' engagement was significantly greater than fathers' in the following dimensions: *emotional support*, *openness to the world*, *basic care*, *evocations*, *discipline* and *home tasks*. Therefore, it has been noted in the present research that overall mothers engage more than fathers with children, corroborating what has been reported in the literature (Lordelo et al., 2006).

In specific terms of engagement (seven dimensions), it has been found that mothers had higher scores on *basic care* and *discipline*. On the other hand, the lowest scores for mothers were in the dimension of *openness to the world*. For fathers, the highest scores were on *discipline* and *physical play*, while the lowest was on *home tasks*. Furthermore, *emotional support* was the third dimension, very important for both parents.

These results are in line with the Brazilian literature reporting that although paternal participation has increased, fathers still assume a traditional role (involved



Team of professors and students (graduate and undergraduate level) involved in the research in Brazil. From left to right: Natália Scatamburlo, Rovana Bueno, Liziara Portella, Elisângela Boing, Prof. Mauro Vieira and Prof. Maria Crepaldi, Simone Bolze, and Carina Bossardi.

in *discipline* and *physical play*), while mothers are primarily responsible for child care and household chores (Silva & Piccinini, 2007). *Emotional support*, in turn, seems to be an important dimension for both parents. Results also indicate an increase in paternal affectivity over time, which suggests a change in paternal engagement in the current Brazilian context (Bornholdt, Wagner, & Staud, 2007).

Marital relationship. The Floreal questionnaire showed that both fathers ($M = 5.05 \pm 0.55$) and mothers ($M = 5.09 \pm 0.55$) have a harmonious marital relationship. Regarding reciprocity between the couple, men (87.5%) and women (84.6%) tend to consider their marital relationship to be fair, with both spouses equally benefiting from being together. In terms of jealousy, the most frequent self-definition for women was rarely jealous (33.7%) whereas men defined themselves as a bit jealous (40.4%). Concerning marital conflicts, couples mainly use negotiation as a tactic for conflict resolution ($M =$ from 10 to 20 times during last year). However, in some cases psychological aggression has also appeared as a form of conflict resolution ($M =$ from 2 to 5 times during the past year). Although some degree of physical assault and sexual coercion was reported by couples, these events were, on average, less frequent than once a year. Thus, it can be stated that, on average, participant couples live in marital harmony characterized by a sense of empathy, which makes each partner feel accepted, validated and

respected in their feelings, allowing for greater satisfaction in marriage (Oliveira, Falcone, & Ribas, 2009).

Relation between marital relationship and parental engagement in child care

Results of Spearman's Correlation test have indicated that a high level of perceived marital harmony can stimulate parental engagement in some dimensions: mothers perform more *physical play* ($r = .32, p < .01$) and *openness to the world* ($r = .20, p < .05$), while fathers perform more *emotional support* ($r = .23, p < .05$). These results appear to suggest that marital harmony encourages parents to assume behaviors that are traditionally associated with the opposite sex. For instance, *physical play* and *openness to the world* have often been more associated with fathers, while *emotional support* has tended to be more associated with mothers.

With regard to marital conflict, couples mainly use negotiation as a strategy for conflict resolution. However, parental engagement is threatened when either parent reports *physical assault* ($r = .20, p < .05$) and/or *injuries* ($r = .19, p < .05$), especially when the mother claim to be the victim of the father's physical violence, and when the father reports perpetrating physical violence and causing injuries.

The quality of the marital relationship is considered by a number of researchers to be a key factor in determining



paternal engagement (Paquette et al., 2000). Research suggests the interdependence between marital and parental systems, that is, parents in conflict may take less care of their children, and be less effective in parenting activities (Bigras & Paquette, 2000; Dessen & Braz, 2005; Silva & Picininni, 2007).

