Child temperament and mother’s personality as a predictors of maternal relation to child

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Abstract

This article investigates the role of child temperament and mother’s personality in maternal relation to child. Basing on theoretical ideas and empirical evidences we proposed that parental personality is associated with parenting directly but this association also interacts with child temperament. Mother’s (N=110) completed EPI to assess extraversion and neuroticism. Mother’s relation to child was assessed with the Parent-child interaction questionnaire on five subscales: Positive relation to child, Control, Mildness, Consistency and Confidence. Child temperament was rated by mothers using the Carey Temperament Questionnaire. According to the results obtained a mother’s neuroticism and extraversion don’t predict the relation to child. Child temperament plays a more important role: Adaptability and Quality of mood are predictors for most mother’s relations to child characteristics. Together Threshold of responsiveness and Distractibility predict mother’s Control. Results of this study are generally consistent with those outlining the influence of infant temperament on parent relation to child.

Keywords: Child temperament; Parent personality; Relation to child.

1. Introduction

The present study aims to evaluate the role of individual child characteristics, namely temperament, which may contribute to the relationship between mother and child. Temperament is defined as inherent individual differences in self-regulation or in attentional, emotional, and motor reactivity [1] and, according to Thomas and Chess [2] expresses itself in behavioral responses across contexts. Researchers have identified a wide range of temperament dimensions, the most attention being given to the construct of “difficult” temperament. Children who withdraw from situations by demonstrate slow adaptability; manifesting high negative affect (e.g., fear, anger), high intensity of response, and dysrhythmicity (i.e., irregularity in biological functions) are characterized as possessing a difficult temperament, whereas children without these characteristics are characterized as having an easy temperament [2, 3]. According to some researchers, difficult temperament is more likely to elicit lower quality parenting from mothers [e.g., 4].

Belsky’s [5] process model, along with others [e.g., 6], suggests that child temperament may play an important role in dictating parental behavior. In general, empirical work has found that interactions between temperament

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and aspects of the child or parent's social environment are most predictive of developmental outcomes [3, 7, 8, 9].

Parenting is considered to be determined by three factors, namely parental personality, the child’s individual characteristics, and contextual sources of stress and support. Parental personality is the most important determinant of parenting among others [10]. The last three decades have seen many associations found between personality and parenting of children [11, 12, 13, 14]. These studies examined the direct link between parental personality and parenting. So it was established that Neuroticism was negatively associated with parental negative control, whereas openness to experience, agreeableness and conscientiousness were positively correlated with positive control. Besides, extraversion was associated with negative control, on the one hand, [e.g., 4], and in contrast with more warmth and supportive behavior, on the other [e.g., 15].

Based on Belsky’s model we can propose that parental personality is associated with parenting directly but this association also interacts with such child characteristics as temperament. While parent's personality predisposes parents to certain behaviors, outcomes are dependent on many factors, including the child's temperament. In other words, certain child temperament moderates the relationship between mother's personality and her relation with her child. Therefore, in the present study we examined how the personality of the mothers and the temperament of their child contribute to their relationship.

2. Methods

Participants.

The subjects for this study were 170 mothers aged 22-51 (M = 35.10; SD = 6.53) 82% were married, 55% had higher education. All of them live in the city of Perm. All mothers have one child aged 5-7 years (M = 5.41; SD = .58), all of the children attend kindergarten, 51% are boys. The questionnaires were administered at one of the monthly parent meetings. The participants were informed of the nature of the study and completed the questionnaires (in the order indicated below) and provided their demographic details. After completion, the participants were debriefed and thanked.

Measures.

Child temperament. Mothers rated infant temperament using the Carey Temperament Questionnaire [16]. This instrument is based on the conceptualization of temperament developed by Thomas, and Chess [2]. It consists of 95 items that describe specific infant behaviors. Each item is rated by the mother on a 6-point scale ranging from "almost never" (1) to "almost always" (6), describing the frequency with which the particular behavior is exhibited by her child. These items are then summed to obtain a score for the infant on each of the following nine temperamental dimensions: Activity, Rhythmicity, Approach-withdrawal, Adaptability, Intensity of reaction, Quality of mood, Attention span and persistence, Distractibility and Threshold of responsiveness. The internal consistencies of the subscales vary from $\alpha = .60$ for Adaptability to $\alpha = .82$ for Approach-withdrawal. Temperament dimensions scores range from 0 to 6, lower values refer to positive characteristics of temperament (ex. Adaptivity = 2 — means easy adaptation of child to a new situation).

Mother’s personality. Mothers completed the Eysenck Personality Inventory [17], which consisted of 24 items designed to measure extraversion and 24 items designed to measure neuroticism. Extraversion encompasses lower order traits such as sociability, assertiveness, liveliness, and optimism. The Neuroticism scale includes characteristics such as anxiety, depression, guilt, shyness, moodiness, and emotionality. Alphas for the Neuroticism and extraversion scales were .71 and .78 respectively.

