



**ORIGINAL RESEARCH PAPER**

**Occupational Therapy**

**KONKANI TRANSLATION AND CULTURAL ADAPTATION OF THE HEALTH ENHANCEMENT LIFESTYLE PROFILE– SCREENING VERSION TOOL FOR GOAN POPULATION: A STUDY IN INDIA**

**KEY WORDS:** Translation, Adaptation, Healthy Lifestyle, Healthy Lifestyle Screening Tool

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**ABSTRACT**

The aim of the current study is to use a disciplined process to translate and cross-culturally adapt a Konkani version (local language used in Goan population) of the Health Enhancement Lifestyle Profile– Screening Version (HELP–Screener) developed by Hwang, J. E. The study was performed in the Goa Medical College and Hospital, Goa, India. It involved a systematic, standardized, multi-step process adhering to internationally accepted and recommended guidelines. Twenty seven participants were included in the study. HELP-Screener was translated into Konkani language by using following steps as follows 1.Preparation 2. Forward Translation 3. Reconciliation 4. Back Translation 5. Back Translation Review 6. Cognitive Debriefing 7. Review of Cognitive Debriefing Results 8. Proofreading and Final Report. Results of the translation and cross-cultural adaptation were satisfactory and indicate that the Konkani translation of the HELP-Screener can be used with confidence in the Goa, India context.

**INTRODUCTION**

In the late 90's, Rowe and Kahn's Successful Aging<sup>1,2</sup> provided an optimistic perspective on how older adults actively seek to live a lifestyle that prolongs their years and allows them to enjoy their old age. As supported by the findings of a series of studies sponsored by the MacArthur Foundation Research Network on Successful Aging<sup>3</sup>, lifestyle choices play an important role in determining health and vitality among community-dwelling older adults. Recent prevalence study conducted in India<sup>4</sup> was recommended that to conduct screening programs which should be instituted at the community level, for the early diagnosis, treatment, and further regular monitoring of the treatment compliance to control diseases related morbidity and mortality. Until recently, there has been a paucity of instruments developed to measure the various lifestyle factors in a holistic and systematic manner in western as well as Indian context.

The aim of the current study is to use a disciplined process to translate and cross-culturally adapt a Konkani version (local language used in Goan population) of the Health Enhancement Lifestyle Profile– Screening Version (HELP–Screener) developed by Hwang, JE<sup>5</sup>. The HELP–Screener defines healthy lifestyle as a broader term that encompasses the physical, dietary, psychological, social, spiritual, and occupational aspects of health-promoting behaviours.

**METHODS**

The study was performed in the Goa Medical College and Hospital (GMC). The study was conducted as a part of PhD study of the main author of this article. The participants were students of Bachelor of Occupational Therapy (BOT) course and patients visited the out-patient clinics of GMC. The study was approved by the Institutional Ethical Committee of GMC and participants gave written informed consent before joining the study. A working group was set up to manage the translation and research process. It consisted of senior researchers (PhD scholar, PhD supervisor) and 2 interns of BOT course. All the working group members were fluent in English as well as Konkani language. As far as the translation is concerned, there is no professional accreditation for specialized translators in Konkani language. Authorized translators can be recognized on the basis of educational qualifications alone.

Translation and cross-cultural adaptation of the HELP–Screener to optimize use in the Goan (Indian) context, we performed translation and cross-cultural adaptation of the HELP–Screener according to internationally accepted and recommended guidelines of International Society of Pharmacoeconomics and Outcome Research (ISPOR)<sup>6</sup>, data from international literature<sup>6</sup>, and recommendations made by the World Health Organization

(WHO) about the process of translation and adaptation of instruments<sup>7</sup>. The focus was on cross-cultural and conceptual equivalence, rather than simply linguistic/literal equivalence<sup>8,9</sup>.

**The process was carried out systematically, and involved the steps as follows:**

**Step 1:** Preparation. Initial work carried out before the translation work began involved identifying appropriate tool through literature review process and available freely (open access).

**Step 2:** Forward Translation. The translation from the English original version into Konkani was carried out in parallel by two independent professional translators who are Konkani native speakers with English as their first foreign language. Instructions were given to translators in the approach to translating, emphasizing conceptual rather than literal translations, as well as the need to use natural and acceptable language for the broadest audience.

**Step 3:** Reconciliation. The two Konkani versions were compared and discussed in a consensus meeting between the two translators and the working group of the study to reach a reconciled Konkani version.

**Step 4:** Back Translation. Back translation of the reconciled Konkani version into English was carried out by a native English-speaking translator who is fluent in Konkani. The English native speaker was blind to the intent and concepts underlying the material.

**Step 5:** Back Translation Review. In the second consensus meeting between the native English speaking translator and the working group, the English original version was compared to the back translated one and differences were debated, resulting in the revision, which we termed the harmonized Konkani version.

