Cross-cultural Instrument Translation and Adaptation: Challenges and Strategies

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Abstract: Over the decades, cross-cultural research has been conducted to increase understanding of health and illness phenomena across different cultures and populations. However, researchers are faced with issues of translation from the source language to the target language, even with instruments developed for use in cross-cultural research. Therefore, the process of translation is a crucial one in order to maintain the conceptual, content, semantic, and construct equivalences across the two languages and cultures which is essential for credibility of the measurement results. The purpose of this article is to describe the process of the translation and cross-cultural adaptation of the Falls Efficacy Scale-International. It was translated into Thai using ten steps, including translation and back-translation as well as checking with experts and the target audience to assure cultural equivalence. Challenges with some wordings and cultural differences in daily life were identified and addressed with strategies to manage them so that an appropriate version of the tool was developed and ready for future research with community-dwelling Thai older adults.

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Introduction

Cross-cultural research has dramatically increased due to an interest in understanding health phenomena and/or experience of health and illness across different cultural populations and ethnic groups. Conducting cross-cultural studies has long been recommended as researchers can reference a concept or construct of interest across cultures and directly compare the findings across studies from different cultures and countries.[1,2] However, in doing so, researchers must translate instruments from the source language, usually English, to the language of the target population. One of the goals of instrument translation is to achieve cross-cultural conceptual, semantic, and content equivalences for the constructs or concepts of interest.[1-4] Without these equivalences, differences and/or similarities in the results gathered from cross-cultural research may be due to errors in translation rather than from cultural differences.[5,6]

Even if an instrument was developed for use in cross-cultural research, researchers still face the challenges of instrument translation. For example,

forward translators could select wording in target languages that does not have the same meaning as in the original language.[7-9] This is because the terms, and meaning of the concept or constructs being studied may differ among languages, cultures, and countries.[1, 7-9] Therefore, the process of translation is a crucial one. The comprehensive process of instrument translation should include not only translation of the instrument, but also cultural adaption of each item to the target culture while retaining the meaning and intent of the original items.[1, 10-12] The purpose of this article is to discuss cross-cultural instrument translation methods, as well as challenges and strategies encountered during a study to translate the Fall Efficacy Scale-International (FES-I) into Thai.

Cross-cultural Instrument Translation Methods

There are two kinds of instrument development methods commonly used in cross-cultural research.[11] In the first instance, an instrument is developed for use in two languages, with an assumption that neither language is a source language. The items are modified in an ongoing reciprocal process thereby providing the opportunity to align the two versions closely. In the second example, researchers rather than developing a new instrument, researchers instead use a previously developed and validated instrument and adapt it for use in a target culture and language.[11] The latter is more commonly used.[8, 11, 13]

The simplest method for instrument translation is forward translation from the original to the new language. This method is simple, but can raise questions related to the quality of the translation, thus threatening the validity of the instrument as well as the research findings since the source and the target versions may lack semantic and content equivalences.[11, 14] In order to improve equivalences between the source and target languages, Brislin[14, 15] recommended cross-cultural researchers add one or more of the following techniques when translating an instrument: (a) use of a bilingual translator to translate the instrument from the source to the target language, (b) use of another bilingual translator back-translation of the instrument, (c) use of bilinguals to test both the source and target language versions, or (d) testing of the translated version with participants of the target population to be studied. Brislin[15] developed a process for cross-cultural research that has been adopted by many researchers.[16, 17] To begin the process of back translation, someone who is bilingual translates the instrument from the source (original) to the target (local) language. Then, a different person who is bilingual translates the instrument back from the target to the source language. The new back-translated version and the original version are compared for similar words and meaning. Ideally, this is done by a researcher familiar with the instrument and content area. This process can be repeated if needed to improve comparability of the back-translated version to the original version. Each bilingual translator works independently. The last back-translated version must be compare with the original version by a monolingual person whose primary language is the language used in the original version,[12, 18] and should be the developer of the original instrument if he or she is available.[10, 18] The researcher then compares the last back-translated version with the original version. If an error in meaning is found, the process is repeated again until both versions are equivalent.[15]

In a recent review of translation process methods used in cross-cultural research, Maneesriwongul and Dixon[5] found that the most widely used translation methods were forward-only translation, forward-only translation with testing, back translation, back translation with monolingual testing, back translation with bilingual testing, and back translation with both monolingual and bilingual testing, respectively. They recommended that the standard method for cross-cultural research should include at least one back translation, followed by testing with target language participants.