Final considerations

The sample of Brazilian parents studied in the present research show that fathers and mothers are engaged with their children in different ways. In addition, couples generally reported harmony in their marital relationship, and the use of negotiation strategies in conflict resolution. Because negotiation seems to be the most appropriate strategy to strengthen parental relations; it is likely that parents who solve their marital disagreements in a constructive way ensure the stability of the family, thereby reducing anxiety and increasing the child's emotional security (Davies, Cummings, & Winter, 2004).

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Notes from The President

As I write these notes, I realize that the 2012 ISSBD biennial meeting in Edmonton, Canada, took place more than 8 months ago, and that the next biennial meeting in Shanghai, China, is scheduled about 15 months from now. When you eventually read these lines, we are probably in-between two major ISSBD events. I already emphasized in my last notes that those of us who participated in the Edmonton event were very impressed with the perfect organization of the meeting and the quality of the scientific presentations. Meanwhile Nancy Galambos submitted the final report on the 2012 biennial meeting, which indicates that the event was also successful from a financial point of view. My congratulations go to Nancy Galambos, Lisa Strohschein, Jeff Bisanz and their dedicated team!

I am confident that the 2014 ISSBD meeting in Shanghai, China, will also become a very attractive event. I visited Shanghai last November and had plenty of opportunities to discuss the progress and important organizational issues with the chairman Biao Sang and the members of the Local Organizing Committee at Shanghai Normal University. They are all working very hard on the issue and have made considerable progress during the past couple of months. Our Liaison Officer and President-elect Xinyin Chen visited Shanghai in January, 2014, and also noticed that the preparations for the meeting are going well. Biao Sang and the ISSBD Executive Committee meanwhile established an International Program Committee, and invitations to potential Keynote Speakers, Invited Speakers, and organizers of Invited Symposia were sent out recently. Please contact the ISSBD 2014 website to get more information on formal aspects of the meeting. You will notice, for instance, that abstracts can be submitted during the time period from April 1, 2013 to September 30, 2013, and that the deadline for early bird registrations will be the end of February, 2014. The plan is to notify participants about the acceptance of their abstracts by the end of November, 2013. This should give sufficient time for booking flights and hotel rooms for the ISSBD meeting in Shanghai which will take place from July 8-12, 2014.

As I already indicated in my last notes, there will be more ISSBD events in 2013. Our EC member Elena Grigorenko from Yale University, USA, supported a group of Russian scientists, Tatiana Yermolova (Moscow City University), Natalya Ulanova and Sergey Kornilov (Moscow State University), and Natalia Raklin (Yale University) in their efforts to organize an ISSBD Regional Workshop in Moscow, Russia, to be held from June 18-21, 2013. The main theme of the workshop concerns "Executive functioning and metacognition", and several renowned researchers (e.g., Ellen Bialystok, Adele Diamond, Angela Friederici, Susan Gathercole, Marcel Just, Deanna Kuhn, Akira Miyake, Phil Zelazo) will provide lectures on different aspects of the general theme.

There will also be an ISSBD Regional Workshop in Budapest, Hungary, organized by Márta Fülöp and focusing on "Interpersonal dynamics over the life span". The workshop is scheduled for September 12-14, 2013, and will focus on recent theories of social development in children, adolescents, and young adults, with an emphasis of the dynamics of different kinds of personal relationships. Keynote speakers include Malinda Carpenter, Patricia Hawley, Heidi Keller, Barry Schneider, József Topal, and Marcel van Aken. Doctoral students and early career researchers from Eastern and Central European countries (Hungary, Slovakia, Poland, Czech Republic, Slovenia, Croatia, Serbia, Austria, Romania, Bulgaria, etc.) will attend this event.

