

Promoting Young Children's Engagement in Organized Extracurricular Activities: Tiger Parenting or Obesity Prevention?

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In this issue, Kong and colleagues(1) demonstrate that providing infants access to a music education program resulted in greater motivation to work for access to music as opposed to food. The results suggest novel obesity interventions that involve promoting the cultivation of children's interests in activities that can serve as alternatives to food.

Boredom -- the aversive experience of wanting, but being unable, to engage in stimulating and satisfying activity(2) -- is reported by obese individuals to be one of the greatest contributors to excessive weight gain. The literature linking boredom and eating dates back to the 1950's, but little progress has been made in understanding these associations. The construct of bored eating is often combined with the construct of emotional eating, which may not be valid. Future research should investigate boredom and its amelioration in relation to obesity risk.

Although the study by Kong et al(1) focuses on infancy, it raises questions about the cultivation of interests at key developmental periods for obesity risk. Adolescence, while marked by increased obesity risk and the emergence of unhealthy risk-taking behaviors, is also marked by the emergence of heartfelt motivations that often last a lifetime.(3) The passion with which an adolescent commits to an activity or a cause is often unparalleled at any other period in the life course. Adolescents who identify and commit to these types of activities with unbridled enthusiasm often have a lower risk of engaging in unhealthy risk taking activities. Many parents focus myriad resources on providing their children with a range of extracurricular opportunities in hopes of helping their adolescent achieve this heartfelt motivation.

Not all families, however, have the resources to provide these opportunities. Disparities in participation in extracurricular activities based on socioeconomic status have developed over the last 40 years.(4) Nearly half of middle- and upper-class children are enrolled in arts classes before age 5 years compared to less than a fifth of low income children. Boredom may be

particularly common among low-income populations who have fewer resources to cultivate interests and hobbies. Eating when bored was described as a common and salient behavior described by low-income mothers of preschool-aged children.(5) The possibility that boredom within low-income populations is a partial explanation for socioeconomic disparities in obesity deserves consideration.

The work by Kong et al(1) suggests that as early as infancy, increased engagement in specific activities can be cultivated and direct focus away from food, potentially preventing obesity. The results could be construed as endorsing the current cultural shift towards structured, organized extracurricular activities for young children. However, this parenting philosophy has evoked intense debate and may not be without unintended adverse consequences, including increased stress among overscheduled children. Working-class children are provided fewer opportunities for these activities, but also tend to be happier and more independent.(4) The amelioration of boredom in the service of reducing motivation for food is a compelling intervention strategy, but the application of these findings in the current cultural context of parenting must be carefully considered.

1. Kong KL, Eiden RD, Feda DM, Stier CL, Fletcher KD, Woodworth E, *et al.* Reducing relative food reinforcement in infants by an enriched music experience: A randomized controlled trial. *Obesity* 2016.
2. Fahlman SA, Mercer-Lynn KB, Flora DB, Eastwood JD. Development and Validation of the Multidimensional State Boredom Scale. *Assessment* 2011.
3. Crone EA, Dahl RE. Understanding adolescence as a period of social-affective engagement and goal flexibility. *Nat Rev Neurosci* 2012;**13**: 636-650.
4. Duncan GG, Murnane RJ. *Whither Opportunity? Rising Inequality, Schools, and Children's Life Choices*. Russell Sage Foundation, 2011.
5. Hayman Jr LW, Lee HJ, Miller AL, Lumeng JC. Low-income women's conceptualizations of emotional- and stress-eating. *Appetite* 2014;**83**: 269-276.