Construct Validity And Reliability Of Perception Towards Smoking Questionnaire (PTSQ) Among Secondary School Going Adolescents

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INTRODUCTION

Multitude studies have shown perception is an integral factor associated with smoking. However, no such tool was available in Malay language. In this study, we established a Bahasa Malaysia version of PTSQ (BM-PTSQ) and tested the validity and reliability among secondary school adolescents.

METHODOLOGY

The English version of PTSQ originally consists of 12 items. It was translated into Bahasa Malaysia and back-translated again into English to check for consistency. Face validity (face-to-face query) was determined among 10 secondary school adolescents. Only to items were included in the survey as that the majority of the respondents were unsure about 2 items in the questionnaire.

Construct validity was established through the distribution of the questionnaire to 428 students (the required sample size that was calculated using Bonett's formula). The questionnaire was distributed to 10 secondary schools in the district of Kota Tinggi, Johor. Number of respondents from each school was selected through proportionate to size approach. Selection of students was done by simple random sampling method. Data was obtained through self-administered approach and respondents were briefed the content of the questionnaire beforehand.

RESULTS

Data Management

Descriptive statistic was used to describe the characteristic of the respondents. Exploratory Factor Analysis was utilised to construct validity of the instruments. The ideal number of factors was determined by eigenvalue criteria above 1 and from scree plot. Factor loading of 0.3 was selected as criteria for item inclusion in each item. Kaiser-Mayer-Olkin test and Bartlett’s test were used to assess the adequacy of data. Reliability of the each domain in BM-PTSQ was determined by internal consistency analysis using Cronbach's alpha. All analysis was carried out by the SPSS statistical software version 16.

Discussion

2 items: “I might develop heart disease/stroke if I smoked” & “My lifestyle such as eating and smoking habit will determine whether I get sick or not” were removed from BM-PTSQ due to lower comprehension among the 16 years old adolescents. Favourable points of this paper: Undertaken comprehensive validity process. Undertaken comprehensive face validity. Reliable (Cronbach’s alpha values were 0.861 and 0.661, for knowledge and attitude respectively).

Conclusion

The BM-PTSQ showed good validity and reliability for measurement of perception of smoking among school adolescents in Malaysia. This is a viable measure tool to measure knowledge and attitude toward smoking among school going adolescents in Malaysian secondary schools.

We would like to thank the Director General of Health Malaysia and the Director of Institute for Medical Research (IMR) for their permission to present the research findings.

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