Finally, the ISSBD Executive Committee decided to provide financial support for a 10th ISSBD Africa Regional International Workshop in Pretoria, South Africa, to be held at the Department

of Inclusive Education, University of South Africa in Pretoria, from September 25-27, 2013. Nareadi Phasha from the University of South Africa serves as host and main organizer of this workshop, which will focus on the following topic: "Sustaining research excellence amongst early career scholars." About 60 African early career scholars will be invited to participate in this event. Major goals of the workshop are strengthening of the confidence of African early career scholars in carrying out independent research, strengthening the relationship between mentors and mentees, and providing a platform for early career scholars to engage in critical discussion about their own work. It has been a pleasure for me to cooperate with the local chairs of the three ISSBD workshops, and to discuss various theoretical and practical issues related to the preparation of these events. I am grateful to the members of the ISSBD Steering Committee for their support in this matter. In particular, Ingrid Schoon and Rick Burdick were effective in solving various financial problems. Last not least, I want to thank Gelgia Fetz and Simon Sommer from Jacobs Foundation for their continuous interest in our international workshops and their valuable support and advice. Without the financial support provided by Jacobs Foundation, it would be very hard for us to achieve our ambitious goal to organize attractive ISSBD regional workshops in different parts of the world, helping early career scholars from different countries to improve their scientific knowledge and to broaden their perspective significantly.

Another issue that has kept me busy since I started my term as president concerns the ISSBD membership situation. From the very beginning, I realized that although ISSBD is a truly international and global learned society, it is obvious from membership statistics that some parts of the world are less well represented than others. Apparently, the number of ISSBD members has stagnated for quite a while. By 1990, the Society counted more than 1000 members from more than 40 countries. Although my predecessors and I have tried hard to improve the situation, this is about the number that was also reported on later occasions, and the one that we published at our Business Meeting in Edmonton last year. Obviously, we have not been able to increase this number during the past two decades, even though the number of membership countries went up to 60+. Our ISSBD membership committee has been working intensively on this problem for quite a while. We believe that the practice of offering one-year free membership packages at our biennial meetings has been effective to some degree, but also know that more has to be done to achieve this goal.

Our membership secretary and president-elect Xinyin Chen and I believe that the membership situation can be improved by recruiting new regional coordinators in countries/areas where the loss of members is considerable. We have enjoyed long-term cooperation with our regional coordinators in Brazil, Cameroon, China, Ghana, India, Kenya, Nigeria, Russia, South Africa, Uganda, and Zambia. More recently, we were able to recruit regional coordinators in Colombia, Hungary, Israel, and The Philippines. We also hope to recruit regional coordinators for Chile and Switzerland very soon. Ideally, the latter should also take care of the French-speaking European world where we have not managed to increase the number of ISSBD members lately. I am grateful to Ann Sanson, Chair of the Membership Committee, and Kerry Barner and her team from SAGE for their support in this matter. For instance, Kerry Barner and her colleague Ed Mottram did a very careful ISSBD member survey analysis that yielded valuable recommendations regarding membership commitment. Moreover, the Membership Committee has developed several interesting ideas related to membership benefits. The Membership



Committee will discuss further suitable measures to improve the situation at its meeting in Seattle next month.

One of our efforts regarding the recruitment of more members specifically focuses on early career scholars, who represent the Society's future. For instance, a reduced rate for early career scholars was suggested by the Membership Committee and approved by the Executive Committee at its meeting in Edmonton last year. The EC also established a new committee which will work out a master plan regarding systematic support of young scientists in our Society. Of course, we hope to see many early career scholars at the three ISSBD regional workshops this year, and even more at our 2014 biennial meeting in Shanghai.

As you may remember, our new Jacobs-ISSBD Fellowship program started at the beginning of last year supporting the first cohort of 10 awarded early career scholars from all over the world. This program also secures funding for several of ISSBD's young scientist activities, including travel grants for ISSBD pre-conference workshops and attendance at International Regional Workshops. Given that further financial support from Jacobs Foundation for the second cohort of early career scholars (to be recruited in 2014) will depend on the fulfillment of specific success criteria for the first cohort, the Early Career Development Committee chaired by Toni Antonucci will have to deal with the evaluation procedure rather soon. My deepest thanks go to Toni and the other committee members (Silvia Koller, Anne Petersen, Julie Robinson, Ingrid Schoon, Jaap Denissen and Robert Serpell) who already have put a lot of effort into this project. Needless to say, we also owe many thanks to Gelgia Fetz and Simon Sommer of Jacobs Foundation who have given valuable feedback regarding our early career scholar program, and who carefully monitor the progress of this important enterprise.