In this study, a rigorous back translation process was used to develop a cross-cultural version of a measure falls self-efficacy, the Falls Efficacy Scale-International (FES-I)[19] for use with Thai older adults. The following

describes the translation and cross-cultural adaptation using this method, as well as challenges encountered and recommendations for other researchers.

The Falls Efficacy Scale-International (FES-I)

Fear of falling is increasingly recognized as a significant problem in older adults, leading to activity restriction, disability, and increased risk of falls.[20-22] As a result, measurement of fear of falling is common in studies related to falls, frailty, and activity among older adults. Fear of falling is often assessed using the related concept of falls efficacy. Falls efficacy was originally conceived as confidence in performing different daily activities without falling by Tinetti, Richman, & Powell[23], who developed the 10-item Falls Efficacy Scale (FES). The FES-I is an adaptation later developed by researchers with the Prevention of Falls Network Europe (ProFaNE) for use in a wide range of cultural settings.[19] The FES-I consists of 16 items, including the 10 items from the original FES.[23] Six additional items were selected from literature to provide a wider range of more difficult activities based on review of the other measures.

The final version of the FES-I assesses concern about the possibility of falling while performing of sixteen common activities.[19] Each activity is scored from 1 (not at all concerned) to 4 (very concerned) points, providing a total score ranging from 16 (absence of concern) to 64 (extreme concern). A higher score indicates higher concern. On testing in the United Kingdom, the instrument showed excellent internal consistency and test-retest reliability (Cronbach's alpha coefficient = 0.96, Intraclass Correlation Coefficient (ICC) = 0.96).[19] A cross-cultural validation of the FES-I indicated positive psychometric properties in Germany (n=94), the Netherlands (n=193), and the United Kingdom (n=178). The Cronbach's alpha coefficients were 0.90, 0.96, and 0.97, respectively and the ICCs were 0.79, 0.82, and not available, respectively.[24]

The FES-I has been translated and has excellent psychometric properties across a variety of languages and countries including, Sweden[25], Brazil[26], Italy[27], Greece[28], Spain[29], Turkey[30], Arabic[31], Hungarian[32], and Chinese.[33] Although the FES-I has been adapted for several countries, a translation use in Thailand had not been posted by the ProFaNE group. While the FES-I was translated into Thai language before[34], the researcher reported using the term "fear of falling" instead of "concern of falling" in her questionnaire, as required by the ProFaNE group. The word "fear" had created issues in past testing of measures of fear of falling. As a result, the purpose of this study was to translate the FES-I into a culturally appropriate Thai language version based on the ProFaNE guideline and process for use in future fear of falling research.

Methods

After the first author (SP) received permission from the ProFaNE group, the process of translation and cultural adaption of the FES-I was conducted according to their ten-step translation protocol.[35] This translation protocol was congruent with the translation process recommended by Brislin.[4, 15] The English version provided the original language. The process for translation and cross-cultural adaptation follows.

Translation and Cross-Cultural Adaptation Process

Before beginning, the authors selected translators. The authors carefully discussed the selection because one of the keys of successful translation in cross-cultural research is translator qualification.[4] According to the literature review, forward translators from the source to the target language should be conducted by persons fluent in both languages and cultures.[16, 17, 36] Ideally, they have different backgrounds, are knowledgeable about and familiar with the construct or concept being measured, and know how the instrument will be used. Conversely, back translators should be blinded to the original instrument being translated and should be unaware of the intent and the concept or context being studied. All translators

should work independently.[2-4, 6, 16, 36] If possible, and the translator team should include translators who speak different variations or dialects of the same language.[3]

After consulting the literature review and the ten-step translation protocol of the FES-I, five bilingual translators were selected, including three forward translators and two back translators. Since the FES-I was developed to be suitable for translation for use in a variety of cultural contexts and languages, the English wording contained in the FES-I was not sophisticated. Hence, three bilinguals Thai doctoral students studying in the United States who were native Thai speakers with different backgrounds (one specializing in psychiatric nursing, and two in adult and older adult nursing), and were familiar with the concept of fear of falling were selected.

