



Parenting and Snacks: A Mixed Methods Study to Guide Intervention Development

Virginia Gray, PhD, RDN,¹ Youngok Jung, PhD,¹ Jyotsna Pattnaik, EdD,² Nancy Dayne, EdD,¹ Haley Adel, BS¹ Sarah Domino, BS¹

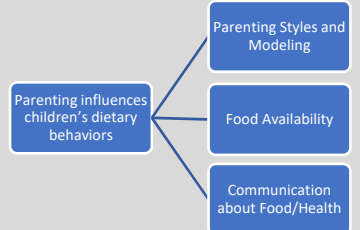
¹Department of Family and Consumer Sciences, College of Health and Human Services, ²College of Education; California State University Long Beach
Corresponding Author: Virginia.Gray@csulb.edu

Project Overview

Innovative intervention programs to improve child diet quality are needed. To be effective, these interventions must *consider the many factors influencing family food preferences* and choices and *seek relevant ways to modify behaviors and environments/contexts* that contribute to behaviors.

Recent work in the realm of family nutrition has suggested a **focus on snacking**, since snack-food is often lower in nutritional value than foods served at mealtimes. Snacking has increased in frequency and caloric contribution in recent years, with mixed impacts on diet quality. Developing healthy snacking habits in early life may impact the trajectory of snacking behaviors later in life. Food habits and preferences in early life tend to persist into adulthood. While recent literature evaluates dimensions of food parenting, and describes family-based interventions to improve early child feeding, literature on snacking practices and ability to moderate them among student parents is lacking. *The goal of this project was to collect data to inform development of a snacking-focused intervention for student parents of preschoolers at a Southern California university.*

Background



Food Parenting Practices

Three categories of food parenting practices: 1. Permissive & Unresponsive Parenting Practices (e.g., few rules on snack intake, potential impacts on self-regulatory ability and obesity risk). 2. Overly Restrictive and Controlling Practices (e.g., use of snacks to pacify or give attention, potential impacts on food preferences and diet quality). 3. Structure and Autonomy Support (e.g., healthy food routines and positive role modeling, potential impact on encouraging healthy eating habits).

Objectives

- To explore: 1) relationships between snacking patterns and snack-related parenting; and 2) drivers of snacking decisions and desired support for development of healthy snacking patterns among student parents.

Methods

Sample: *Student-parents of preschoolers* on the CSULB campus. This population is under-represented in most intervention studies on nutrition with parents. Demands of earning an academic degree, while caring for children and earning money, may contribute to reliance on convenience foods.

Mixed Methods Approach: 1. Snack Intake Frequency Questionnaire (11 item questionnaire to collect typical food items parents offer as snacks). 2. Parenting around Snacking Questionnaire (P-SNAQ) (55 item questionnaire). 3. Focus Group (Two independent coders, NVivo).

Results

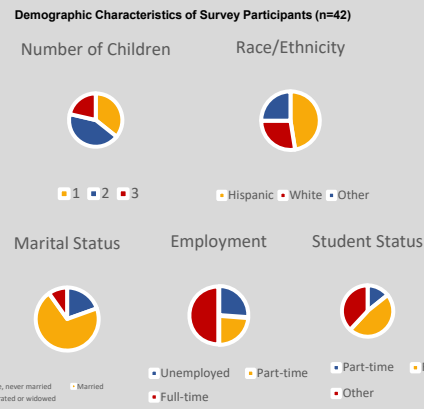


Table. Correlations between Parent's Age, Snack Offerings, and Parenting around Snacking