In my last Notes I informed you about the plan to establish a Consortium of Developmental Science Organizations. This initiative was stimulated by SRCD's Governing Council and pursues several goals, including the facilitation of multinational research and collaboration, the expansion of collaborative training and research opportunities for early career scholars, and global research issues such as ethics and measurement across cultures. A first meeting of target members of such a consortium organized by Jacobs Foundation took place at Schloss Marbach, Germany, in December of 2012. Although I had good intentions to participate, I was unable to do so because of an unexpected

health problem. However, our past presidents Anne Petersen and Rainer Silbereisen attended this meeting and also informed me about its major outcome. The meeting was very productive, and a vision statement was formulated, indicating that the Consortium sees its mission as combining the efforts of several developmental science organizations in order to advance knowledge about developmental processes and outcomes, to improve standards of education and training of developmental scientists, and to communicate relevant developmental research findings and their value for public policy. Several Consortium working groups were established that deal with issues such as membership criteria, governance and funding, research priorities, website/press, ethics and best practice, and the involvement of emerging scholars. Results from working groups will be discussed at a next meeting scheduled for April 20, 2013 at SRCD in Seattle.

Before closing I want to thank all my colleagues in ISSBD, and in particular my fellow officers, for their continuous support since the beginning of my presidency. I can assure you that the Society is in good shape, financially and scientifically, and that its perspectives are promising. ISSBD is an important player in the field of developmental science, owing its uniqueness in focusing on life-span development and cross-cultural issues. Our flagship journal, the International Journal of Behavioral Development (IJBD), has continuously improved its reputation over the last two decades, and is perceived of as a very noteworthy publication outlet in the field of life-span and cross-cultural developmental science. The term of our IJBD editor Marcel van Aken will end soon, and we very much hope that his successor will be similarly successful. Also, the ISSBD Bulletin is faring very well, due to the joint efforts of the editor-in chief Karina Weichold and the co-editor Deepali Sharma. Last but not least, Josafá Cunha is doing a great job as our Social Media editor, providing us with a highly interesting ISSBD E-Newsletter every month.

I am fully convinced that we have a terrific organization. Thanks a lot to all of you for your enormous efforts!

Wolfgang Schneider, Ph.D.
President of ISSBD

Workshop Report

Report of the 9th ISSBD Africa Regional Workshop on Consolidating and Extending Early Career Scholars' Capacity to do Research Across the Life Span, University of Lagos, Nigeria, 28th to 30th November 2011

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The 9th ISSBD Africa Regional International workshop was held at the University of Lagos, Nigeria, from the 28th to the 30th of November, 2011. The workshop was attended by over eighty (80) early career, middle-level, and senior scholars from nine (9) countries, which were Nigeria (the host country), Cameroon, Ghana, Kenya, South Africa, Zambia, Zimbabwe, Germany and Australia.

The workshop was officially opened by Professor Rahman Ade Bello, the Deputy Vice-Chancellor in charge of management services on behalf of the Vice-Chancellor, Professor Adetokunbo Sofoluwe. The Deputy Vice-Chancellor emphasized the importance that the University attaches to research capacity building and its commitment to developing and building early career scholars in all areas of scientific endeavor including human development research, as well as its unreserved support for this workshop.

The workshop objectives included (i) providing forum for training early career researchers new to ISSBD in conducting publishable research across the life span, both in normal and in special circumstances, and provide feedback on their ongoing research programs; (ii) providing a forum for other early career scholars who might have attended other Africa regional workshops and/or ISSBD conferences to workshop their manuscripts and make them viable for submission for publication and also help them develop research career plans; (iii) introducing the young scholars' program of ISSBD to incoming members and consolidate the African Chapter of the program; and (iv) consolidating and continuing to build on the mentoring model developed in Maseno at the 8th ISSBD Africa regional workshop in 2009. The three-day meeting involved training sessions in research methodologies and research capacity building in different areas of human development, dissemination of publishable research information and developmental research networking. The senior scientists instrumental to achieving the workshop objectives included the following:

Anne Petersen

The immediate past ISSBD president provided information on how and where early career scholars can find early career resources and other information as they develop

their research ideas and interests, and emphasized resources such as websites, handbooks, and organizations. The presentation was made on her behalf by Bame Nsamenang.

