



## Introduction

- Developmental trajectories indicate that overweight and obesity maintain over time (Maumun et al., 2009; Rolland-Cachera et al., 1988).
- Children under 5 have had the largest increase in prevalence rates of overweight/obesity (Ogden, Flegal, Carroll, & Johnson, 2002; Summerbell et al., 2005); in Nebraska, 30.5% of children between 2 and 5 are overweight or obese (CDC, 2010).
- The early formative years are particularly important to addressing childhood obesity as this is when habits are formed, contingencies established, and relationships among parents and early educators created.
- Parental perceptions of their roles in their children's health may impact healthy habit formation; however, research to date has not explored this relationship.

## Purpose of the Current Study

- The purpose of this study was to conduct exploratory analyses regarding parents' perceptions of their role in the health of young children.
- This study also sought to understand the differences in parents' perceived roles and their levels of concern for their children's health status.

## Methods

### Sample

- Sixteen 3-5 year old children identified as overweight or obese ( $BMI \geq 85^{th}$  percentile) drawn from a larger pilot study exploring efficacy of a family-centered, consultation intervention (PHIT) at improving standardized BMI levels (zBM).
- 15 parents (one parent consented two siblings to participate in the study).

### Measures

- Child's health status: zBMI measured directly through anthropometric weight/height
- Semi-structured parent survey interview including demographic information (i.e., race/ethnicity, family income, parent education level, etc.) and adapted version of the Parent Role Construction Scale (PRCS; Walker et al., 2005; 6-point Likert rating scale, 1 = strongly disagree, 6 = strongly agree).

### Design and Analysis

- Only baseline measurements were used in the analyses for this study.
- Analyses of Variance (ANOVAs), correlations ( $r$ ), and  $t$ -test analyses were used to examine the data.

## Results

- Results demonstrated that overall parents hold active role beliefs in their children's health habits (mean ratings for each item range from 4.2 – 5.6).
- Pearson correlations demonstrated a moderate effect size between health concern and perception of overall health ( $r(16) = -.394, p = .131$ ).
- Pearson correlations also demonstrated a moderate effect size between zBMI and parent perception of their child's actual health ( $r(13) = .339, p = .257$ ).
- Results showed moderate to large effect sizes between perception of overall health, zBMI, and parents' role construct regarding eating and physical activity habits (see Table 2).
- Our results indicated that 62.5% of the parents in our sample had not ever had a health concern about their child's health or development, while 37.5% reported they had.
- In regards to the parents' perception of their child's overall health, most parents (37.5%) reported that their child's health was "excellent"; the second most reported health status was "good" (25%); "very good" and "fair" were reported equally, with both being (18.8%).

Table 1  
Demographics

	Total Sample
Child Sample	N=16
Child gender	
Males ( <i>n</i> )	56.3% (9)
Females ( <i>n</i> )	31.3% (5)
Mean ( <i>SD</i> ) child age in months	48.5 (12.37)
Race/ethnicity	
White, non-Hispanic ( <i>n</i> )	6.3% (1)
Hispanic or Latino ( <i>n</i> )	58.7% (12)
African American or Black ( <i>n</i> )	6.3% (1)
Parent Sample	N=15
Relation to child	
Mother ( <i>n</i> )	93% (14)
Father ( <i>n</i> )	0% (0)
Race/ethnicity	
White, non-Hispanic ( <i>n</i> )	27% (4)
Hispanic or Latino ( <i>n</i> )	62.5% (10)
Mean ( <i>SD</i> ) parent age	33.71 (6.06)
Education	
Less than high school diploma ( <i>n</i> )	53% (8)
High school diploma or GED ( <i>n</i> )	13% (2)
Some college ( <i>n</i> )	13% (2)
College degree ( <i>n</i> )	13% (2)
Some graduate coursework ( <i>n</i> )	0% (0)
Advanced graduate degree ( <i>n</i> )	0% (0)
Not provided ( <i>n</i> )	7% (1)
Mean ( <i>SD</i> ) parent weight in pounds	166.4 (32.26)
Mean ( <i>SD</i> ) parent height in inches	62.37 (4.88)
Family income	
Less than \$15,000 ( <i>n</i> )	33% (5)
\$15,001-\$50,000 ( <i>n</i> )	27% (4)
\$50,001-\$100,000 ( <i>n</i> )	7% (1)
\$100,001-\$150,000 ( <i>n</i> )	13% (2)
Not provided ( <i>n</i> )	20% (3)
Marital status	
Married	31% (5)
Widowed, divorced, or separated	6.3% (1)
Single, never married	18.8% (3)
Living with partner	25% (4)

Table 2

Correlations between role construct, concern for health, perception of overall health, and actual health status by item

Item		Concern for Health	Perception of Overall Health	zBMI
Eating habits of parents influence the eating habits of their children.	Pearson correlation Sig. (2-tailed) N	.163 .653 10	.690 .027 10	.588 .126 8
Children will be physically active if their parents exercise regularly.	Pearson correlation Sig. (2-tailed) N	.024 .947 10	.459 .183 10	.420 .300 8
Sleep habits of parents influence the sleep habits of their children.	Pearson correlation Sig. (2-tailed) N	.162 .655 10	.205 .569 10	-.186 .660 8
I can influence my child's food choices.	Pearson correlation Sig. (2-tailed) N	-.163 .653 10	.565 .089 10	.588 .126 8
I can influence my child's amount of physical activity.	Pearson correlation Sig. (2-tailed) N	-.071 .845 10	.074 .840 10	-.466 .244 8
I can influence the amount of sleep my child gets.	Pearson correlation Sig. (2-tailed) N	.354 .316 10	.112 .759 10	-.714 .046 8
My child's current eating habits will influence his/her healthy development.	Pearson correlation Sig. (2-tailed) N	.066 .857 10	.482 .158 10	.588 .126 8
My child's current physical activity levels will influence his/her healthy development.	Pearson correlation Sig. (2-tailed) N	.163 .653 10	-.063 .863 10	-.208 .621 8
My child's current sleep habits will influence his/her healthy development.	Pearson correlation Sig. (2-tailed) N	.199 .581 10	.308 .387 10	-.035 .935 8
My child's current habits related to their health will influence the health habits s/he has as an adult.	Pearson correlation Sig. (2-tailed) N	.118 .745 10	.502 .139 10	.573 .138 8
It is important to work together with my child's care provider/teacher to support my child's health habits.	Pearson correlation Sig. (2-tailed) N	.200 .704 6	.542 .266 6	.592 .293 5

## Discussion

- Despite children being overweight or obese, the majority of parents did not have concerns regarding their child's health and wellbeing.
- The higher a child's BMI level, the less likely parents were concerned.
- Parents who believed they have an active role in eating and activity were more likely to rate their children as being in good health, but also more likely to have children with higher BMI levels.
- Parents who believed that they played a more active role in their child's sleep had children with lower BMI levels.

### Limitations

- The overall sample is small and the results of this study are considered preliminary.
- Despite being underpowered, moderate effect sizes were found across parent perceptions, role constructs, and child health status, indicating that significant relationships might be found when powered to size.

### Future Directions

- Further research is needed to determine the robustness of these findings.
- Future studies should explore why there is a discrepancy between parent perception and actual child health status with specific focus on the impact of culture on these perceptions.
- Physician perceptions of their role in the health of young children should also be explored.