The two back translators were also bilingual: one had English as a first language, and the other had Thai as a first language. One of two back translators was a professional translator of Thai nationality. She was born, grew up, and earned her education through a doctoral degree in the United States. Although her native language was English, she can read and write in Thai since she used Thai language in her home and had worked in Thailand. The other back translator was a retired Thai older adult living in the United States. She spent the first half of her life in Thailand, and then earned her master's and doctoral degrees and worked in the United States.

Next, the instructions for translators[37] were provided to the three forward translators in order to enhance conceptual, semantic, and content equivalences between the FES-I and the FES-I (Thai) versions.[2, 18] Then, they independently translated the original FES-I into Thai language. In the second step, a first meeting of forward translators was held in order to identify differences and discrepancies between the three translated versions, and to solve any problems through discussion and consensus. These steps yielded a provisional FES-I (Thai) version. As a first step in evaluating this version, each forward translator selected two Thai older adults living in the United States to evaluate the provisional FES-I (Thai) version. Each older adult filled out the provisional version separately. The forward translators then asked the older adults about the clarity, comprehensibility, appropriateness, and comprehensiveness of each item in the provisional version. Then, the forward translators met again in order to discuss and modify the wording of the provisional version based on the older adults' feedback. This step resulted in a second provisional version.

In the next step, the second provisional version was back translated by two back translators who were blinded to the original FES-I, and were not aware of the intent or the concept and context of fear of falling. A third meeting of the forward translators was then held to review both back-translation versions. The discrepancies between the translated versions were evaluated and noted. As an additional step, all three English versions (the original and the two back-translated versions) were examined by another author (HL). She is an expert in the area of fear of falling and monolingual in English. Any inconsistencies were identified, discussed with the back translators, and a consensus reached by the authors. Then, the pre-final FES-I (Thai) version was established.

The pre-final FES-I (Thai) version was reviewed by six monolingual Thai community-dwelling older adults living in Thailand, the target population for future studies. The purpose was to examine the clarity and linguistic appropriateness of the pre-final FES-I (Thai) version, and to ensure that future participants could comprehend all the questions and procedure for administration. Because the authors were not in Thailand at the time, the first author (SP) contacted a nurse working in a community hospital who worked with Thai older adults who agreed to administer the FES-I (Thai) version. The nurse was oriented to the project, and worked with an older adults' club in her community to find older adults to volunteer to fill out a questionnaire and discuss it. They independently reviewed and filled out the

questionnaire. Afterwards, she asked them about the clarity of each item and identified any words or phrases that they did not understand, were difficult to comprehend, or inappropriate.

Results

While the translation process worked well, there were some challenges encountered during the project that were solved. During the first step, the forward translators had some difficulty finding an appropriate match for some English words in the Thai language. For example, they noted that the word "concerned" was translated into three different Thai words. One translator used a Thai word with a meaning close to "worried," even though all translators were provided the FES-I direction that the term "concerned" should be used to express a cognitive uneasiness about the possibility of falling, rather than emotional distress that would be expressed in terms of "worried", "anxious", or "fearful." This problem was solved during their consensus meeting.

Another item was modified by a consensus among the forward translators due to differences in Thai culture: "taking a bath or shower." This was translated into Thai as "taking a bath." The Thai rarely have a bathtub in their homes, so bathing is typically done by taking a shower. After the first meeting, there were no other changes to items or words apart from those mentioned, and the provisional version of the FES-I (Thai) version was created.

This provisional version was reviewed with six Thai older adults living in the United States. Then a second meeting of the forward translators was held to discuss their comments. None of the participants in this initial group reported a problem with any item in the provisional version or gave any suggestions; thus, the first provisional version was not revised.