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
|---|---|------|------|------|--------|--------|-------|-------|-------|------|-------|--------|--------|--------|--------|--------|-------|------|
| 1. Parent's age | | -.18 | .08 | .04 | .211 | .09 | -.08 | .12 | .02 | .13 | -.08 | -.20 | -.04 | -.46** | -.35* | -.45** | -.29 | .06 |
| 2. Healthy snacks | | | -.05 | .19 | .43** | .25 | .37* | .31 | .28 | .15 | -.07 | -.06 | -.13 | .03 | .07 | -.10 | .11 | -.06 |
| 3. Unhealthy snacks | | | | -.07 | -.10 | -.15 | -.17 | -.32* | -.20 | -.09 | -.03 | .20 | .02 | -.02 | .04 | -.03 | -.01 | .20 |
| 4. Praise/encouragement of healthy snacks | | | | | -.43** | .46** | .23 | .11 | .39* | .07 | .34* | .08 | .03 | .20 | .29 | .01 | .13 | .12 |
| 5. Reasoning and support for healthy snacks | | | | | | -.64** | .57** | .51** | .33* | .37* | .41** | -.20 | -.17 | .05 | .15 | -.37* | -.21 | -.06 |
| 6. Role modeling of healthy snacking | | | | | | | -.10 | .57** | .50** | .00 | .41** | .07 | -.25 | .09 | .21 | -.09 | -.13 | -.11 |
| 7. Snack planning and routines | | | | | | | | -.10 | .13 | .28 | .06 | -.19 | -.25 | .22 | .19 | .16 | .26 | .09 |
| 8. Availability and accessibility of healthy snacks | | | | | | | | | -.19 | .15 | .28 | -.21 | -.23 | .03 | .16 | .18 | -.23 | -.09 |
| 9. Monitoring of healthy snacks | | | | | | | | | | -.16 | .19 | .01 | -.45** | .23 | .35* | .08 | .21 | .11 |
| 10. Snack rules and limits | | | | | | | | | | | .07 | -.56** | -.01 | .05 | .13 | .09 | .24 | .30 |
| 11. Child-centered snacks | | | | | | | | | | | | -.12 | -.07 | .12 | .12 | .11 | .02 | .22 |
| 12. No rules or limits for snacks | | | | | | | | | | | | | .38* | .28 | .24 | .48** | .12 | .25 |
| 13. No involvement with child snacks | | | | | | | | | | | | | | -.23 | .04 | .29 | .21 | .10 |
| 14. Emotion-based feeding of snacks | | | | | | | | | | | | | | | -.56** | .67** | .45** | .03 |
| 15. Snacks as rewards | | | | | | | | | | | | | | | | -.62** | .28 | -.08 |
| 16. Snacks to manage behavior | | | | | | | | | | | | | | | | | -.36* | .04 |
| 17. Pressure to eat snacks | | | | | | | | | | | | | | | | | | -.10 |
| 18. Restriction of snacks | | | | | | | | | | | | | | | | | | |

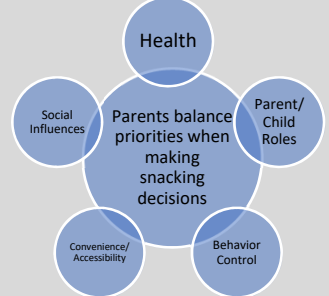
- Parent age was the only demographic variable significantly associated with parenting around snacking.
- Desired parenting practices around snacking tended to be positively associated with one another.
- Negative parenting practices around snacking tended to be positively associated with one another as well.

Conclusions

Findings suggest younger parents may benefit from snacking-focused intervention programs that support healthy snacking routines and alternative behavior management strategies for children.

The data from this study guided the development of a three-lesson plan: Snacks for Success: A Curriculum for Parents of Preschoolers, to be piloted to CSULB student-parents in the 2021-22 academic year.

Focus Group (n=11):



Parents suggested a snacking-focused class with information on snacking strategies and social support.



SNEB Nutrition Educator Competencies

- 1.8.3 Identify the theory-based mediators and facilitators of behavior change, using a participatory approach, including social and environmental influences.
- 2.8.8 Apply inclusive participatory approaches that enable the target population to effectively communicate, share experiences, identify personal needs, and manage personal food behaviors.