Reviewer’s report

Title: Associations between obesity, socio-demographic factors, life events, lifestyle and psychological well-being in older Europeans

Version: 1 Date: 29 December 2011

Reviewer: Awat Feizi

Reviewer’s report:

Below you will find comments obtained during the peer review for the submitted manuscript entitled: “Associations between obesity, socio-demographic factors, life events, lifestyle and psychological well-being in older Europeans

1. Minor Essential Revisions
   Title of manuscript should expressed or modified in which the role dependent and independent variables clearly identified.

2. The following item are major Compulsory Revisions
   Methods section:
   • What is the study design? What is the time period of research? Please present it carefully.
   • Please correct the number of sample for GB to 1182 in table 1. Also present the corresponding percents to frequencies of male and female. What are the numbers in parentheses? They are SD or SE, please identify it.
   • For each used instrument you should present which type of factor analysis has been used; explanatory or confirmatory and what are the number in parentheses (loadings); for example for FFQ it is not clear which type of factor analysis was used and …
   • Regarding to BHS instrument: regular factor models cannot be used for analyzing dichotomous variables. They are only applicable for continuous or at least ordinal variables.
   • Regarding to PSS instrument: if you extracted two factors you should compute factor scores for each one and use them separately as predictor variables.
   • Your statistical analysis has major drawbacks. Accordingly the obtained results should be modified according to following recommendation:
     o First: the authors in methods section mentioned that the one way ANOVA have been used for …. In this regard due to two dependent variables (BMI and WSC) they should use Two-way MANOVA, considering sex and country as independent variables.
     o Second: Regarding to regression models: it is highly recommended the authors use Multivariate multiple regression, i.e. simultaneously consider the BMI and WSC as dependent variables and regress them on independent variables.
Variable “Resilience” two times has been used, although the second one has been adjusted, definitely in this case the colinearity problem will be occurred in fitted regression models!

- According to the above recommendations, the results section needs major revisions. Results section should be rewritten more precisely.(e.g. the percents in parentheses are not meaningful. The sample size for GB has been wrongly written 1172?!) 

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.