When the back-translated English versions were reviewed and compared to the original, the wording of one item appeared awkward in English. The original item, "walking up and down a slope" appeared as "walking up and down the steep or ramp" in the back-translated version. The back translator was contacted. She explained that the terms "steep or ramp" meant a slope, but she used these other words because they were more appropriate and familiar terms in the Thai language and context than the word "slope." Therefore, after discussion with the forward translators, their wording was retained since it used was determined to have a meaning closer to the original English version. Therefore, the authors concluded that although the original FES-I and one of the back-translated versions was a bit different in linguistic equivalence, the three English versions revealed semantic and content equivalence since the meaning was maintained. A pre-final FES-I (Thai) version was developed.

The pre-final FES-I (Thai) version was reviewed by six Thai community-dwelling older adults living in a Thai rural area. After completing the questionnaire, the older adults were asked "What do you think this questionnaire asks?" They all answered that the questionnaire asked about their concern about the possibility of falling when doing each activity. While participants reported that the items were clear and understandable, they also preferred to have the questions administered by interview, rather than filling out the questionnaires themselves. This is because they were confused about which column they should check to answer each question. When the nurse compared the answers on the questionnaire to the older adults' verbal answers, she found that the older adults did not always check the correct column. For example, one person answered that she was very concerned, but she checked the "not concerned" column. Other than this suggestion, no words or items were reworded or modified, and the final FES-I (Thai) version was created.

Discussion

In this study, the FES-I was translated and adapted into Thai context in terms of both semantic

and cultural aspects. While completing the forward translation, team members had difficulty finding some Thai words that would retain meaning and conceptual equivalence to the original FES-I. This occurred even though the original FES-I was created for use in cross-cultural research, and guidelines were provided to the three forward translators in order to enhance conceptual, semantic, and content equivalence between the original FES-I and new versions. Our experience is congruent with results from previous research related to both instrument translations and the translation and cross-cultural adaptation of the FES-I.[6, 26, 30, 36, 38] Specially, our findings are in accordance with the finding of Camargos and colleagues[26] in Brazil who also encountered difficulty with cultural equivalence of the terms either bath or shower. The strategies recommended by Brislin[15] and ProFaNE[37] methods provide a rigorous process for identifying and resolving cross-cultural differences and is recommended for other researchers.

While we were able to find translators, some researchers report that the most difficult challenge for researchers using Brislin's back translation method is finding enough bilingual persons to run such the process.[1, 13, 17] Hence, an alternative way is to use only two independent bilingual translators, one to translate and one to back-translate.[17] However, the back translation can look adequate, even when it isn't. This is because a good or expert translator can achieve semantic and content equivalence between the source and the back-translated versions, even if the translation from the source to the target language is poor.[5, 6, 11] Additionally, the back translation process is time consuming and may be costly. Researchers may have limited resources (e.g., time, budget, and accessibility and availability of bilingual persons) along with the fact that none of aforementioned instrument translation techniques is perfect. Therefore, a combination of techniques should be used for instrument translation in cross-cultural research.[1, 4, 8, 18]

In this study, it also was found that having a reviewer who is an additional reviewer who was a native monolingual English speaker and expert in the area of fear of falling, along with previously mentioned multi-step translation process and testing enhanced the cross-cultural conceptual, semantic, and content equivalence between the original FES-I and the FES-I (Thai) versions. This was evidenced because in the third meeting, the three forward translators did not notice the minor differences between the original and back-translated versions. It took an expert who is a monolingual native speaker of English to identify minor discrepancies. It may be that the four translators (3 forward translator and one back translator who spent her first half of her life in Thailand before moved to the US) shared a common worldview owing to similar background, and the three forward translators were not as fluent in words commonly used in the English language, such as colloquial phrases or jargon.[2, 18] Therefore, the strategy of having a monolingual native English speaker examines all English versions helped to identify discrepancies between the original and the back-translated versions.[5, 17]

