Understanding the Role of Parenting on the Eating Behavior of Young Children in Low-Income Households in the US

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Purpose of Presentation

- Present some research on parenting and feeding in low-income populations
- Discuss the implications of these findings for understanding the role of parenting in childhood obesity
Before Describing our Research

- Briefly provide an overview of past relevant research on parenting
- Summarize what we know about parenting and child obesity in middle-class samples
A Brief History of Parenting Research

- Empirical research on parenting goes back about 100 years
- Early research focused on specific parenting practices—e.g., toilet training, weaning, scheduled vs. demand feeding
- Early studies—few consistent relationships between parenting and child development
Identification of Parenting Dimensions

- 1940s—turned to global characteristics of parenting
- So researchers focused less on what parents do but how they do it
- Led to studies to identify some of the global dimensions along which parents differed in their behavior toward their children
- Range of methods—observations, interviews, questionnaires
Parents would be rated along various dimensions:
- Accepting
- Rejecting
- Warm
- Cold
- Attentive
- Dismissing
- Strict
- Permissive
- Controlling
- Lax
Across studies, theories, and methodological approaches, there were remarkable similarities in the dimensions identified:
- Responsiveness (warmth)
- Demandingness (control)
# Parenting Styles


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<tr>
<th>Demand-ingness</th>
<th>High Responsiveness</th>
<th>Low Responsiveness</th>
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<tbody>
<tr>
<td>High</td>
<td>Authoritative</td>
<td>Authoritarian</td>
</tr>
<tr>
<td>Low</td>
<td>Indulgent</td>
<td>Uninvolved</td>
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Since Baumrind, in general, research has shown:

- Authoritative parenting associated with positive developmental outcomes:
  - e.g., emotional stability, competence, less drug use, adaptive patterns of coping, life satisfaction

- Authoritarian parenting (European American families) associated with:
  - Dependence, depressive symptoms, poor academic achievement

- Indulgent parenting associated with:
  - Low levels of self-control, low self-esteem, aggression
Parenting and Child Obesity (Middle Class Families)

- Authoritative—lowest child obesity levels
- Consistent with self-regulation hypothesis
  - Guidance plus warmth
- However, authoritative parenting also associated with children’s dietary quality
  - More fruits & vegetables
  - More likely to eat breakfast
  - Less snacking and saturated fat
Results Different with Lower Income Families

- Parenting Style and Child Obesity (Olvera & Power, 2010)
  - Three-year longitudinal study of 69 low-income Mexican American mothers and their 4–8 year old children
  - Looked at probability of children becoming overweight or obese over three year period as a function of parenting style
  - Parenting style assessed with PDI (Slater & Power, 1987)
    - Median splits on nurturance and amount of control scales to assign parents to four parenting styles.
Assessing Nurturance

Six items (Block, 1965)

Example items:

- I encourage my child to talk about his or her troubles.
- My child and I have warm, intimate moments together.
- I make sure my child knows that I appreciate what he/she tries to accomplish.
Assessing Amount of Control

- Mothers given choice between five sets of two socially desirable statements differentiating between authoritative and permissive control strategies
  - e.g. “I try to prevent my child from making mistakes by setting rules for his/her own good.”
  - vs.
  - “I try to provide freedom for my child to make mistakes and learn from them”
Results

- Increases in child weight status over time significantly more likely for children of indulgent parents than the other three parenting styles.
Studies of Feeding Style

- Development of Caregiver’s Feeding Style Questionnaire (CFSQ) (Hughes, Power, Fisher, Mueller & Nicklas, 2005)
- Applied concept of parenting styles to feeding:
  - Responsiveness
  - Demandingness
Responsiveness

Child Centered Versus Adult Centered Feeding Strategies

Child Centered

- Say something positive about food
- Arrange food to make it more interesting
- Ask questions about food
- Reason with child
- Allow choosing of appropriate foods
- Help child eat
- Compliment child for eating
Child Centered Versus Adult Centered Feeding Strategies

Adult Centered
- Physically struggle with child to get him/her to eat
- Tell the child that you will take food away if child doesn’t eat
- Promises child something other than food if child eats
- Spoons feeds child
- Tells child to eat a small amount of food
- Shows disapproval for child not eating
- Hurries child
Demandingness

- Degree to which caregiver encourages child to eat (regardless of approach)
  - Average of all encourages eating items
# Feeding Style and Child Obesity

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<tr>
<th>Reference</th>
<th>Source</th>
<th>Ethnicity</th>
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<tbody>
<tr>
<td>Hughes, Power et al., 2005</td>
<td>Head Start Texas</td>
<td>101 African American 130 Latino</td>
</tr>
<tr>
<td>Hughes, Shewchuk et al., 2008</td>
<td>Head Start Texas, Alabama</td>
<td>309 African American 209 Latino 200 European American</td>
</tr>
<tr>
<td>Hennessy, Hughes et al., 2010</td>
<td>Elementary Schools Rural Appalachia</td>
<td>49 African American 22 Latino 29 European American</td>
</tr>
<tr>
<td>Tovar, Hennessy et al., 2012</td>
<td>Recent Immigrants Boston</td>
<td>138 Brazilian 114 Latino 131 Haitian</td>
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All four studies, children of caregivers with indulgent feeding style had greater BMIs than children in other groups.
Why Indulgence a Problem?