Therese Tchombe

(University of Buea & Centre for Research in Child & Family Development & Education)

In her presentation on "Socialization of the African Child and the Development of Resilience Skills" she emphasized the role of inculcating right thinking processes in children from an early age because this allows for the development of healthy self-esteem and resilience. She stated that children have to be taught how to relate with and be responsible for their environment, and stressed the role of an enabling environment in the development of resiliency behavior in children, pointing out that it is the quality, not just the quantity of efforts, loaded with care and love, that can nurture African Children.

Yuwanna Mivanyi

(Kaduna Polytechnic, Nigeria)

Her presentation focused on the development of indigenous psychological tests by early career scholars to address development issues of children, adolescents and adults in Africa. She emphasized the view that research should offer solutions to the pervasive needs of the African people and stressed the need for young African researchers to be trained in the development of psychological instruments that can measure indigenous phenomena that are specific to Africa and Africans. Such phenomena include contextual developmental issues of children, adolescents and adults in Africa. In addition, she pointed out that concepts should be properly defined and implemented.

Bame Nsamenang

(Head, University Cooperation Division, University of Bamenda, and Director, Human Development Resource Centre (HDRC), Bamenda)

Bame made a presentation on "Researching the Agency of Africa's Young Citizens." He focused on the scientific tools needed to conduct research on the behavioral capacity of young Africans and disseminate the research outcomes. He looked at the issues, challenges and prospects of studying African children. He posed questions such as, "Can Africa's young citizens make independent decisions?" "Do African children have agency?" He emphasized the importance of paying attention to the functioning of African children in the various African contexts, for example taking care of themselves and their siblings without the supervision of an adult. The thrust of the paper was that African scholars must engage in more



Group photograph of participants and resource persons.

research and in ask questions that are pertinent to Africa. He believes that this will reduce the importation of research and the generalization of research findings that are irrelevant to the African context. He stressed the importance of supporting African scholars to develop concepts, constructs, theories, methodologies, models, measures, and ways of disseminating any new knowledge.

Bettina Lamm

(University of Osnabruck, Germany)

Bettina presented a paper on strategies for studying infants and young children in a laboratory setting, illustrated by research carried out in both Cameroon and Germany. The focus of her presentation was ethnocentrism in infant research strategies. She drew attention to the fact that research methods cannot be easily exported from one context to another and that in order to understand the processes involved in infant development, it is necessary that research be conducted in different cultural contexts. She coached the young researchers on how to set up and run a laboratory for studying infants and young children. She described the tools and other requirements needed for building a baby laboratory, including baby cots, cameras, computers, a conducive room, and electricity.

Julie Robinson

Julie presented two papers, one on developing skills for preparing winning posters at conferences, and another on

theoretical approaches to the study of development and wellbeing along with intervention strategies to foster resilience in children and adolescents facing adversity. In the first paper she highlighted the importance of developing poster presentation skills because it is one of the skills expected in a research portfolio. She identified reasons for making poster presentations at conferences, including peer networking, Ph.D. scholarships, post-doc fellowships, opportunities to identify and recruit persons to study with, getting examiners for Ph.D. work, and employment. She stated that effective poster presentation includes using very bold titles, making one's poster visually attractive and captivating so that it can beckon to the audience, and making use of graphs. The focus of her second presentation was the assessment of research on resilience and adaptation in children in special circumstances of adversity. She focused on the measurement of adversity as a construct, as well as positive adaptation strategies for adolescents. She emphasized the importance of "high stakes academic assessment quality" in working with mental health cases and street children.