Input from Thai community-dwelling older adults who were representative of future study participants helped to verify the clarity and appropriateness of the Thai version. This strategy is recommended to enhance the cross-cultural conceptual, semantic, and content equivalence, and to identify potential problems related to administration of this instrument in further research.[2, 4, 5, 15, 17] The authors could anticipate that future participants would be able to comprehend the questions on the instrument and answer appropriately. Study to test whether measurement equivalence or psychometrics properties of the Thai FES-I are the same as the original and other translated versions is needed.[39]

Thai older adults preferred to be interviewed rather than fill out the questionnaire. Based on the first author's experience and a discussion with the

nurse working with Thai older adults, we concluded that those living in rural areas might be not familiar with filling out a questionnaire. There is evidence of this in that when older adults go to the hospital and have to fill out any health forms, the majority of older adults ask nurses or other individuals to read it to them. Researchers anticipating this strategy will need to consider the added time and resources needed to collect data by interview with older adults rather than having participants complete questionnaires on their own.

Conclusion

In the present study, authors complete the translation of the FES-I into a culturally and semantically appropriate instrument to measure falls efficacy relate to fear of falling in community-dwelling Thai older adults using Brislin's and ProFaNE's process and strategies. The findings of this study revealed that the FES-I (Thai) version was demonstrated to have cross-cultural conceptual, semantic, and content equivalence with the original FES-I, with some minor adaptations. Further research with larger samples will be done to determine the psychometric properties of the measure and explore fear of falling more fully in Thai older adults.

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References

1. Jones E. Translation of quantitative measures for use in cross-cultural research. Nurs Res. 1987;36(5):324-7.
2. Waltz CF, Strickland OL, &, Lenz ER. Measurement in nursing and health research. 5th ed. New York: Springer; 2016.
3. Willgerodt MA, Kataoka-Yahiro M, Kim E, Ceria C. Issues of instrument translation in research on Asian immigrant populations. J Prof Nurs. 2005;21(4):231-9.
4. Brislin RW. Back-translation for cross-cultural research. J Cross Cult Psychol. 1970;1(3):185-216.
5. Maneesriwongul W, Dixon JK. Instrument translation process: a methods review. J Adv Nurs. 2004;48(2):175-86.
6. Wang WL, Lee HL, Fetzer SJ. Challenges and strategies of instrument translation. West J Nurs Res. 2006;28(3): 310-21.
7. Hoben M, Mahler C, Bar M, Berger S, Squires JE, Estabrooks CA, et al. German translation of the Alberta Context Tool and two measures of research use: methods, challenges and lessons learned. BMC Health Serv Res. 2013;13:478.
8. Khalaila R. Translation of questionnaires into Arabic in cross-cultural research: techniques and equivalence issues. J Transcult Nurs. 2013;24(4):363-70.
9. Ljungberg AK, Fossum B, Furst CJ, Hagelin CL. Translation and cultural adaptation of research instruments - guidelines and challenges: an example in FAMCARE-2 for use in Sweden. Informatics for health & social care. 2015;40(1):67-78.
10. Sousa VD, Rojjanasrirat W. Translation, adaptation and validation of instruments or scales for use in cross-cultural health care research: a clear and user-friendly guideline. J Eval Clin Pract. 2011;17(2):268-74.
11. Sperber AD. Translation and validation of study instruments for cross-cultural research. Gastroenterology. 2004;126 (1 Suppl 1):S124-8.
12. Wong-Anuchit C, Mills AC, Schneider JK, Rujkorakarn D, Kerdpongbunchote C, Panyayong B. Internalized stigma of mental illness scale - Thai version: translation and assessment of psychometric properties among psychiatric outpatients in central Thailand. Arch Psychiatr Nurs. 2016;30(4):450-6.
13. Chan DNS, So WKW. Translation and validation of translation in cross-cultural research: Strategies used in a study of cervical cancer screening among ethnic minorities. Int J Nurs Pract. 2017;23(6).
14. Jones E, Kay M. Instrumentation in cross-cultural research. Nurs Res. 1992;41(3):186-8.

