

DEVELOPMENT OF CHINESE VERSION OF THE GLOBAL YOUTH TOBACCO SURVEY INSTRUMENT

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Abstract

- Tobacco smoking posed public health concerns because of its high risk on many chronic diseases. Most smokers begin using tobacco in their teens and recent reports indicate that smoking prevalence is climbing among youth. The Global Youth Tobacco Survey (GYTS) is a worldwide school-based tobacco specific survey and the most challenging work involved in international study is how to minimize the cross-cultural differences. Specifically, GYTS is not only interested in the prevalence of smoking, but also tobacco-related attitude, curriculum and advertisement which are culture-oriented. Therefore, we conducted this study to develop a Chinese version of GYTS instrument for both national surveillance and international comparison.
- Six tobacco control experts were invited to review the comprehensiveness and feasibility of Chinese version of GYTS questionnaire. A focus group meeting which involved five school teachers and eight students was held to discuss culture-relevant tobacco issues. Translation and back translation techniques were used to meet the equivalence of Chinese version and original instrument. Finally, the Chinese Version of GYTS was administered to a total of 382 students in 10 schools which were randomly selected using a multi-stage sampling. The internal consistency (Cronbach's alpha) for the subscales of smoking concern, social relationship and media information ranged from 0.70 to 0.94. The internal logical agreement of responses ranged from 85.3 to 99.2. The results of this study demonstrated that the Chinese version of GYTS are equipped with good reliability and validity and are capable of being the foundation of international comparison and tobacco control in Taiwan.

Background

- Tobacco use is one of the major preventable causes of death in the world.
- In Taiwan, Smoking cigarettes significantly increases mortality among individuals 35 years and older, and lung cancer is the second leading cause of cancer death.
- About 46% of men and 4% of women in Taiwan are current cigarette smokers.
- Most people begin using tobacco in their teens, and recent trends indicate rising smoking prevalence rates among children and adolescents and earlier ages of initiation.
- Previous research on tobacco in Taiwan used a range of survey instruments, sampling frames, and data collection protocols. Findings from these studies may not be comparable with other data collected in Taiwan or other countries.
- The Bureau of Health Promotion implemented the Taiwan Global Youth Tobacco Survey (GYTS) in 2004.