- Although indulgent parents are high on support they also are low on control—they provide little guidance for what their children eat.
- Since they are low-income families, it is likely that many of the foods available are low cost, calorie dense processed foods.
So a combination of high support and low control might lead to unchecked, mindless eating of high-calorie, low nutrient foods—children eating and not paying attention to how full they are getting

Examples

- Eating while watching TV
- Eating quickly
- Cleaning plate—especially if given large portions
- Quickly eating lots of something that is really, really good
Indulgence and Self–Regulation

- Consistent with a self–regulation hypothesis—parents provide lots of support, but little guidance
Indulgence Associated with Dietary Quality

- One study (Hoerr et al., 2009) looked at dietary quality:
  - Dietary recalls—three days 3PM to bedtime
  - Children of indulgent parents:
    - Highest consumption of energy dense foods
    - Lowest fruit, vegetable, and dairy consumption
Parenting Practices that Likely Encourage Self–Regulation

- Slow meal down—family meals, conversation
- Model mindful eating
- Avoid large portions
- Don’t put unlimited amounts of high calorie foods on table (e.g., chips and fries)
- Use “responsive feeding” practices
  - Give child choices
  - Pay attention to child’s verbal and nonverbal cues of fullness and do not pressure child to eat (let child determine how much within limits)
Current Research

- Sheryl Hughes (PI) and Teresia O’Connor (Children’s Nutrition Center—Houston)
- Jennie Fisher (Department of Public Health, Temple University)
- Susan Johnson (Department of Pediatrics, University of Colorado Denver)
- Suzie Goodell (Department of Food, Bioprocessing, and Nutrition Sciences, North Carolina State University)
Observational Study of Feeding Practices (USDA)

- Descriptive study of mother–child feeding interactions—addressing reliance on questionnaires
- 140 3–5 year olds, Head Start
- Half Latina, half African–American
- Three dinners at home
- Examining:
  - Feeding practices
  - Dietary intake
  - Child obesity
Observational data on 80 families
Most mothers did not use responsive feeding practices
- Two common patterns:
  - High levels of pressuring child to eat (despite child’s insistence that he/she was finished) (about 2/3)
  - Low parental involvement (about 1/3)
- Little talk about food and its characteristics
- Virtually no references to feelings of hunger or fullness
- Mothers focused more on table manners than encouraging eating skills
Follow-Up Focus Groups

- Recruited from Head Start
  - Eight in Houston (4 African-American, 4 Latina)
  - Four in Yakima, WA (Latina)
  - Four in Tacoma, WA (African-American)
Why Do Low-Income Mothers Pressure their Children to Eat?

- Mothers rely more on how much food is left on the plate to determine fullness than what the child says.
- Mothers don’t want to waste food—they don’t want child to leave too much food on plate.
- Mothers want to be sure that the child eats quickly enough since there are things to do after dinner.
- Mothers are ultimately concerned about their child’s health—want to make sure that child eats enough.
About 200 Latina/o Head Start Children
Examining longitudinally for 18 months the relationships between:
- Children’s self-regulation of eating
- Children’s emotional self-regulation
- Parenting–child interactions: eating and noneating situations
- Dietary intake
- Child obesity
Developing a Family–Focused, Obesity Prevention Program (USDA)

- Year one—completed coding of videotapes from first USDA grant and conducted focus groups
- Year two—will use data, literature, and focus group findings to inform development of program
- Year three—will pilot and revise program
- Years four and five—will implement and evaluate randomized control trial in Houston, Yakima, and Tacoma
Program Structure and Content

- Seven Sessions
  - Mother and child separately
  - Family activity
- Groups of 7–10 mothers
- Increase maternal sensitivity and responsiveness to children’s fullness cues
- Increase mothers’ awareness of the consequences of indulgent feeding
- Will address barriers to responsive feeding
Research Questions and Future Directions

- What are the specific maternal behaviors and interactional processes that account for the relationships between parenting and child obesity?
- What are the respective roles of child dietary intake and parenting practices in predicting child obesity risk?
- What is the child’s role—e.g., picky eating, temperament, genetics?
Research Questions and Future Directions

- How do self-report data correlate with observational data?
- What are the relevant maternal attitudes and beliefs that account for differences in feeding behavior and how can they best be measured?
- How do we capture the complexity of social interaction that truly recognizes the bidirectional nature of mother-child influences?