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## A naturalistic enquiry into the day-to-day lives of obese children

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## A Naturalistic Inquiry into the Day-to-Day Lives of Obese Children

A thesis submitted in fulfilment of the requirements for the award of the degree

Doctor of Philosophy From University of Wollongong By Lauren M. Puglisi

B.Ed (Honours), University of Wollongong The Faculty of Education

2009

### CERTIFICATION

I, Lauren Puglisi, declare that this thesis, submitted in fulfilment of the requirements for the award of Doctor of Philosophy, in the Faculty of Education, University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. The document has not been submitted for qualification at any other academic institution.

Signed

Lauren Puglisi

Date

#### ABSTRACT

Childhood obesity has reached epidemic levels in both developed and developing countries, posing one of the greatest challenges to paediatric health in the 21st century. To date, interventions to prevent and treat child obesity have had moderate success, with many researchers advocating the need for individual and community programs combined with a better understanding of the contextual factors affecting children, in particular social and environmental aspects. Little has been documented about the daily experiences of an obese child and the context of their weight-related behaviours. Because of the sensitive nature of child obesity, few studies have employed participant observation methods or naturalistic paradigms to gather contextual information around this prominent health issue.

The purpose of this current study was to explain the daily life of an obese child and then determine the context in which weight-related behaviours existed. This study was a naturalistic inquiry employing a multiple case-study design. It was conducted with six obese children and their families in their normal daily environments, including their home, school, and after-school and weekend settings. Participant observations took place from when the child woke in the morning until he/she went to bed at night. Field notes were taken, which were supplemented with digital recordings and casual conversations with key individuals.

A number of dietary, physical activity, sedentary and personal factors affecting the weight status of all six children were identified. A cross-case analysis found that there were a number that were common for most children. Common dietary factors included: the consumption of high-sugar or energy-dense snacks; portion sizes; providing food choices; parental dietary patterns; eating in front of the television; and the options available at the school canteen. In relation to physical activity, frequent aspects were: perceived physical activity competence; physical difficulties; participation in a small amount of physical activity after school and on weekends: having people to play with; existence of sibling or parental role models; backyard size; school sport activities; and time available for unstructured physical activity in schools. There were also a number of common factors related to sedentary behaviours, including: enjoyment of these activities; time spent in small screen recreation; regularly reading books; availability of electronic media; friends' interests in small screen recreation; existence of rules; parental sedentary behaviour patterns; and parental use of small screen recreation as a babysitter. Personal characteristics affecting the weight status of most of the children in the study included: physical

appearance self-concept; behavioural self-concept; and peer acceptance self-concept. These factors exerted their influence in a number of the normal day-to-day behaviour settings of these six children.

These findings were compared retrospectively with the study's theoretical framework, Davison and Birch's Ecological Systems Model (Davison & Birch, 2001), which explores factors affecting a child's weight status within three broad categories: child characteristics and child risk factors; parenting styles and family characteristics; and community, demographic and societal characteristics. A number of similarities and differences were found between my study's findings and those presented in Davison and Birch's model. New risk factors, which were evident in this current study included: personal characteristics which suggested low levels of self-awareness in the social context; sedentary factors such as the enjoyment of the activity and the social inclusion it provided rather than the social exclusion and physical discomfort experienced through physical activity. Both Davison and Birch's model and this study recognise that the aetiology of child obesity involves complex interactions between individuals and environments.

In light of these findings, the development of childhood obesity involves a complex set of factors from a range of contexts that interact to place a child at risk of developing weight problems. It is not simply an imbalance in energy intake and energy expenditure. It is crucial that future interventions cater for risk factors at all three levels, including child, family and the community. Collecting both quantitative and qualitative data at both intraand extra-individual levels may help to reduce some of the methodological limitations associated with child obesity interventions such as using a "one-size fits all" approach, delivering interventions in highly resourced settings and failing to include the entire family and add greater depth to our knowledge of the experiences and characteristics of the obese child.

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