The Influence of Maternal Well-Being on Later Infant Affective Expression
Katherine L. Guyon, B.A., Alissa C. Huth-Bocks, Ph.D., Erin Gallagher, M.S.
Eastern Michigan University

INTRODUCTION
Maternal depression in the early years of a child’s life may adversely affect the development of infant emotion regulation and affective expression which can have deleterious effects on child development (Paul-Pott et al., 2003). Infants learn how to regulate and express their emotions from the affective messages they receive from their mothers, and research has shown that depressed mothers tend to show more withdrawn and sad facial expressions (O’Hara, 2009). Additionally, maternal self-efficacy has been found to be inversely related to infant distress, such that higher levels of infant distress were associated with lower levels of maternal self-efficacy (Leerkes & Crockenberg, 2002).

Research Aim:
To explore the relationship between maternal well-being (postpartum depression and maternal self-efficacy), and later infant affective expression, as well as the role of social support in these relationships.

METHOD
Participants
• 120 women followed from pregnancy through the first three years of their infants’ lives
• Mothers’ age range: 18–42, M = 26
• 47% African–American, 36% Caucasian, 13% Biracial, 4% Other
• 64% single/never married, 28% married, 4% divorced, 4% separated
• 20% had a high school diploma or less, 44% some college, 36% college degree
• Median monthly household income = $1500
• 88% receive services from WIC, and 90% have public health insurance

Procedures
Pregnant women were recruited through the posting of flyers in pregnancy agencies and area community organizations. The first interview took place during the third trimester of pregnancy (T1), with subsequent interviews at 3-months postpartum (T2), 1-year postpartum (T3), and 2-years postpartum (T4). The present study utilized data from the second and third waves of data collection.

RESULTS
A series of multiple regression analyses were performed in order to examine the relationship between maternal well-being at T2 and infant affective expression at T3.

Maternal total self-efficacy was not found to predict later infant affective expression, however, two of the 5 subscales were found to be significant predictors of infant affect and shared affective valence in the mother-infant dyad. Maternal self-efficacy concerning pregnancy, labor, and delivery experiences, predicted more positive infant affective expression and less shared neutral affective valence. Furthermore, maternal self-efficacy concerning a woman’s self-reported general ability and preparedness for the母亲 role predicted less shared negative affective valence. Bivariate correlations are presented in Table 2.

Table 3
Main Effects in the prediction of Infant affective expression

<table>
<thead>
<tr>
<th>Predictor</th>
<th>β (T3 Depression)</th>
<th>p (T3 Depression)</th>
<th>β (T3 Positive Affect)</th>
<th>p (T3 Positive Affect)</th>
<th>β (T3 Negative Affect)</th>
<th>p (T3 Negative Affect)</th>
<th>β (T3 Neutral Affect)</th>
<th>p (T3 Neutral Affect)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal Self-efficacy</td>
<td>.02</td>
<td>.66</td>
<td>.15</td>
<td>.12</td>
<td>.10</td>
<td>.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal Depression</td>
<td>.04</td>
<td>.64</td>
<td>.04</td>
<td>.64</td>
<td>.04</td>
<td>.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal Depression</td>
<td>.01</td>
<td>.64</td>
<td>.01</td>
<td>.64</td>
<td>.01</td>
<td>.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal Depression</td>
<td>.00</td>
<td>.64</td>
<td>.00</td>
<td>.64</td>
<td>.00</td>
<td>.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal Depression</td>
<td>.00</td>
<td>.64</td>
<td>.00</td>
<td>.64</td>
<td>.00</td>
<td>.64</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DISCUSSION
• Results suggest that a mother’s postpartum well-being, especially her current rather than past mood states as well as her current level of social support, has an important impact on her infant’s expression of affect.
• Results highlight the importance of proximal mood states to the development of infant affective expression.
• Similarly, findings indicated a trend toward depression at T2 predicting greater shared negative affect in the dyad. This trend suggests that maternal depression 3-months postpartum may be an early risk factor in the development of infant affective expression. This is especially concerning due to the significant correlation between T2 and T3 depression (r = .35, p < .001) which suggests many women who were depressed at T2 were still depressed at T3.

• The mother’s perceived level of social support was not found to moderate the relation between maternal depression at T2 and infant negative affective expression as hypothesized. These results could be explained by the fact that the items of social support with childcare responsibilities reflected more functional support.

• Perhaps emotional support is more important than functional support when it comes to buffering the effects of maternal depression on infant affective expression. It was thought that having high levels of social support would allow the infant to be exposed to individuals other than their mother, and therefore give them a chance to experience affect with a variety of individuals. However, some supporters may provide the child less healthy affective models.

Limitations:
• Self-report data may reflect response biases.
• The T2 interview was done over the phone whereas the T3 interview was done in person.

Implications:
• Results highlight the need for early intervention and supportive care for mothers who present with depression and low maternal self-efficacy after pregnancy.
• Results add to our understanding of the effects of maternal well-being at different points in a child’s life on infant emotional development.
• Future studies might utilize longitudinal data to analyze trajectories of maternal well-being in order to capture a more detailed view of the effects of maternal well-being at different points of a mother’s life on the development of her infant’s affective expression.