Relation to child. Mother’s relation to child was assessed with the “Parent-child interaction” questionnaire developed by Markovskaya I.M. [18]. The instrument consists of 60 items to be answered on a 5-point scale and are scored on five subscales: Positive relation to child ($\alpha = .60$), Control ($\alpha = .62$), Mildness ($\alpha = .40$), Consistency ($\alpha = .66$) and Confidence ($\alpha = .65$). The subscale scores range from 0 to 5. Positive relation to child is characterized the degree of parental satisfaction with the relationship and the level of child acceptance. Control (as opposed to Autonomy) reflects the view of parents about the extent of their intervention in the child's life, the need to control his actions and deeds. Mildness reflects the parental desire to protect the child from unpleasant moments in life, the ability to forgive the parent of the child. Consistency describes how the behavior of a parent is constant towards the child and the consistency of requirements to the child. Confidence reflects the level of trust that exists between parent and child, the degree of involvement of parents in a child's life, their openness to the problems and needs of the child.
3. Results and discussion

Preliminary analysis
To examine the role of demographic characteristics: mother’s age, child’s age and child sex the regression analysis was performed. Only one significant case was found, Child’s age revealed as a significant predictor ($\beta=-.15$, $p<.05$) for mother’s Mildness ($R^2=.23; F(1, 168)=4.01, p < .05$).

We detected one sex difference ($t(168)=2.48, p < .01; \text{Cohen's } d = .38$) for child temperament traits. Boys ($M = 3.91, \text{SD} = .61$) demonstrate more Distractibility than girls ($M = 3.67, \text{SD} = .64$). Based on reported sex differences we tested whether sex differences in Distractibility were mediated by individual differences in maternal relation characteristics. Mother’s Control mediated the relationship between sex and Distractibility ($DA^2R^2=.08, F(2, 167) = 7.23, p < .001$), as the direct path ($\beta = -.18, \ t = -2.48, p < .01$), remained significant when the Control was added ($\beta = .21, \ t = 2.85, p < .01$).

Correlations
We examined the associations of mother’s personality with relation to child and child temperament characteristics. Table 1 shows the correlations among the variables.

Positive relation, Mildness, Consistency and Control were correlated with Adaptability at the zero-order. The same associations were also found in the Quality of mood. Positive relations also correlate with Rhythmity and Attention span and persistence at the zero-order. Confidence correlates at the zero-order with Attention span and persistence. Control with Distractibility and Threshold of responsiveness is at the zero-order. However, when we controlled for shared variance among the child’s temperament characteristics with standard multiple regression, Quality of mood ($\beta = .29, p < .05$) and Attention span and persistence ($\beta = -.28, p < .05$) remained as significant predictor for maternal Mildness.

Next we correlate the Maternal relation to child and mother’s personality traits, for reportorial economy we only report the significant effects here. At the zero-order level Control negatively correlates with Extraversion ($r(170) = -18, p < .05$). When we controlled for shared variance among the personality traits with standard multiple regression this association remained ($\beta = -.31, \ p < .001$). Correlations among the child temperament traits ranged from -.19 to .67, with a median r of .29.

Table 1. Correlations of maternal personality, child temperament, and maternal relation to child ($N=170$)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Maternal relation to child</th>
<th>Maternal relation to child</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Positive relation</td>
<td>Control</td>
</tr>
<tr>
<td>Extraversion</td>
<td>11.39</td>
<td>4.31</td>
<td>-.11</td>
<td>-.182*</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>11.70</td>
<td>4.74</td>
<td>-.13</td>
<td>-.051</td>
</tr>
<tr>
<td>Activity</td>
<td>3.36</td>
<td>0.63</td>
<td>-.121</td>
<td>.034</td>
</tr>
<tr>
<td>Rhythmity</td>
<td>3.18</td>
<td>0.56</td>
<td>-.241**</td>
<td>.020</td>
</tr>
<tr>
<td>Approach-withdrawal</td>
<td>2.97</td>
<td>0.77</td>
<td>-.069</td>
<td>-.049</td>
</tr>
<tr>
<td>Adaptability</td>
<td>3.29</td>
<td>0.45</td>
<td>-.213**</td>
<td>.059</td>
</tr>
<tr>
<td>Intensity of reaction</td>
<td>3.57</td>
<td>0.58</td>
<td>-.019</td>
<td>.107</td>
</tr>
<tr>
<td>Quality of mood</td>
<td>3.14</td>
<td>0.53</td>
<td>-.180*</td>
<td>.101</td>
</tr>
<tr>
<td>Attention span and persistence</td>
<td>3.21</td>
<td>0.64</td>
<td>-.256**</td>
<td>.010</td>
</tr>
<tr>
<td>Distractibility</td>
<td>3.80</td>
<td>0.63</td>
<td>-.111</td>
<td>.204**</td>
</tr>
<tr>
<td>Threshold of responsiveness</td>
<td>3.76</td>
<td>0.61</td>
<td>.049</td>
<td>-.215**</td>
</tr>
</tbody>
</table>

*p<.05, **< .01.

