A growing body of literature has focused on variables relevant for optimal cognitive, emotional, and behavioral development of children. One important factor accounting for this link is parenting and interaction behavior. Over the last 20 years, the concept of parental bonding in the postpartum period has come into focus. Bonding is described as the emotional tie from a mother to her newborn child [1] and includes behaviors such as proximity seeking, touch, contact, gaze, baby talk, positive expression, cuddling, and smiling [2] as well as cognitive-emotional variables such as positive feelings, emotional warmth, and affection [1]. Bonding develops gradually after birth, ensures protection and nurture of the newborn, is highly relevant for establishing the mother-infant relationship [3], and directly affects the way a parent interacts with the child. As a child’s environment and socialization seem to play a crucial role in the development of his/her cognitive, emotional, and behavioral development, it can be assumed that satisfying interactional processes exerts a positive influence on a child’s development. In the so-called mutual regulation model [4], interaction is regarded as a continuous moment-to-moment process, in which each partner adjusts to the behavior of the other [5]. The behavior of one partner during the interaction can be predicted by the behavior of the other in both positive and negative affective states. The ability of the caregiver-infant dyad to change in a flexible process between affective interactive ‘matches’ (coordinated behavior and affective states) and ‘mismatches’ (uncoordinated behavior and affective states) is of essential importance. The experience that negative affective states can successfully and reliably be transformed into positive states (‘interactive repair’) results in a sense of self-efficacy in infants and helps them to learn effective interactive strategies for affect regulation [4]. Studies identified these interactive processes as pivotal aspects of interactive regulation which exert influences on the socio-emotional and cognitive development of infants [6].

One factor which has been negatively associated with child development, bonding capacities, parenting, and interaction behavior is impaired mental health of the caregiver, especially if the mother is affected. Depression and anxiety disorders are among the most common psychiatric disorders and often affect women during the postpartum period. For Germany, prevalence rates of 6% for postpartum depression and 11% for postpartum anxiety disorders have been reported [7]. Maternal mental health is considered to affect child development in two ways: (1) a long-lasting negative impact of maternal men-
tial health disorders on child development has been re-
ported \[8\] and (2) an elevated risk of transmission for the
offspring of parents with these diagnoses has been found
\[9, 10\]. Nevertheless, the status of research about risk fac-
tors for child development is that negative developmental
outcomes do not solely depend on maternal psychiatric
disorders but rather that the quality of interaction be-
tween mother and child is an important pathway for in-
tergenerational transmission. Early life adversities in
mothers have recently been discussed to be another se-
vere risk factor for unfavorable child development, result-
ing in the intergenerational transmission of sequelae of
trauma from mothers to offspring \[11\]. Most strikingly,
an estimated 20–30% of abused children are likely to be-
come abusive parents themselves.

To sum up, we can conclude that the quality of parent-
ing behavior seems to be a risk factor for adverse child
outcome. Interaction with a social partner plays an essen-
tial role in child development, and we assume that satisfy-
ing interactional processes exert a positive influence for
child development. There are strong indications that the
ability for supportive interaction with the child might be
hampered in mothers with impaired bonding, negative
parenting behavior, psychiatric disorders, or early life
maltreatment in the own childhood.

This special issue is dedicated to the significant issue
of the mutual influence of interpersonal experiences ear-
ly in life and mental health later in life, which has also
been focused on by several large funding initiatives dur-
ing the last years (e.g. the National Institute of Health,
NIH, or the Federal Ministry of Research and Education,
BMBF, Germany). The main aim is to offer an updated
survey of contemporary research on the impacts of suc-
cessful bonding \[Pena and Arias, pp. 217–227\] as well as
troubled rearing conditions \[Brockington, pp. 247–260;
Taubner et al., pp. 236–246; Bozicevic et al., pp. 228–235\]
that may be associated with the psychopathology of the
mother \[Fuchs et al., pp. 211–216; Reck et al., pp. 277–
284; Riva Crugnola et al., pp. 285–294; Müller et al., pp.
295–304\] and/or early life maltreatment \[Matas et al., pp.
201–210; Hillmann et al., pp. 261–268; Behrendt et al., pp.
269–276; Morelen et al., pp. 305–314\]. The articles of this
issue will shed new light on behavioral and biological
mechanisms of healthy development as against sequelae of
early life stress. We hope that important aspects for
early prevention and mother-infant interventions will be
derived from the special topics of the single papers. The
findings suggest that mother-infant-centered interven-
tion in the field of postpartum mental disorders, impaired
bonding, and nonsupportive mother-child interaction
should, besides the treatment of maternal mental health
problems, focus on the improvement of the quality of in-
teraction and the ability for interactive coordination and
repair as well as on maternal interaction behavior. Ad-
ressing these issues in intervention and early prevention
programs should have a positive effect on early develop-
ment through the consolidation of a supportive mother-
child interaction.

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