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Engaging Intergenerational Hispanics/Latinos to Examine Factors Influencing Childhood Obesity Using the PRECEDE–PROCEED Model

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Introduction

Obesity disproportionately a ects Hispanics/Latinos in the United States (U.S.). According to national data, 77.1% of Hispanic adults and 38.9% of children and adolescents (ages 2–19 years) are overweight or obese (Ogden et al. 2014). Hispanic children represent the largest group of obese children (22.4%); 40.7% of boys and 37.7% of girls between the ages of 2–19 are overweight or obese compared to 27.8% and 29.2% of non-Hispanic white boys and girls (Ogden et al. 2014). Consequently, Hispanic children have a greater risk of obesity during adolescence and adulthood (Singh et al. 2008; Williams et al. 2015; Wong et al. 2015) and have a greater lifetime risk of developing obesity-related illnesses (Park et al. 2012; Watt et al. 2013).

Multiple levels of the socio-ecologic model contribute to obesity disparities among Hispanics (Pan et al. 2013; Power et al. 2015). Risk factors include individual behaviors, family socio-economic status, beliefs and practices, and environmental factors (Cartagena et al. 2014; Davis et al. 2015; Frank 2008). Parents and caregivers play a pivotal role in the development of their children's eating and physical activity behaviors (Arredondo et al. 2006; Davis et al. 2015; Davison and Birch 2001; Ventura and Birch 2008), because child health habits develop in the home (Santiago-Torres et al. 2016). However, little is known about children's perceptions of the causes of obesity in Hispanic/Latino families. Intergenerational perspectives, including children's opinions, can inform the development of intervention materials to improve nutrition, physical activity, and weight status.

The PRECEDE–PROCEED model guides the planning and development of health behavior interventions (Gielen et al. 2008) by addressing fundamentals of epidemiology, health education, behavioral sciences, and health administration (Green and Kreuter 2005). PRECEDE stands for Predisposing, Reinforcing, and Enabling Causes in Educational Diagnosis and Evaluation, whereas PROCEED stands for Policy, Regulatory and Organizational Constructs in Educational and Environmental Development (Gielen et al. 2008). Comprised of two collaborative components, PRECEDE specifically focuses on diagnosis of the health problem and investigation of predisposing factors and constructs to explain health behaviors. PRECEDE phases include (1) social assessment; (2) epidemiological assessment of genetics, behavior and environment; (3) educational and ecological assessment to identify predisposing, reinforcing, and enabling conditions; and (4) administrative and policy assessment and intervention alignment (Green and Kreuter 2005).

This study examined the factors that influence Hispanic/Latino childhood obesity from the perspectives of children, parents/caregivers, and grandparents, using the PRECEDE component of the planning model.

Methods

Design

This study employed a mixed methods approach, including a series of focus groups (FGs) and a short demographic survey. Hispanic children, parents and grandparents provided a holistic overview of influences on childhood obesity among low-income Hispanic families. The California State University Long Beach Institutional Review Board approved the study.

Study Setting and Participant Recruitment

The study was conducted in Los Angeles County (LAC), California, in collaboration with four community-based partners. Hispanics, including parents of children under 10 years old, pregnant and lactating women, caregiving grandparents, and youth ages 10–17, were recruited in person by bilingual community health workers at community-based organizations. Community health workers recruited adults who met the study criteria and asked them to refer their children who were ages 10–17; this approach allowed the parents/caregiving grandparents to provide verbal consent to invite the youth to participate. Based on the recruitment process, involvement of more than one family member was possible. A maximum of 12 participants were recruited for each group. Adults were eligible if they self-identified as Hispanic/Latino, lived in LAC, and served as a caregiver for children up to 10 years old or were currently pregnant. Youth were eligible if they self-identified as Hispanic/Latino, lived in LAC, and were 10–17 years old. FGs occurred at community partner locations.

Data Collection

All adult participants provided written informed consent, and all youth participants provided written parental consent and minor assent. Participants completed a brief demographic survey. The adult survey assessed age, gender, birth country, education, income, relationship status, occupation, number of children in the home, and language preference. The youth survey assessed age, gender, birth country, and languages spoken at home. Six FGs were conducted with adults and two with youth; participants were grouped by age and primary language to allow for age-specific questions (see Table 1).

A semi-structured moderator's guide was used to structure the FGs with questions based on the four phases of the

ter didn't receive this positively, and until she changed her mind, she started to provide more discipline for her daughter and now she's losing weight.

Reinforcing Factors

Factors that promote healthy weight among children include parental role-modeling, rule-setting, and support programs (Faught et al.

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