

## 20.31: Parental Recognition of Child Obesity

### Learning Objectives

- To study the parents' perception of their children's weight status

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### Overview

With increasing public awareness of child obesity as a major public health problem, studies are showing that it has not translated into an increased awareness of obesity in one's own child. Dietary patterns and weight status in childhood tend to carry into adolescence and adulthood, promoting the onset of chronic and other diseases. A key ingredient for combating childhood obesity is parental involvement and commitment. However, this is predicated on whether or not parents can recognize overweight and obesity in their children.

This study examined parents' perceptions of their children's weight status, their understanding of the health risks of obesity relative to other conditions they may perceive as health risks, and their knowledge of some healthy eating practices. Children's actual weight status was expressed as their body mass index (**BMI**) percentile, as determined by the CDC growth charts based on age and sex. According to the CDC growth charts for children, a child with a **BMI** percentile less than the 5<sup>th</sup> percentile is underweight; from the 5<sup>th</sup> to less than the 85<sup>th</sup>, a child is at a healthy weight; from the 85<sup>th</sup> to less than the 95<sup>th</sup> percentile, a child is overweight; and a **BMI** percentile equal to or greater than the 95<sup>th</sup> percentile, a child is considered to be obese.

A visual analog scale was used to measure parents' perceptions of their child's weight. The visual analog scale consisted simply of a 10-cm straight line anchored at the left end by the label "extremely underweight" and at the right end by the label "extremely overweight." A parent placed a mark along the line to indicate where they perceived their child's weight to be. The researchers interpreted the marks as percentiles in their analysis.

### Questions to Answer

Do parents recognize when their children are overweight or obese? Do parents who make incorrect judgments about healthy food practices also make incorrect judgments about their child's weight status?

### Design Issues

This study defines a parent's perception of their child's **BMI** percentile as "accurate" if their score on a visual analog scale fell within 30 points of the child's true **BMI** percentile. This wide range defining accuracy potentially allows for misclassification of a child's weight status among normal, overweight, and obese categories. For example, a parent who perceives their child's weight status as being at the 80<sup>th</sup> percentile, i.e., in the normal range, when in reality the child is obese with a **BMI** percentile of 98, the parent's assessment would be considered accurate by the operational definition used in this study. The authors explain that they chose this definition to give parents as much leeway as possible in assessing their child's weight on the visual analog scale.

### Descriptions of Variables

Table 20.31.1: Description of Variables

Variable	Description
Sex	The sex of the participating parent's child

Overwt_Obese	Whether or not a child's body mass index (BMI) is equal to or greater than the 85th percentile for the child's age and sex, which means that the child is either overweight (85th to less than 95th percentile) or obese (95th percentile or above)
PA_overwt	Parental attitude expressing level of concern if their child were overweight, measured on a 4-point Likert Scale. In data analysis, the four categories were condensed into two categories: 0 = "not at all" or "a little" concerned 1 = "quite" or "extremely" concerned
PA-TV	Parental attitude expressing level of concern if their child watched >20 hours of TV per week, measured on a 4-point Likert Scale. In data analysis, the four categories were condensed into two categories: 0 = "not at all" or "a little" concerned 1 = "quite" or "extremely" concerned
Accurate	Whether or not the parent's perception of their child's weight status was accurate. Parent's perception was considered accurate if the BMI percentile it corresponded to fell within 30 points of the child's actual BMI percentile
Juice_boxes	The amount of juice that a parent thinks is healthy for their child to drink each day (a juice box contains eight ounces). We condensed the original four response categories into two categories: 0 = "1 or 2 juice boxes per day" 1 = "3 to 8 juice boxes per day"
Fast_food_meals	How often a parent feels it is okay to eat at fast-food restaurants. We condensed the original four response categories into two categories: 0 = "once a month"

## Links

Etelson et al. article

BMI percentiles for children

## References

- Debra Etelson, D., Brand, D. A., Patrick, P. A., Shirali, A. (2003). Childhood obesity: Do parents recognize this health risk? Obesity Research, 11, 1362-1368

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