Paul Oburu

(Maseno University, Kenya)

Paul's presentation was on "Rethinking the Relevance of Human Development and Research Programs in Africa." He focused on the need for a paradigm shift that will incorporate African content and identity into human development and research programs in Africa. He pointed out



Photograph of some of the participants with the workshop convener.

that there is a need for more Afrocentric materials in terms of books, programs, and research agendas. He emphasized the idea that human behavior and development should be studied across nations, countries and cultures. He underscored the importance of methodology by saying that the quantitative approach is a fundamental method of research which can, however, be combined with qualitative methods to give a comprehensive view of the research. He emphasized the fact that it is often more scholarly to present a qualitative view and then bring in the quantitative aspect to arrive at a holistic view of the subject of study.

Robert Serpell

(University of Zambia)

Robert gave a presentation on "Constructive Strategies for the Enhancement of Capacity for Developmental Research in Africa." The focus of this presentation was international cooperation in research designs of African graduate students' research projects. According to him, not only data is needed to strengthen Africa's contribution to child development. More importantly, he said, more voices have to be brought in, and the factors that can contribute to this increase are mentoring, accountability, and knowledge accumulation. He pointed out that the focus should first be on the selection and development of appropriate research measures.

Nareadi Phasha

(University of South Africa)

"Research Approaches to Studying Children with Disability and Fostering Inclusion in Africa" was the title of Nareadi's presentation. She focused on the strategies that can be adopted when studying children with disability, and

enumerated the challenges that accompany such research and what can be done to overcome such challenges.

Therese Tchombe

(University of Buea & Centre for Research in Child & Family Development & Education), **and**

Bame Nsamenang

(Head, University Cooperation Division, University of Bamenda & Director, Human Development Resource Centre (HDRC), Bamenda)

A talk on discovering what editors look for in a manuscript such that it merits publication in an international journal was jointly presented by Therese and Bame. They emphasized the idea that a journal is not just a periodical but a scientific publication. The articles must be reviewed before publication in order to determine (and possibly upgrade) the quality of the work. They noted that two or three different opinions are usually required and that there is a clear distinction between academic report writing and a writing proposal. They placed a strong emphasis on situating one's article in the literature and developing good scientific writing skills. They pointed out that working in groups to identify scientific writing problems can enhance networking and should be a continuous process.

The ISSBD business meeting held on November 30th and chaired by Bame Nsamenang resolved as follows:

1. We are greatly indebted to ISSBD for its continuous support of Africa Region workshops and the development of human development as a discipline pursued by early career scholars on the continent.
2. The host country of the 10th Africa Regional ISSBD workshop shall be South Africa. The host institution



- shall be the University of South Africa (UNISA) in Pretoria, South Africa. The person to whom to submit a proposal for ISSBD executive council consideration is Professor Nareadi Phasha.
3. That the ISSBD and its partners should give serious thought to instituting an African type of "Summer School" to begin to more systematically cumulate a "critical mass" of African scholars in human development science in a context-relevant and more cost-effective way, given the high cost of travel to and from Africa. African resource persons and facilitators and "the School" participants will see themselves as frontline participants in capacity building.
 4. That a journal be established to give visibility to research and publication by emerging African scholars.
 5. That the organizers of the Lagos Workshop should endeavor to publish the proceedings of the Workshop.
 6. That henceforth, we present ARAP (African Research Advisory Panel) as a "Standing Committee" of the ISSBD Africa Region International Workshop Series. This Committee will locate appropriate institutions for the training and enhancement of human development scientists in each of Africa's five (5) major regions, which are Central, East, North, South and West Africa.

After the workshop some participants visited the national museum and a beach resort before heading home.

News

News from the IJBD Editor

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At this time I would like to draw your attention to two issues of the *International Journal of Behavioral Development*.

