Validation of a food choice questionnaire among adolescents in Penang, Malaysia

ABSTRACT

Introduction: This is a validation study of the modified version of the Food Choice Questionnaire (FCQ), a multidimensional measure of food choice motives.

Methods: Adolescents aged 15 to 17 years attending schools from three randomly selected co-educational and multiracial public secondary schools were invited to participate in this study. Data were collected using a self-administered modified version of the FCQ consisting of 58 items assessing 13 factors including health, mood, convenience, sensory appeal, natural content, price, weight control, familiarity, ethical concern, religion, parents, peers and media. Factor analysis with the extraction of a maximum likelihood and varimax rotation were performed to validate the FCQ.

Results: A total of 306 students comprising 64.7% Malay, 19.3% Chinese and 16.0% Indian with a mean age of 16.1±0.3 years participated in this study. Based on their BMI status, a majority (71.9%) of the participants had normal weight, 8.2% were thin, 1.6% severely thin while 12.1% were overweight and 6.2% obese. Six factors (health and nutrition knowledge, price and convenience, media, mood and sensory appeal, peers, and parents), consisting of 36 items and explaining 45.9% of the variance, remained from the factor analysis. The reliability of the FCQ factors was good, with Cronbach's a coefficient values as follows: health and nutrition knowledge=0.84, price and convenience=0.82, media=0.89, mood and sensory appeal=0.79, peers=0.84, and parents=0.75.

Conclusion: This modified version of the FCQ validated among Malaysian adolescents is recommended for future research determining food choice motives of adolescents.

Keyword: Adolescents; Food choice motives; Food choice questionnaire; School; Validation