Educating Preschoolers about Color, Texture, and Taste: Child Care Providers’ Perceptions for Engaging Children’s Senses

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Educating Preschoolers about Color, Texture, and Taste: Child Care Providers’ Perceptions for Engaging Children’s Senses

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BACKGROUND

Recommendation: Child care providers help children learn about food by engaging their senses (smell, touch, taste) such as touching and smelling new food is encouraged as a step towards tasting

- Academy of Nutrition and Dietetics benchmarks for Nutrition in Child Care (2011)
- Educate and expose children to different tastes, smells, textures (Academy, 2011)
- Knowledge gap: Providers’ perceptions
  - No studies identified child care providers’ perceptions for meeting this benchmark
  - This information is necessary for the development and successful implementation of interventions

STUDY OBJECTIVES

1. To identify child care providers’ motivators, facilitators, and barriers for engaging children’s senses to educate them about the color, texture, and taste of foods
2. To provide child care providers with feasible solutions or strategies to the barriers they face so they can educate children’s senses
3. To translate the research to practice by developing programming for child care providers

METHODS

Design and Population
- Maximum variation purposeful sampling
- Providers from Head Start programs and licensed child-care centers in Central Nebraska

Data Collection
- Semi-structured interview (lasting approx. one hour (Mean 43.5, SD 12.54)
- Saturation reached after 18 interviews

Data Analysis
- Interviews digitally recorded and transcribed
- NVivo
  - Theoretical thematic analysis to analyze data
- Constant comparison method to systematically generate initial codes, and then to develop themes
  - Two authors independently coded data and third author reviewed coding themes in a codebook and themes

RESULTS

Table 1. Child care providers’ motivators to engaging children’s senses

<table>
<thead>
<tr>
<th>MOTIVATORS</th>
<th>REPRESENTATIVE QUOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourages children to try new foods</td>
<td>Because I think that’s where the children learn to try new things...You know, they’re able to enjoy the taste of the food, then they’re able to pick it up and look at it...I think that’s important for them to be able to experience new things...</td>
</tr>
<tr>
<td>Encourages children fun &amp; strategy for engaging children to taste foods</td>
<td>“We would make things like cupcakes or muffins, and then we would invite the parents for breakfast the next morning...We would say, ‘We cooked these things for you!’”</td>
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Table 2. Child care providers’ facilitators to engaging children’s senses

<table>
<thead>
<tr>
<th>FACILITATORS</th>
<th>REPRESENTATIVE QUOTES</th>
</tr>
</thead>
</table>
| Low cost and feasible hands-on learning activities like: | During the day, we can smell the food cooking in the kitchen, so we play games like, ‘What’s for lunch today?’ and we try to guess what’s cooking. 
| Fruit or vegetable tasting, different foods | ‘Or the little one, for example, tastes a pear, and he’s like, ‘Oh, I didn’t know pears tasted like that!’” |
| Playful dynamic, sensory experiences | “Or the little one, for example, tastes a pear, and he’s like, ‘Oh, I didn’t know pears tasted like that!’” |

Table 3. Child care providers’ barriers to engaging children’s senses and strategies from other child care providers to overcomes barriers

<table>
<thead>
<tr>
<th>BARRIERS</th>
<th>REPRESENTATIVE QUOTES</th>
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</thead>
<tbody>
<tr>
<td>Messy &amp; unhygienic</td>
<td>“We have to be hard on our kids because they like to mess food everywhere...”</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>STRATEGIES</th>
<th>REPRESENTATIVE QUOTES</th>
</tr>
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<tbody>
<tr>
<td>Teachers accepting messes as part of learning &amp; hygiene reasons</td>
<td>“I would tell those teachers that they need to let the children explore, engage these things, and that’s also the way that they learn...they learn by touching, they learn by smelling, and feeling...”</td>
</tr>
</tbody>
</table>

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<tr>
<th>Policy disparities</th>
<th>Do messy activities outdoors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy disparities</td>
<td>Hard working as a way to</td>
</tr>
<tr>
<td>Policy disparities</td>
<td>Advice for dealing with taste</td>
</tr>
</tbody>
</table>

DISCUSSION

Consistent with previous research, child care providers perceived that engaging children’s senses in child care is important because:
- Encourages children to try new foods
- Increases exposure to different food tastes, smells, and textures.

Implications for Practice and Programming
- Develop low-cost, easy, and no cooking, hands-on food preparation activities
- Address barriers and consider suggestions to overcome barriers for effective implementation of recommendations

Implications for policy
- The discrepancy between the childcare accreditation and the DCFS/Public Health should be addressed by the different accreditations and policy makers
- Policy recommendations should be operationalized by including relevant programming and useful resources.

Implications for research
- Identify effective strategies to engage children’s senses with:
  - Experts (Nutrition, Early Childhood, Developmental Psychology)
  - Practitioners (Extension Educators, Child Care administrators and providers)
- Evaluate programs to determine the impact of strategies

CONCLUSION

- Activities (daring and outside of mealtime) provide valuable opportunities for engaging children’s senses.
- Increased exposure may help children try new foods and foster long-term healthy eating behaviors and childhood obesity prevention

A collaborative and bottom-up approach with child care providers is important for effective translation of research to practice.

ACKNOWLEDGEMENTS

- This project is currently funded by the - Administration for Children and Families Office of Planning and Evaluation Research and the, Idaho Transdisciplinary Obesity Prevention Program (I-TOPP)
- We also thank the STRONG Kids Program team at the University of Illinois at Urbana- Champaign for their support of this project.
- Full references are available upon request from author. sdev2@unl.edu