



## Committee Translation Approach Combined with Cognitive Interviews: A Valuable Translation Method

Many research instruments were originally developed in the English language. However, it is necessary to carefully translate these instruments into the languages of cultures being studied in order to conduct cross-cultural nursing research.<sup>1-2</sup> Four common techniques that have been successfully used for instrument translation are back-translation, bilingual techniques, the committee approach, and pretesting.<sup>3</sup> Although all these techniques are helpful in maintaining the equivalence of the translated version with the original instrument,<sup>4</sup> the question remains as to whether or not the study participants will be able to understand the meaning of the translated instrument items. To achieve cultural appropriateness as well as equivalence of the translated items with the original items, we would like to offer a valuable translation method that combines the committee translation approach with cognitive interviews. In our study, we wanted to investigate the Theory of Planned Behavior (TPB) constructs influencing nurses' pain management behavior for hospitalized Thai elderly patients with postoperative pain. However, no existing instruments in Thai addressed all the TPB constructs. Therefore, we prepared and translated the pain assessment questionnaire (PAQ) and pain management questionnaire (PMQ) for use as TPB-based measures of Thai nurses' beliefs (behavioral, normative, and control), attitudes, perceived norms, perceived behavioral control, and intentions with regard to assessing pain and administering PRN opioid analgesics for the population of interest. Below we describe the committee translation and cognitive interview methods and how we combined them to translate the PAQ and PMQ for use in our research.

### Committee Translation Approach

The committee or team translation approach has been used since the 1960s.<sup>5</sup> This translation method is useful for ensuring high-quality output, as the method provides alternative options for choosing the most appropriate verbiage to be used in a translation.<sup>5-6</sup> In addition, this method is better than direct translations and the technique of back-translation in terms of acceptable quality.<sup>7</sup> The process of committee translation consists of three steps: (a) forward translation, (b) a consensus meeting, and (c) a reconciliation meeting.<sup>6</sup>

#### Forward translation

Several translators individually translate the same instrument items.<sup>5-6</sup> All the members of the translation team must have sufficient knowledge of instrument design as well as the research study and the culture involved, and of course they must be fluent in both languages.<sup>5</sup> Forward translation can be conducted in two ways. First, parallel translations where several translators individually translate all the instrument items.<sup>5-6</sup> Second, split translations. Here the translators divide the questionnaire items into groups that they will individually translate; each translator is responsible for translating items pertaining to all the constructs and sub-constructs present.<sup>6</sup> This method involves less effort and is less time consuming than parallel translations, especially when the instrument includes many items.<sup>5</sup>

### **Consensus meeting**

During the consensus meeting for parallel translations, the translators discuss each instrument item, reviewing all the versions and agreeing on the optimal version.<sup>6</sup> For split translations, each translator presents his/her own group of items, and the team discusses and agrees on the final version of each item.<sup>6</sup> In both approaches, any disagreements over item translations that cannot be resolved are documented for discussion in the reconciliation meeting.

### **Reconciliation meeting**

Finally the translators meet with adjudicator, who is responsible for making final decisions about the instrument translation.<sup>6</sup> The purpose of the meeting is to reconcile any disagreements among the translators, confirm translation equivalence with the original instrument, and reach agreement on the most appropriate wording for the final version.<sup>5</sup> Along with being fluent in both languages involved, the adjudicator must have detailed knowledge about the research study and its design.<sup>6</sup>

## **Application**

The three steps of the committee translation approach were applied in our study. Our application of this approach and its results are summarized below.

### **Forward translation**

We conducted parallel forward translations because we wanted to ensure the translation quality of each item. Three translators, all of whom were Thai doctoral students in the College of Nursing at the University of Illinois at Chicago, independently translated the entire PAQ and PMQ. All three translators were fluent in English as well as Thai and had worked as instructors of nursing students in Thailand. In addition, all the translators had sufficient knowledge of the research study and were very familiar with nursing practice in Thailand.

