

EVALUATION OF AN ADAPTED FOOD CHOICE QUESTIONNAIRE FOR CLIMATE-VULNERABLE REGIONS: COASTAL, HILL, AND PLATEAU POPULATIONS

Azzahra Khairunnisa Alya Mas'ud^{1*}, Diana Nur Afifah^{1,3}, Denny Nugroho Sugianto^{2,3}

¹Department of Nutrition Science, Faculty of Medicine, Universitas Diponegoro, Semarang, Jawa Tengah, Indonesia

²Department of Oceanography, Faculty of Fisheries and Marine Science, Universitas Diponegoro, Semarang, Jawa Tengah, Indonesia

³SDGs Center, Universitas Diponegoro, Semarang, Jawa Tengah, Indonesia

*Correspondence: khairunnisalya@gmail.com

ABSTRACT

Background: Food choice was driven by some motives, psychology or physiological needs. FCQ were conducted to assess and measure motives underlying of food choice, however, the original FCQ by Steptoe was over 30 years ago in U.K population. The original FCQ was urgently need to validate the factor in other population target based on cultural, social and health factors, also different of mother language of population target, especially in context of household food insecurity.

Objectives: Aim of this study was (1) to assess modified FCQ in household food insecurity, (2) evaluate its construct validity and reliability of modified FCQ in household food insecurity.

Methods: FCQ (36 items) was translated to Indonesian, back-to-back. Construct validation was performed with factor analysis (EFA and CFA). Internal consistency was performed by Cronbach's α . Participants in this study were driven by random sampling, ratio 3:1. Total participants were 108, women over 20 years old, household food handler and live on; coastal, hills and plateau areas that affected by climate change.

Results: 15 items were excluded, and remaining 21 items perform favorable results of goodness-of-fit indices (CFI 0.968, TLI 0.965, IFI 0.969, GFI 0.932, RMSEA 0.06, and SRMR 0.11). Internal consistency also performs an excellent consistency (Cronbach's α 0.876).

Conclusion: This modified FCQ is a valid and reliable instrument for assessing household food choice in populations affected by climate change and food insecurity, supported by strong psychometric performance. Further validation with a larger sample is recommended to enhance generalizability.

Keyword: Factor analysis; food choice questionnaire; household food insecurity; reliability; validity