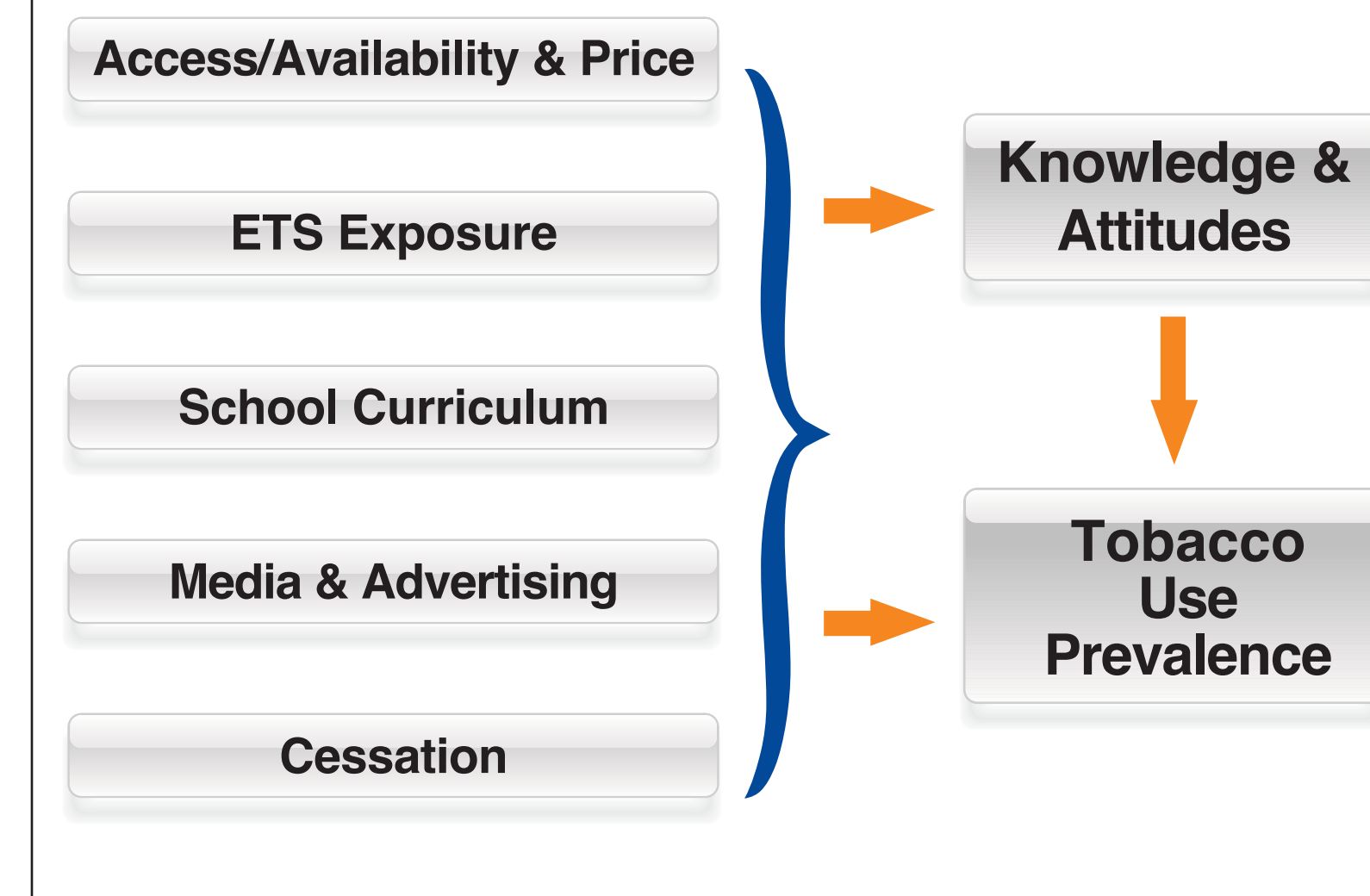
Purpose

- The aim of this study was to assess validity and reliability of the Chinese version of the Global Youth Tobacco Survey (GYTS) to provide a valid and reliable measure of smoking behaviors on students aged 13 to 15 in Taiwan.

Global Youth Tobacco Survey

- Developed by the World Health Organization and Centers for Disease Control and Prevention since 1998
- A standardized methodology for constructing the sample frame, selecting schools and classes, preparing uniform questionnaires, and following consistent field procedures
- School based survey on students aged 13 to 15
- Two-stage cluster sample design
- Confidential self-administered questionnaire