First, in the tradition of publishing special issues at least once a year, the issue of March 2013 was fully devoted to the topic of the development of face processing. Special issue editors Oliver Pascalis (also one of *IJBD*'s associate editors), Paul C. Quin, and Kang Lee assembled 16 empirical papers on this topic. In combination, these papers lead to a fascinating overview of research on the development of face processing, with new evidence on multi-modal contributions, scanning, and recognition. As editor, I am proud that *IJBD* can contribute to this field, and am sure that it offers very interesting reading to our readers. And remember: proposals for special issues (or shorter special sections) are always welcome. If you have specific ideas or plans, don't hesitate to contact me.

Second is the issue that you have received together with this Bulletin, the May issue of the *International Journal of Behavioral Development*. In this issue, papers address various diverse topics concerning behavioral development, ranging from children's self-presentations in self-drawings, through the study of life stories, moral attributions, to modifying ethnic attitudes in young children. Combined with a Method & Measures paper on different types of sensation seeking, this May issue again shows the breadth of the topics and age groups that we try to cover in *IJBD*.

Please enjoy reading!



BOOK REVIEW

BOOK REVIEW

T. S. Saraswathi

Formerly Professor in Human Development
at the M.S. University of Baroda, India

Shwalb, D.B., Shwalb, B.J., and Lamb, M.E. (Eds.), 2013. *Fathers in cultural context*.
New York: Routledge.

During my evening walks in a gated community housing complex in Bangalore, India, I have the opportunity to observe fathers and mothers interact with their infants and young children. I am impressed with fathers talking to their infants while pushing the pram or teaching a child to ride their bicycle. I often go up to them to express a word of appreciation. Peeved mothers' comments as to why I should compliment the fathers but take the mothers for granted shows that I am a creature of my cultural background! In my generation and even the next, such interactions between fathers and infants and even young children, would be a rare occurrence. The fathers I observe are of the present generation, IT professionals who have traveled abroad, have working wives and a small nuclear family. What is noteworthy also is the presence of a fairly large number of grandparents taking the baby or child for a stroll and playing with them (something the grandfathers confess they never did with their own children when they were young). Yet they have separate living arrangements even though in close proximity to their sons or daughters. An interesting sociological experiment in progress!

The present volume on the fathers in varied cultural contexts provides a panoramic view of fathering, fatherhood, and fathers' involvement with their children across cultures in major regions of the world. Each chapter stands complete in itself and the studies are primarily cultural rather than cross-cultural in nature. However, the provision of a broadly common outline facilitates cultural comparisons and is user friendly.

The editors "pre-empted" my thematic summary for the review by highlighting wide intra-cultural variations; observed changes due to global communication (travel, media); dearth of focused studies in almost all non western countries in contrast with abundant literature from the USA, UK, and the Scandinavian countries; marked social class differences

within cultures; and constraints imposed by the market economy and the labor market that separate fathers from their families.

I found the chapter by Hillary Fouts on fathering in Central and West Africa particularly absorbing. The chapter clearly highlights the significance of anthropological and ethnographic studies in understanding the eco-cultural variables that shape fathers' roles. One recalls Jerome Bruner's oft-cited lament that both psychology and anthropology have been left poorer by the absence of an active interface in methodology and theorizing (See Bruner, 1996; Mattingly, 2008) in both disciplines. The loss perhaps is greater in the case of psychology except for cultural psychology which draws from anthropology.

The chapters by Fouts and by Townsend on Africa and the one on the Caribbean by Roopnarine draw attention to Cole's comprehensive model of a cultural approach to ontogeny cutting across geological time, phylogeny, history (culture), ontogeny of the parent, ontogeny of the child and micro genesis. The model serves to conceptually integrate evolutionary, socio-historical (cultural), and family/individual history in understanding parenting (See Cole, 1996, p.185).

The chapters by Townsend and Roopnarine portray poignantly the irremediably disastrous consequences of colonization and exploitation. This should indeed be a burden on the white man's conscience. (I remember how some of my cross-cultural friends who had worked in South Africa broke down and wept in sheer relief when apartheid was lifted and Nelson Mandela was freed.) It takes centuries to rebuild family cohesiveness in these cultures. I could not help but reflect that ancient civilizations like India and China were able to retain the stability of the family tradition despite colonization (though the Chinese family did suffer the repercussions of the internal cultural revolution).