15. Brislin RW. The wording and translation of research instruments. In: (Eds.) WLLJWB, editor. Field methods in cross-cultural research. Beverly Hills: Sage Publications; 1986. p. 137-64.
16. Jones P, Lee J, Phillips L, Zhang X, Jaceldo K. An adaptation of Brislin's translation model for cross-cultural research. Nurs Res. 2001;50(5):300-4.
17. Cha ES, Kim KH, Erlen JA. Translation of scales in cross-cultural research: issues and techniques. J Adv Nurs. 2007;58(4):386-95.
18. Hilton A, Skrutkowski M. Translating instruments into other languages: development and testing processes. Cancer Nurs. 2002;25(1):1-7.
19. Yardley L, Beyer N, Hauer K, Kempen G, Piot-Ziegler C, Todd C. Development and initial validation of the Falls Efficacy Scale-International (FES-I). Age Ageing. 2005;34(6):614-9.
20. Jefferis BJ, Iliffe S, Kendrick D, Kerse N, Trost S, Lennon LT, et al. How are falls and fear of falling associated with objectively measured physical activity in a cohort of community-dwelling older men? BMC Geriatr. 2014;14 (114):1-9.
21. Lavedan A, Viladrosa M, Jurschik P, Botigue T, Nuin C, Masot O, et al. Fear of falling in community-dwelling older adults: A cause of falls, a consequence, or both? PLoS One. 2018;13(5):e0197792.
22. Denkinger MD, Lukas A, Nikolaus T, Hauer K. Factors associated with fear of falling and associated activity restriction in community-dwelling older adults: a systematic review. Am J Geriatr Psychiatry. 2015;23(1):72-86.
23. Tinetti ME, Richman D, Powell L. Falls efficacy as a measure of fear of falling. Journals of Gerontology. 1990;45(6):239-43.
24. Kempen GI, Todd CJ, Van Haastregt JC, Zijlstra GA, Beyer N, Freiberger E, et al. Cross-cultural validation of the Falls Efficacy Scale International (FES-I) in older people: results from Germany, the Netherlands and the UK were satisfactory. Disabil Rehabil. 2007;29(2):155-62.
25. Nordell E, Andreasson M, Gall K, Thorngren KG. Evaluating the Swedish version of the Falls Efficacy Scale-International (FES-I). Advances in Physiotherapy. 2009;11(2):81-7.
26. Camargos FF, Dias RC, Dias JM, Freire MT. Cross-cultural adaptation and evaluation of the psychometric properties of the Falls Efficacy Scale-International Among Elderly Brazilians (FES-I-BRAZIL). Rev Bras Fisioter. 2010; 14(3):237-43.
27. Ruggiero C, Mariani T, Gugliotta R, Gasperini B, Patacchini F, Nguyen HN, et al. Validation of the Italian version of the falls efficacy scale international (FES-I) and the short FES-I in community-dwelling older persons. Arch Gerontol Geriatr. 2009;49 Suppl 1:211-9.
28. Billis E, Strimpakos N, Kapreli E, Sakellari V, Skelton DA, Dontas I, et al. Cross-cultural validation of the Falls Efficacy Scale International (FES-I) in Greek community-dwelling older adults. Disability and Rehabilitation. 2011;33(19-20):1776-84.
29. Lomas-Vega R, Hita-Contreras F, Mendoza N, Martínez-Amat A. Cross-cultural adaptation and validation of the falls efficacy scale international in Spanish postmenopausal women. Menopause: The Journal of The North American Menopause Society. 2012;19(8):904-908.
30. Ulus Y, Durmus D, Akyol Y, Terzi Y, Bilgici A, Kuru O. Reliability and validity of the Turkish version of the Falls Efficacy Scale International (FES-I) in community-dwelling older persons. Arch Gerontol Geriatr. 2012;54(3):429-33.
31. Halaweh H, Svantesson U, Rosberg S, Willen C. Cross-cultural adaptation, validity and reliability of the arabic version of the falls efficacy scale-international (FES-I). Med Princ Pract. 2016;25(1):1-7.
32. Kovacs E, Rozs F, Petridisz A, Erdos R, Majercsik E. Cross-cultural validation of the Falls Efficacy Scale-International to assess concerns about falls among Hungarian community-living older people. Disabil Rehabil. 2017:1-6.
33. Kwan MM, Tsang WW, Close JC, Lord SR. Development and validation of a Chinese version of the Falls Efficacy Scale International. Arch Gerontol Geriatr. 2013;56(1): 169-74.
34. Thiamwong L. Psychometric Testing of the Falls Efficacy Scale-International (FES-I) in Thai older adults. Songklanakarin medical journal. 2011;29:277-87.
35. ProFaNE. Ten step FES-I translation protocol 2012. Available from: http://www.profane.eu.org/documents/ Ten_step_translation_protocol.pdf.