Direct Determinants of Tobacco Use

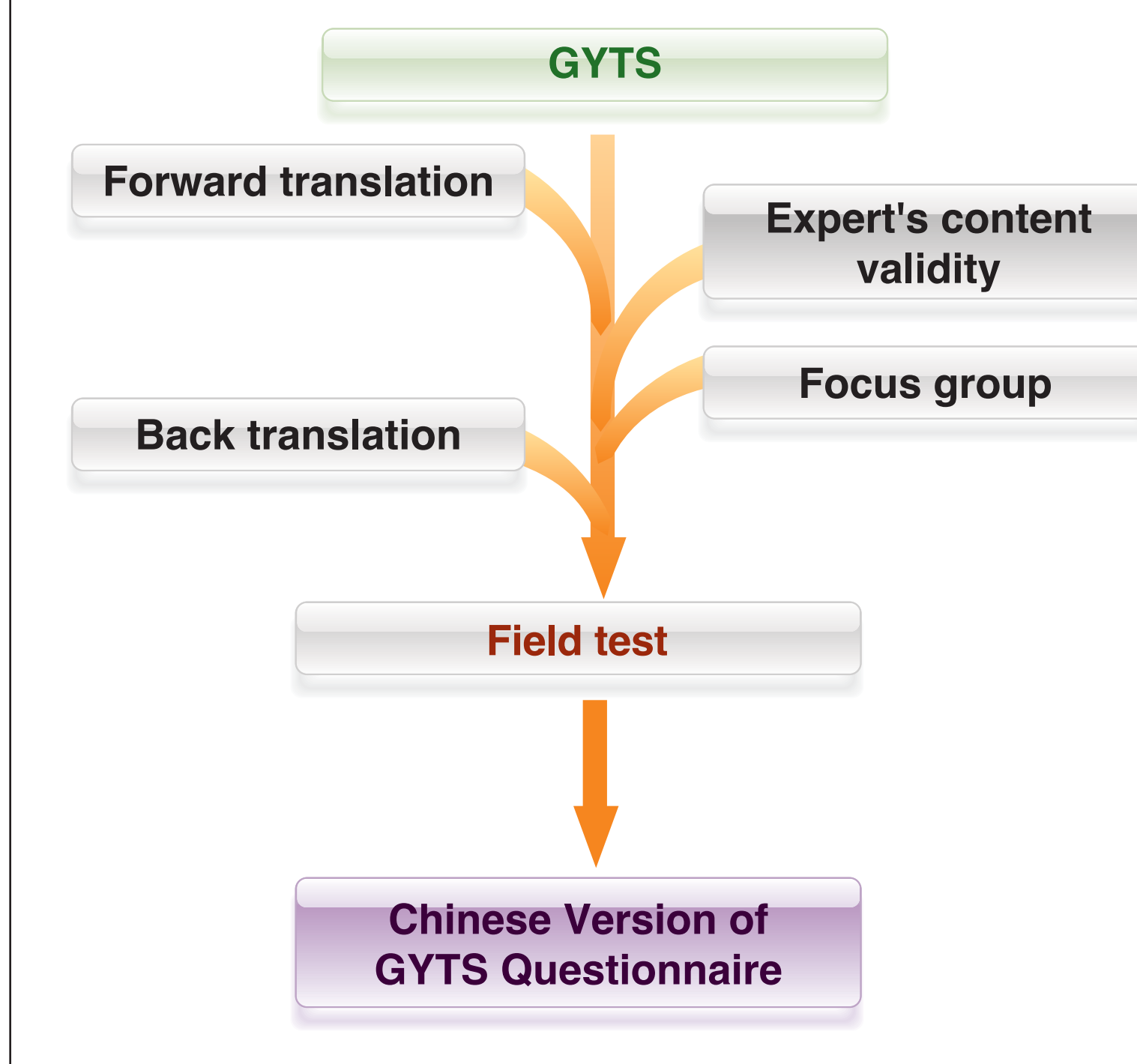


Topics of GYTS

- Prevalence of cigarette smoking and other tobacco use among young people
- Knowledge and attitudes of young people towards cigarette smoking
- Role of the media and advertising on young people use of cigarettes
- Access to cigarettes
- Tobacco-related school curriculum
- Environmental tobacco smoke (ETS)
- Cessation of cigarette smoking

Cross-cultural adaptation process

- The original GYTS questionnaire developed by CDC with WHO.



Forward translation

- The forward translation was independently performed by two bilingual epidemiologists who participated in a two-day GYTS survey workshop to be familiar with the detailed concepts of GYTS questionnaire before translation.

Expert meeting and Focus group

- Six epidemiologists with expertise in risk behavior surveillance, and tobacco control participated in an expert meeting to review the appropriateness and comprehensiveness of the Chinese versions of GYTS.

- Eight students and five school teachers were invited to attend a focus group.

Back translation

- One University English instructor translated back the Chinese version of GYTS questionnaire into English for assessment