### **Consensus meeting**

The translators met to discuss their versions of each PAQ and PMQ item. In this consensus meeting, they selected optimal versions of translated items and confirmed that they had the same meanings as the source items. Item translations that the translators could not agree on were documented for discussion in the reconciliation meeting.

### **Reconciliation meeting**

The translators met with the adjudicator, a specialist in pain management and the TPB, to reconcile translation disagreements, confirm the equivalence of the translated instruments with the originals, and select the most appropriate wording for the Thai versions of the PAQ and PMQ.

### **Results**

During the committee translation process, nine items of the PAQ and seven items of the PMQ were modified to better reflect Thai cultural meanings. For example, a PAQ item for pain assessment behavioral beliefs was modified from “A more accurate picture of the patient’s situation” to “A better understanding of the patient’s pain.” As another example, a PMQ item for pain management behavioral beliefs was modified from “Increased independence” to “Increased ability to take care of themselves.” In addition, two items of the PMQ were deleted because they were culturally inappropriate for Thai nursing practice.

## **Cognitive Interviews**

Cognitive interviewing is widely used in instrument development to identify unclear items and support their improvement.<sup>8</sup> This method allows the researcher to understand how people interpret individual items and allows the people to verbalize their thought process when responding to items through a “think aloud” process.<sup>8-9</sup>

During cognitive interviews, respondents are asked to read each instrument item and select a response; then they are asked to explain the meaning of the item and offer suggestions to improve it.<sup>8</sup> Cognitive interview results can then be used to modify or develop items that capture the respondents' cultural context,<sup>10</sup> and thus the items' meanings can be similarly understood across cultures.<sup>10</sup>

## **Application**

In our study, after translation of the PAQ and PMQ, we conducted 10 cognitive interviews with Thai nurses to ensure the instruments' conceptual equivalence with the originals, meaning that the constructs were operationalized in the same forms between the target and source cultures.<sup>3</sup> The procedure used to conduct the cognitive interviews and their results are summarized below.

### **Sample**

The sample consisted of 10 Thai nurses working in the adult inpatient unit of a tertiary care hospital in Bangkok who had experience in providing care for elderly patients with postoperative pain.

### **Procedure**

The 10 nurses were asked to read each PAQ and PMQ item and select a response. Then they were asked to explain how they interpreted the meaning of the item and why they responded as they did (e.g., "What do you think we mean by this statement?" and "When you answered this question, what were you thinking about?"). The nurses were also asked to provide suggestions for item improvement (e.g., "Is there a better way to say this?").

### **Data analysis**

During analysis of the interview data, unclear items were identified and documented in tabular form. Then the researchers met to discuss these items and to modify or delete them in order to finalize the PAQ and PMQ.

### **Results**

On the whole, the nurse participants correctly understood the PAQ and PMQ items. However, nurses identified additional advantages of assessing patient pain (e.g., the patient feels safe). Therefore, four items were added to the PAQ in order to more fully measure these pain assessment behavioral beliefs. Furthermore, one PAQ item and three PMQ items that individual nurses interpreted differently or considered inappropriate for the Thai context were deleted. For example, the PAQ item "If I really want to, I could conduct pain assessment for a hospitalized elderly patient with postoperative pain" was deleted because some nurses indicated that pain assessment was their major responsibility in caring for patients and that the phrase "If I really want to" was irrelevant. Nurses also provided comments on two items measuring perceived behavioral control in pain assessment and opioid analgesic administration. For example, in response to one item "Administering PRN opioid analgesics for a hospitalized elderly patient with moderate to severe postoperative pain is within my control," nurses stated that factors other than perceived control, such as a patient's condition, could influence their perceived control in administering PRN opioid analgesics. However, we decided to retain both items in the instruments because their deletion would have resulted in inadequate measurement of perceived behavioral control.

## **Summary**

The combined application of the committee translation approach and cognitive interviews provided for a rigorous translation process that avoided problems with cross-cultural differences and cultural bias.<sup>11</sup> This thorough translation process ultimately ensured the quality of the final instruments. We believe that this process is a viable option for future instrument translation efforts.

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