
Amy Encinger and Helen Raikes
Department of Child, Youth, and Family Studies, University of Nebraska—Lincoln

Background

Childhood obesity is a significant public health concern that can impact the quality of a child’s life with effects continuing throughout adulthood (Must &人为引用, 1990; Neumark-Sztainer, et al., 2013). Breastfeeding duration has been associated with child weight status (Díaz-Granados, 1999; Hodges, & Fisher, 2013). Inverse dose-response association between breastfeeding duration and obesity obesity (Hadar & et al., 2009; Adams, Hodges, & Fisher, 2012). Breastfeeding duration has been associated with child satiety at 18 to 24 months and with higher fruit and vegetable intake in preschool children (Brown & Lee, 2012; de Lourdes Godinho et al., 2013).

Children’s eating behaviors have been found to contribute to weight status and some may also be potential risk factors for childhood obesity (Laukens et al., 2008). Obese children have been found to have decreased satiety responsiveness and increased food responsiveness (Laukens et al., 2010; Morse, & Brewer, 2011; Weber et al., 2009). Satiety responsiveness refers to the internal feeling of fullness and sense of satisfaction after eating (Wardle et al., 2003). Food responsiveness refers to children’s general appetite and desire to eat, as well as children’s external response to food cues—sight, smell, taste (Jansen et al., 2003; Weber, et al., 2009). Parental feeding practices may influence child eating behaviors and dietary intake which can influence child weight status (Haszard et al., 2015). Highly controlling parental feeding practices have been negatively associated with children’s ability to regulate intake in response to energy content of foods (Johnson & Birch, 1984).

Analysis and Results

Correlations: Pearson listwise correlations between study variables are listed in Table 1.

<table>
<thead>
<tr>
<th>Study Variables</th>
<th>SN</th>
<th>n</th>
<th>Cramer’s V</th>
<th>Mediation Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breastfeeding Duration</td>
<td>-0.16</td>
<td>p &lt; 0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child BMI Percentile</td>
<td>-0.46</td>
<td>p &lt; 0.01</td>
<td></td>
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<tr>
<td>Satiety Responsiveness</td>
<td>-0.15</td>
<td>p &lt; 0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Responsiveness</td>
<td>-0.16</td>
<td>p &lt; 0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental Control</td>
<td>-0.35</td>
<td>p &lt; 0.01</td>
<td></td>
<td></td>
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</tbody>
</table>

Results:

- Breastfeeding duration positively predicted BMI percentile (b = 0.46, p < 0.01).
- Satiety responsiveness negatively predicted BMI percentile (b = -0.15, p < 0.05).
- Food responsiveness negatively predicted BMI percentile (b = -0.16, p < 0.05).
- Parental control positively predicted BMI percentile (b = 0.35, p < 0.01).

Discussion

- Consistent with previous findings on breastfeeding duration and BMI, the current study yields support for the protective effects of breastfeeding duration and later BMI (Díaz-Granados, et al., 2012; Gelman et al., 2004; p = 0.07; Morgan & McCarron, 2010).

- Findings suggest that children who are breastfed longer are more responsive to their internal hunger and satiety cues and have a lower desire to eat.

- Indication that food responsiveness may have a unique mediating effects linking breastfeeding to child BMI in preschool-aged children.

Limitations

- Weak Chronbach’s alpha levels for parent feeding practices subscales.
- Parent report data for child eating behaviors and parental feeding practices.

Future Directions

- Explore parental feeding measures with diverse samples of low-income participants to determine if the use of the scales among such populations are valid measures of parental feeding practices.
- Implement observational components or prospective approaches that include the home environment to gain a greater understanding of the association between child eating behaviors and parental feeding practices.

References