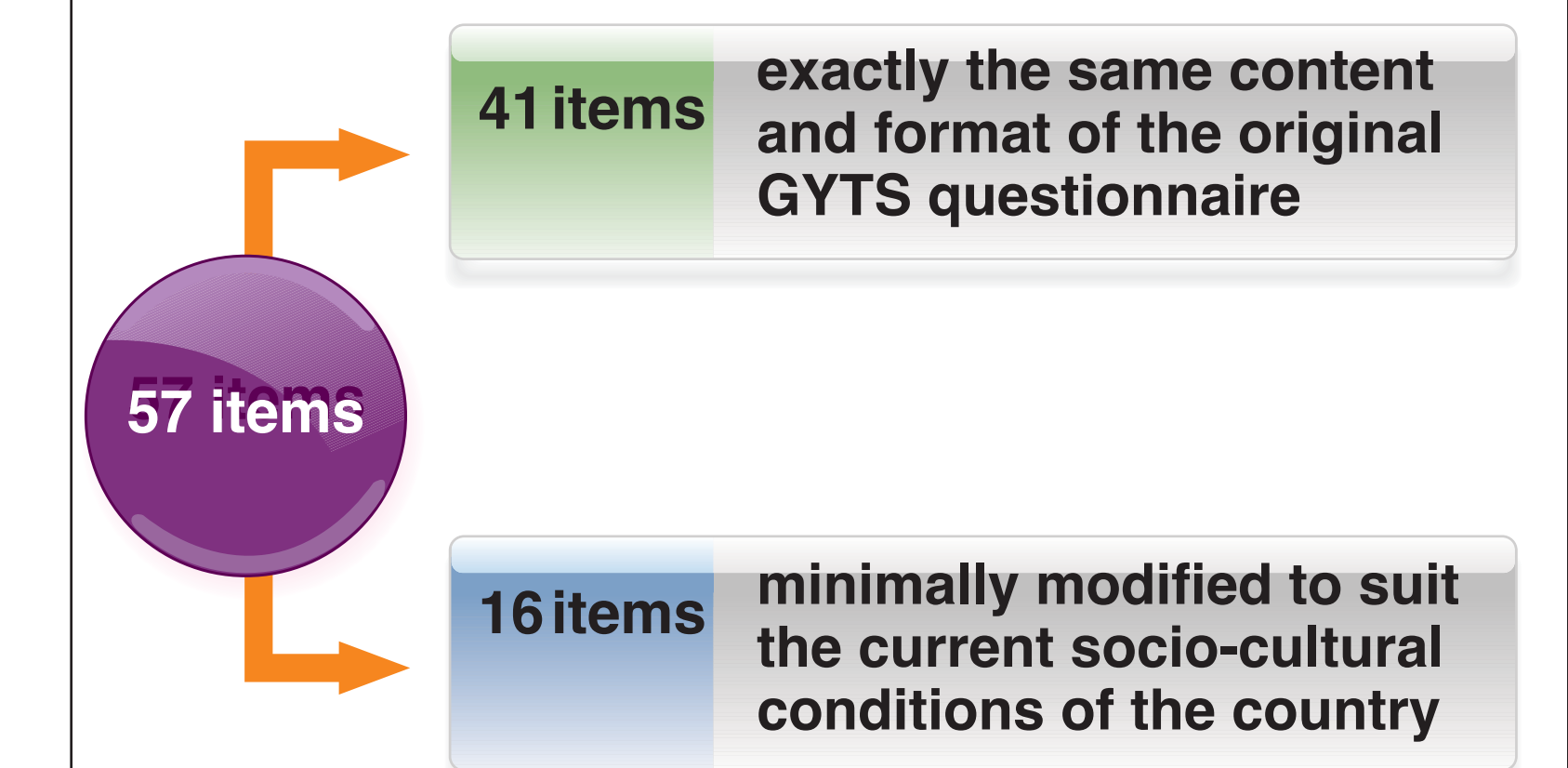
of equivalence. Two University English assistant professors compare the back translation forms and the original questionnaire to ensure the target version and the original version has the same meaning.

Filed test

- The Chinese version of GYTS was administered to a total of 382 students in 10 schools which were randomly selected using a multi-stage sampling in June, 2004.
- The internal consistency (Cronbach's alpha) for the subscales of smoking concern, social relationship and media information ranged from 0.70 to 0.94.
- The internal logical agreement of responses ranged from 85.3 to 99.2.

The Contents of Chinese version of GYTS Questionnaire

- The original GYTS questionnaire developed by CDC with WHO.



Conclusion

- The results of this study demonstrated that the Chinese version of GYTS are equipped with good reliability and validity and are capable of being the foundation of international comparison and tobacco control in Taiwan.