“To me she is perfect”: Perceptions of Body Image among Mexican Kindergarten-aged Children and their Mothers

Raha Hosseini1, Lyana Delgado2, Evelyn Zepeda2, Liliana Aguayo2, MPH, Andiara Schwingel2, PHD, Angela Wiley3, PHD

Division of Food Science and Human Nutrition, College of ACES
Department of Kinesiology and Community Health, College of Applied Health Sciences
Division of Food Science and Human Nutrition, College of ACES, University of Illinois at Urbana-Champaign

Background

In Mexico, obesity rates are continuing to increase dramatically. Mexico has the second highest obesity rates in the world, following the US (1). Approximately 71% of adults are overweight or obese (2). Among children, 31% aged 5-11 years old and 33% of aged 12-19 are overweight or obese (2). Obese children are more likely to be obese adults and develop chronic diseases such as diabetes and cardiovascular heart disease (1). In addition to the physical consequences, childhood obesity can also lead to severe psychological effects that can influence body image (3).

Poor body image can lead to disordered eating and depression (4). The limited information available regarding body image effects in Mexico, a country with increasing rates of childhood obesity prompted the topic of this study.

Aims

1. Evaluate Mexican mother and child’s satisfaction with own body image and also with that of their child or mother
2. Examine if child’s perception of mother’s body image is informed by mother’s self-perceived body image
3. Examine if the child’s body image is influenced by the mother’s perception of the child’s body image.

Methods

Participants and Procedure:
- 12 Mexican mother (≥18 yrs)-child (between 5-6 yrs) dyads took part in an interview administration questionnaire (in Spanish) at a preschool in San Luis Potosi, Mexico.
- Measurements:
  - Bioelectrical impedance analysis (BIA) assessed body composition in fasted mothers and children. Child weight-for-height percentile was calculated (ANTHRHO Software) using WHO growth references.
  - The Figure Rating Scale (FRS) evaluated body satisfaction (5) with gender-specific drawings of increasing size (thinnest to heaviest). 10 for mothers and 7 for children. Mothers selected a) the figure most resembling their own body shape or “real figure,” b) the figure they would like to have (their “ideal figure”); c) the figure most resembling their child’s “real figure;” and d) the “ideal figure” they would like their child to have. Children were asked the same questions in regards to their perceptions of their mothers and themselves.

Results

Participant Characteristics: All participants were Mexican native. Mother’s were recruited from a low SES public preschool. On average, mothers completed 9.6 years of education. Most children and mothers were overweight or obese (see Figure).

Considering mothers’ “real figure:” Children’s perceptions differed from mother’s self-perceptions ($Z = -2.582, p < 0.05$). Children’s satisfaction also differed from mother’s satisfaction ($Z=-2.199, p < 0.05$).

While all but one mother wished to lose weight, 50% of children were satisfied with their mothers figure (6/12), and 42% thought their mother needed to gain weight (5/12).

Child Figures: There were interesting patterns but no other significant differences between children’s and mother’s perceptions in this small sample (see table).

Table 1. Weight Status and Perceptions of Weight Status Among Mothers and Children

<table>
<thead>
<tr>
<th>Construct</th>
<th>Instrument</th>
<th>Mean (SD)</th>
<th>Range</th>
<th>Underweight to Obese</th>
<th>Underweight</th>
<th>Normal</th>
<th>Overweight</th>
<th>Obese</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wt Status of Mother</td>
<td>BIA</td>
<td>4.17 (1.19)</td>
<td>1-6</td>
<td>8.3</td>
<td>41.7</td>
<td>25.0</td>
<td>25.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother R Fig as Assessed by Mother*</td>
<td>FRS, P</td>
<td>2.83 (1.43)</td>
<td>1-6</td>
<td>8.3</td>
<td>41.7</td>
<td>25.0</td>
<td>25.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother Ideal Fig as Assessed by Mother</td>
<td>FRS, P</td>
<td>2.00 (0.85)</td>
<td>1-4</td>
<td>25.0</td>
<td>58.3</td>
<td>8.3</td>
<td>8.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child R Fig as Assessed by Mother</td>
<td>FRS, P</td>
<td>2.75 (0.66)</td>
<td>1-4</td>
<td>0.0</td>
<td>58.3</td>
<td>16.7</td>
<td>25.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child R Fig as Assessed by Mother</td>
<td>FRS, P</td>
<td>2.00 (0.00)</td>
<td>2-2</td>
<td>0.0</td>
<td>130.0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight Status of Child</td>
<td>BIA</td>
<td>2.83 (0.13)</td>
<td>1-6</td>
<td>8.3</td>
<td>41.7</td>
<td>25.0</td>
<td>25.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother R Fig as Assessed by Child*</td>
<td>FRS, P</td>
<td>1.75 (1.4)</td>
<td>1-6</td>
<td>58.3</td>
<td>25.0</td>
<td>0.0</td>
<td>16.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother Ideal Fig as Assessed by Child</td>
<td>FRS, P</td>
<td>2.17 (0.27)</td>
<td>1-5</td>
<td>33.3</td>
<td>41.7</td>
<td>8.3</td>
<td>16.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child R Fig as Assessed by Child</td>
<td>FRS, P</td>
<td>2.52 (0.66)</td>
<td>1-6</td>
<td>25.0</td>
<td>41.7</td>
<td>16.7</td>
<td>25.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Ideal Fig as Assessed by Child</td>
<td>FRS, P</td>
<td>2.50 (0.17)</td>
<td>1-5</td>
<td>25.0</td>
<td>25.0</td>
<td>25.0</td>
<td>0.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*<p>0.05

Recommendations

- Obesity prevention efforts need to shift their focus from weight loss centered interventions to programs that focus on limiting obesity-related health risks and promote a healthy body image.
- Efforts to raise awareness of the health risks associated with obesity should have a family approach which includes young children.
- Health care professionals need to be aware of possible weight misperceptions which may prevent mother’s from seeking treatment and following health recommendations for both their children and themselves.

Conclusion

- Although the sample was small, it reflects the nutrition transition currently underway in Mexico. In this sample, we found more than half of children were overweight or obese. This was striking given that most mothers and children were satisfied with children’s current figure, many judging children to be normal weight. When looking at the child’s “ideal” figure, all mothers wanted their child to have a normal body size compared to only 25% of the children (equally spread across body image categories).
- The children were significantly more likely to be satisfied with their mother’s figure than the mother’s themselves.

Implications

- The current high prevalence of overweight and obesity in MX may limit stigma among children, explaining their misrepresentation of their mother’s figure.
- There is a concern in mothers’ self-perception of “real figure” which although not significantly different, does not accurately match their actual weight categories, indicating the majority of overweight mothers failed to recognize their weight status. The high prevalence of overweight and obesity in the country may be precluding them from recognizing the risks associated with high BMI.
- High BMI averages make these women at risk for diabetes, hypertension, and heart conditions, while also providing a standard for their children to follow that may not be beneficial for their health.