The editors are right in pointing out that there is a need for systematically planned studies to tease out

the role of cultural differences when un-packing the contributions of ecological factors, social class variables, and the nature of employment. The anthropological studies provide a refreshing change in examining eco-cultural factors that influence fathers' roles and involvement. Ethnographic accounts from different cultures alone can enrich our understanding of the role of eco-cultural factors and address the contributions of evolutionary, socio-historical, political and cultural factors in what is seen as the fathers' role in contemporary societies.

The agenda for research outlined by the editors in the closing chapter calls for well planned, theory-based cross-cultural and interdisciplinary studies. This is a significant contribution as is the entire collection of carefully assembled 14 chapters. Looking at the wealth of materials displayed (despite the absence of a critical mass of data from many cultures), one is tempted to speculate about possible meta-analyses based on the findings of the available studies. A range of variation in existing cultures in terms of high quality of life, good governance, fairly homogenous population, high levels of education and employment, and state support for parenting at one end contrasts with low human development index, unstable governments, heterogeneous population composition, low levels of education and employment and near absence of state support at the other extreme, and provide immense possibilities for examining variations in fathers' roles resulting from interactions among the variables.

Finally, a word about planned interventions to promote fathers' involvement. A systematic study of the impact of intervention with fathers in Turkey (where traditionally fathers have little interaction with their young children), shows that such an experiment is clearly supportive (Dogruoz and Rogow, 2009). Also see studies in other cultures in the same volume published by The Population Council). However, we need to first understand the cultural narratives regarding fathers' roles. In a culture where the father is seen as a visitor (as among

the Nayars of Kerala) and the maternal uncle is the custodian of his sisters' children, the cultural narrative is bound to be different from that of a nuclear family bound by marriage. Similarly, in societies where fathers have always been absent because they leave their homes to work, earn and support their families, the narrative is one of a caring father who sacrifices his comfort for the sake of the children. The influence of father absence in these and similar instances will undoubtedly be different from that of father absence due to desertion and divorce. We need to comprehend how cultures make meaning of their life situations (see Bruner, 1986, *Actual minds, possible worlds*).

In conclusion, let me commend the editors of the present volume for succeeding in their Himalayan task of providing a panoramic view of fathers' roles in different regions of the world. As an interested reader, I must state that this is one of the few books of readings in the field that enthralls the reader to go through the entire volume instead of choosing only a few chapters of specific interest. In fact, the reader's interest is sustained by wanting to "discover" what happens to fathers in other cultures, and to make cross-cultural comparisons on one's own. Kudos for a well timed and useful contribution to the field.

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MAJOR CONFERENCES OF INTEREST

June 11–13, 2013

10th World Congress of the International Association for Adolescent Health

Location: Istanbul, Turkey

Website: www.iaah2013.org

July 31–August 4, 2013

121st Annual Convention of the American Psychological Association

Location: Honolulu, Hawaii, USA

Website: <http://www.apa.org/convention>

September 3–7, 2013

ISSBD Regional Workshop

Location: Budapest, Hungary

Website: www.issbd2013budapest.com/

October 1–4, 2013

16th International Congress of the International Psychogeriatric Association

Location: Seoul, Republic of Korea

Website: www.ipa2013.com

July 9–12, 2013

13th European Congress of Psychology

Location: Stockholm, Sweden

Website: <http://www.ecp2013.se>

September 3–7, 2013

16th European Conference on Developmental Psychology

Location: Lausanne, Switzerland

Website: <http://www3.unil.ch/wpmu/ecdp2013/>

September 25–27, 2013

10th ISSBD African Regional Workshop

Location: Pretoria, South Africa

Website: www.unisa.ac.za

November 3–5, 2013

8th Biennial Meeting of the Society for the Study of Human Development

Location: Fort Lauderdale, USA

Website: www.sshdonline.org