36. Beck CT, Bernal H, Froman RD. Methods to document semantic equivalence of a translated scale. Res Nurs Health. 2003;26(1):64-73.
37. ProFaNE. FES-I Translators'/Interviewers' notes. 2012.
38. Yu DS, Lee DT, Woo J. Issues and challenges of instrument translation. West J Nurs Res. 2004;26(3):307-20.
39. Streiner DL, Norman GR, & , Cairney J. Health measurement scales: A practical guide to their development and use. 5th ed. United Kingdom: Oxford University Press; 2015.

การแปลและปรับเนื้อหาของเครื่องมือวิจัยข้ามวัฒนธรรม: ความท้าทายและกลยุทธ์

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บทคัดย่อ: ในช่วงหลายทศวรรษที่ผ่านมาได้มีการทำวิจัยข้ามวัฒนธรรมมาตลอด เพื่อช่วยเพิ่มความเข้าใจปรากฏการณ์ของภาวะสุขภาพและความเจ็บป่วยในประชากรที่มีความแตกต่างทางวัฒนธรรมและชาติพันธุ์ แต่อย่างไรก็ตามนักวิจัยยังคงประสบปัญหาเกี่ยวกับการแปลเครื่องมือวิจัยจากภาษาดั้งเดิมไปเป็นภาษาเป้าหมายถึงแม้ว่าเครื่องมือวิจัยนั้นจะถูกสร้างมาสำหรับใช้ในการวิจัยข้ามวัฒนธรรมก็ตาม ดังนั้นกระบวนการแปลจึงเป็นขั้นตอนที่สำคัญมากขั้นตอนหนึ่งเพื่อรักษาความเทียบเท่ากันด้านแนวคิด เนื้อหา ความหมายและโครงสร้างของทั้งภาษาดั้งเดิมและภาษาเป้าหมาย ซึ่งเป็นส่วนสำคัญต่อความน่าเชื่อถือของผลที่ได้จากเครื่องมือวิจัยที่ถูกแปลมา วัตถุประสงค์ของบทความนี้คือนำเสนอขั้นตอนการแปลและปรับให้เข้ากับวัฒนธรรมของแบบประเมินความเป็นกังวลว่าจะหกล้มฉบับนานาชาติ ซึ่งแบบประเมินความเป็นกังวลว่าจะหกล้มฉบับนานาชาติได้ถูกแปลเป็นภาษาไทยโดยกระบวนการแปล 10 ขั้นตอน ประกอบไปด้วยการแปลจากภาษาอังกฤษเป็นภาษาไทย การแปลย้อนกลับ การเปรียบเทียบเครื่องมือวิจัยต้นฉบับกับชุดที่แปลย้อนกลับโดยผู้ทรงคุณวุฒิ และการทดสอบเครื่องมือโดยกลุ่มตัวอย่างที่มีลักษณะทางประชากรเหมือนกลุ่มเป้าหมายงานวิจัย เพื่อให้แน่ใจว่าเครื่องมือที่แปลมานั้นมีความเทียบเท่าเชิงวัฒนธรรม รวมทั้งนำเสนอความท้าทายจากการใช้คำและวัฒนธรรมในชีวิตประจำวันที่แตกต่างกัน ดังนั้นแบบประเมินความเป็นกังวลว่าจะหกล้มฉบับภาษาไทยจึงมีความเหมาะสมและพร้อมแล้วที่จะถูกนำไปศึกษาวิจัยต่อไปในอนาคต

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