Multiple Regressions Results

Regressions were performed, each for one of maternal relation to child variables. First, maternal personality traits (neuroticism, extraversion) were entered at Step 1. Second, child’s temperament traits were entered at Step 2.

Shared variance of mother’s personality and child temperament traits accounted for not more than 10% of maternal relation to child characteristics. Maternal neuroticism and extraversion produced insignificant effects, except the effect which is close to significant ($p=.057$) for Extraversion to Positive relation. For all maternal relation to child characteristics the child temperament traits acted as a predictor. Different child temperament characteristics predict maternal relation to child: Attention span and persistence ($\beta \text{ Positive relation } = -.26, \ t = 3.44, p$
< .001; \beta \text{Confidence} = -\.20, t = 2.67, p < .01) predict Positive relation (\Delta R^2 = .09, F (2, 167) = 5.60; p < .01) and Confidence (\Delta R^2 = .05, F (3, 166) = 3.37; p < .01). Adaptability (\beta = .19, t = 2.35, p < .05) predict Mildness (\Delta R^2 = .04, F (3, 166); = 2.18; p < .05). Together Threshold of responsiveness (\beta = .15, t = 2.80, p < .05) and Distractibility (\beta = .16, t = 2.01, p < .05) predict mother’s Control (\Delta R^2 = .09, F (3, 166); = 4.27; p < .01). Unfortunately, no mediation effect was found.

Our findings complement the research on both individual differences and child development. Specifically, this study aimed to examine the degree to which child temperament alone and in interaction with maternal personality, predicts aspects of parenting relevant to early childhood socialization.

It was somewhat surprising, and in contrast to past work [19], that maternal extraversion has negative association with control parenting behavior. As an example, Kochanska et al. [19] reported a finding that a facet of extraversion (i.e., sociability-affiliation) was associated with power assertion. Perhaps the low degree of engagement that is characteristic of extraversion contributes to more dominant, controlling behavior in contexts associated with discipline and prohibition. Alternatively, mother’s high in extraversion may be less assertive in pursuing disciplinary goals. In the future, it will be worthwhile to examine the differential impact of the specific aspects of extraversion on parenting, which will require a more differentiated measure of extraversion than that used in this study. Maternal personality has no main effects on parenting, and its interactions with child temperament showed that personality traits do not contribute significantly to the prediction of relation to her child. These facts are contradictory to contemporary socialization theories [20]. How mothers respond to their children depends in part on their own personalities and in part on their children’s emotionality.

One clear implication of these results is that child temperament is a dimension of mother’s relation to her child. Child temperament traits were able to account for not more than 10% of the variance in mother’s relations scores. Despite that we may conclude that two of the difficult temperament indicators (Adaptability and Quality of mood) have associations with most of mothers’ relations to child characteristics. Children’s low threshold of responsiveness and high distractibility make mothers devote more effort to control their child. These characteristics demonstrate specific reactions to the new and strong external impact that force their mother to exercise more control over her child’s actions and deeds. In the current study boys are more distractible than girls but a mother’s controlling behavior mediates this relation. In our judgment, mothers of distractible boys tend to regulate and correct their child’s behavior more frequently.

A child who is unable to easily change their behavior makes its mother use less punishment and demonstrate more agreement with child’s behavior and greater mildness. High children’s attention span and persistence play a positive role for the mother’s parental behavior and demonstrate more parental satisfaction with the relationship and acceptance as well as their high level of involvement and openness.

4. Conclusion

In this study we tried to examine the role of mother’s personality and child’s temperament and its interaction in the mother’s relation to her child.

Mother’s neuroticism doesn’t associate with her relation to her child. Mother’s extraversion associates with control behavior. Together mother’s neuroticism and extraversion don’t predict mother relation to child. At the same time we found that child temperament plays a more important role in parent’s relation to child.

Child temperament traits predict mother’s relation in less than 10% of cases. Adaptability and Quality of mood are predictors for all mother’s relations to child characteristics, except Control. At the same time, distractible boys cause more controlling reactions in mothers. These facts support the findings [ex. 4] that difficult temperament makes parents more consistent, colder and less satisfied with their relation to their child. It also supports the idea of Belsky’s process model about the impact of child temperament on its relation with parents.

In summary, the results of our study make a contribution to the existing literature by identifying relationships between paternal personality, child temperament and parenting. The results of this study are generally consistent with those outlining the influence of infant temperament on parent relation to child.

This project overcomes several limitations of the past research. First, parenting behavior and child temperament were assessed with self-report rather than with observational methods. Second, personality assessment was broad, including only a measure of extraversion and neuroticism.

References


