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EDITORIAL

Social Cognitive Determinants of Dietary Behavior Change in Children

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Dear Editor

Poor dietary habits in children and adolescents may impose some negative health impacts later in the life. To promote healthy eating and dietary behaviors through effective dietary interventions for children and adolescents, it is necessary to determine the pivotal factors involved in food intake and dietary behaviors in this population. Self-efficacy, health outcome expectations, intention, and knowledge play the role as the most important psychosocial constructs correlating youth dietary behaviors. However, findings from youth studies regarding the correlates of social-cognitive factors with food intake are still controversial. In this editorial, we discussed the basic social cognitive factors associated with dietary behaviors in children and adolescents.

Unhealthy eating habits may be tracked from childhood into adulthood and may impose some negative health impacts later in life (1). To promote healthy eating and dietary behaviors through effective dietary interventions for children and adolescents, it is necessary to determine the pivotal factors involved in food intake and dietary behaviors in the population. Psychosocial characteristics of youth may influence behavior through mutual interactions between individual and environmental determinants. Self-efficacy, health outcome expectations, intention, and knowledge play the role as the most important psychosocial constructs correlating youth dietary behaviors (2).

The study that investigated the psychosocial correlates of dietary behavior among youth has shown mixed and sometimes relatively convincing findings concerning the associations between the proposed determinants and a wide range of eating behaviors (1). In one of the first studies evaluating the psychosocial factors associated with dietary intake among low-income urban African American youth population, increased scores of intention and selfefficacy showed positive correlates of fruit-vegetable (FV) and fiber intake (2). Along with these findings, self-efficacy was demonstrated to be correlated with higher FV intake and greater barriers were associated with less FV intake in both minority groups of African-American and Hispanic and non-minority groups of Caucasian high-school students. However, among the ethnic minority group, healthy eating goal setting and perceived benefits of FV intake were illustrated to be positive predictors of 5-a-day

FV consumption; while among the non-minority group, the perceived barriers to FV consumption and the family social support, negatively and the peer social support, positively could predict the 5-a-day FV consumption (3).

In a recent cross-sectional design study, Bandelli and colleagues found that different theory-based determinants were involved in "do more" behaviors (FV and physical activity) and "do less" behaviors (sweetened beverages, processed packaged snacks, fast foods, and sedentary behavior) (4). Self-efficacy and habit strength were shown to be associated with "do more" behaviors while for "do less" behaviors in addition to self-efficacy and habit; other factors including outcome expectations and goal intention were correlated with these behaviors. Another study from this group investigated mediating mechanisms of theory-based psychosocial determinants on behavioral changes among urban middle school students in New York City, USA. Intention and reduced perceived barriers were significant direct mediators for reducing daily sugar-sweetened beverage consumption; whereas outcome expectations, affective outcome expectations, selfefficacy, and autonomous motivation mediated similar behavioral changes indirectly through goal intention or perceived barriers (5). The umbrella review of Sleddens and colleagues found that intention is a strong determinant of a wide range of dietary behaviors in youth population. But, other potential determinants such as automaticity, selfregulation, and subjective norms showed promising results (1). In addition to the mentioned psychosocial constructs affecting youth eating behavior, having more nutritional knowledge was reported to be related to more consumption of FV and less consumption of foods high in fat and sweets (6).

Findings concerning the correlation between social support and food intake were mixed overall. In cross-sectional baseline health surveys from rural middle school students in Virginia and New York cities, USA, both family and friend support were found as significant predictors of fat and fiber intake (7). In addition, the correlation of family support was confirmed for mean daily servings of FV among adolescents in San Diego County, USA (8). Evidences explain that family support and social influence may mediate the associations of parental education with children's dietary intake and are also considered as positive mediators in correlation between socioeconomic status and adolescents' dietary quality features. Indeed, in a cross-sectional study of parental influences on adolescent fruit consumption in Australian secondary school students, adolescent dietary self-efficacy for higher consumption of fruits

mediated both the positive associations of parental control and perceptions of the importance of healthy diet and the negative association of parental barriers to purchase FV and youth's fruit intake (9).

However, the review of McClain et al. did not find a consistent association between the psychosocial constructs like social support as well as knowledge, self-efficacy, outcome expectations, and dietary outcomes. But, in this review perceived modeling, dietary intentions, norms, liking, and preferences were consistent and presented positive correlates of eating behavior. Food preferences seem to be strongly and positively associated with the preferred food consumption in adolescents (10). Finally, the availability of foods at homes and accessibility to community settings (such as schools, fast food restaurants, etc...) were mentioned to influence the food choices and eating patterns of children and adolescents. However, in situations that income is limited; food price plays a critical role in youth dietary intakes too (10).

As can be seen, findings from youth studies regarding the correlates of food intake are mixed. In general, most of the studies have suggested individual factors like intention, self-efficacy, and preferences as the strongest determinants of food intake in the population. However, most of the findings are based on cross-sectional designed studies and they in large part investigated only the influences of psychosocial factors on FV intake behavior. Therefore, future comprehensive betterdesigned researches are required to investigate the strong determinants of eating of other food groups and support the available associations.

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Conflict of Interest

None declared.

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