



### Institutionen för folkhälsovetenskap

# Motivation and health behavior in the prevention of childhood obesity

#### AKADEMISK AVHANDLING

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av

# Benjamin Bohman

Leg psykolog

Huvudhandledare:
Professor Finn Rasmussen
Karolinska Institutet

Institutionen för folkhälsovetenskap

Bihandledare:
Professor Ata Ghaderi
Karolinska Institutet
Institutionen för klinisk neurovetenskap

Fakultetsopponent:
Professor Lars Wichstrøm
Norges teknisk-naturvitenskapelige
universitet
Psykologisk institutt

Betygsnämnd:
Professor Bo Melin
Karolinska Institutet
Institutionen för klinisk neurovetenskap

Professor Örjan Sundin Mittuniversitetet Institutionen för samhällsvetenskap

Docent Ulrica von Thiele Schwarz Stockholms universitet Psykologiska institutionen

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#### **ABSTRACT**

The objectives of the present thesis were to investigate self-efficacy and motivational interviewing as motivational frameworks for health behavior change in the prevention of childhood obesity, and to explore child health services as a setting for childhood obesity prevention. Specifically, the thesis aimed to (a) develop a measure of parental self-efficacy for promoting healthy physical activity and dietary behaviors in children and assess its psychometric properties, (b) evaluate the effects of a training program in childhood obesity prevention on self-efficacy in nurses in child health services, (c) evaluate the effects of a training program in motivational interviewing on proficiency in nurses in child health services, and (d) investigate the frequency of conversation about dietary and physical activity behaviors in children in child health services.

In **Study I**, using exploratory and confirmatory factor analyses, the evaluation showed that a new measure of parental self-efficacy had adequate psychometric properties in a sample of 2232 mothers with 3-year-old children, including construct and discriminant validity, internal consistency ( $\alpha$  = .87), and test-retest reliability (r = .82). **Study II** used multiple linear regression analysis and dependent t-tests with Bonferroni correction to examine the effects of training in methods of preventing childhood obesity on efficacy beliefs in nurses in child health services. The study had a randomized controlled design with an intervention group (n = 22) and a control group (n = 38). Results showed that efficacy beliefs in intervention nurses had increased at post assessment relative to control nurses ( $\beta$  = 14.70, p < .001). **Study III** used dependent t-tests and multiple linear regression analysis to evaluate the effects of training in motivational interviewing on proficiency in a sample of nurses in child health services (n = 36). Skillfulness had not been acquired in this sample from pre to post training (ps  $\geq$  .05). In **Study IV**, conversations between nurses (n = 23) and parents in child health services were assessed to what extent conversations focused on child health behaviors. Using descriptive statistics, it was found that attention to these behaviors was infrequent, with dietary behaviors ranking fourth and physical activity on rank 14 among topics of conversation.

In summary, self-efficacy is a useful framework, and motivational interviewing a potentially useful framework in childhood obesity prevention. Efficacy beliefs were adequately assessed in parents of small children and nurses in child health services, and increased in nurses as a result of training. However, motivational interviewing proved to be a difficult method to learn, and conversations in child health services did not focus to any greater extent on dietary and physical activity behaviors in children.

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