**Step 6:** Cognitive Debriefing. A comprehension test for the harmonized Konkani version was carried out in order to assess if the questionnaire was easy to understand. The questionnaire was tested on 7 students of BOT course and 20 patients visited in the out-patient clinic of GMC. Over three consecutive days, all patients who visited GMC clinics were asked to participate into the study. Patients with cognitive deficit were excluded; the original HELP–Screener was designed to be accessible across literacy levels, but was not tested for use across different levels of cognitive function. Respondents were administered the harmonized Konkani version of the HELP–Screener and were systematically asked for what they thought each question was asking, whether they could repeat the question in their own words, what came to

their mind when they heard a particular phrase or term. They were also asked to explain how they chose their answer.

**Step 7:** Review of Cognitive Debriefing Results and Finalization. Information about comprehension of items and answer mode were collected, analysed and discussed. Test findings led to a refined and final Konkani version.

**Step 8:** Proofreading and Final Report. The final Konkani version of the HELP-Screener was reviewed carefully by the working group.

**RESULT**

Translation and cultural adaptation of the HELP-Screener  
 We tested the Konkani versions on a total of 27 participants; n=27 (7 students of BOT course and 20 patients visited in the out-patient clinics of GMC) (see Table 1 for demographics). Overall, a small number of patients had difficulty understanding the translated items/questions (Table 2). The results of the first comprehension test with a group of participants (n=27) indicated that 7 participants, found it hard to understand items 3, 10 and 11. Accordingly, both items were modified, since culturally we don't use terminologies such as "foods high in fat, cholesterol, sodium, or sugar" etc. and culturally in most of the socioeconomic strata, we don't read nutrition facts labels on food products before buying them. As they identified a specific word with which they were not familiar (red meat), we substituted a more common term or examples of food items (beef, lamb). We also re-phrased item 9, since it included a form of the same unclear word. In other words, the initial literal translation was accurate; cultural adaptation required further adjustment. Accordingly, we modified each of these questions, taking into account suggestions expressed by participants during the interviews, which made each item more user-friendly.

These results are a sign that the instrument is operating as expected. Given the sample size and purpose (i.e., refining the translation and cultural adaptation), they should not be considered representative of how patients view healthy lifestyle in Goa.

**Table 1: Demographic characteristics of participants in the comprehension test for HELH-Screener**

	Students	Patients
<b>Total no. of participants</b>	<b>n=27</b>	
<b>Gender</b>	n (%)	n (%)
<b>Male</b>	n=1 (14%)	n=7 (35%)
<b>Female</b>	n=6 (86%)	n=13 (65%)
<b>Age</b>	Mean 19.85, SD 0.89	Mean 56.9, SD 2.24
<b>Nationality</b>	Indian	Indian
<b>Native Konkani speaker</b>	n=7 (100%)	n=20 (100%)

**Table 2: First comprehension test results: percentage of the patients reporting difficulties in understanding items/questions**

	Comprehension Test
Items/Question No.	Participants reporting difficulties in understanding items/questions (%)
3	25.9
10	25.9
11	25.9

**DISCUSSION**

To our knowledge, this is the first study conducted in Goan population on translation and cultural adaptation of any instrument detecting habitual patterns of health-compromising behaviours among older adults or healthy lifestyle behaviours. Study in Russia<sup>10</sup> found that a large body of evidence has demonstrated that self-reported health assessment has high predictive validity for mortality, physical disability, and chronic disease status. Furthermore, self-assessed health is a stronger predictor of mortality than physician-assessed health<sup>11</sup>. Self-rated health is a valid and extensive measure of health. The results of Russian study indicate that health behaviours, especially physical activity, are important for the health of Russia's older population.

Although abundant studies (e.g., the Well Elderly Study) have been conducted to determine the effectiveness of programs aimed at promoting healthy lifestyles among older adults, most of these studies focused on health outcome measures, such as physical functioning, health status, quality of life, or life satisfaction, yet failed to include a direct measure of the lifestyle factors or behaviours as a dimension of outcome evaluation. A comprehensive, systematic evaluation assessing the breadth of lifestyle behaviours is needed in order to reflect the nation's current health-care emphasis as well as the role of occupational therapy in services for older adults. To fill this gap, Hwang developed the Health Enhancement Lifestyle Profile (HELP)<sup>12,13,14</sup> and its screening version, the HELP-Screener<sup>15,16,17</sup>. In this study, the well validated and highly reliable HELP-Screener<sup>9</sup> was successfully translated and cross-culturally adapted to Goan (Indian) context. The process was carried out according to standardized procedures and after a multi-step process with corrections and adjustments taking into account not only linguistic factors but also cultural components<sup>2,3,4</sup>. The use of detailed methods was essential to document development of an equivalent version of the HELP-Screener that is appropriate for use in Goa. The HELP-Screener is a feasible screening tool to assess healthy lifestyle behaviours, and offers a rare but essential opportunity for providing intervention to provide healthy lifestyle to the older population. The translation and cross-cultural adaptation of an instrument has useful implications for practice since there are currently no validated tools in the any of the Indian language. This study represents the first step in the translation and cultural adaptation of the HELP-Screener instrument in Goa India. The second step is to validate the instrument's psychometric properties in larger Goan (Indian) samples. The same research team is working to validate the instrument's psychometric properties in larger Goan (Indian) samples to reach a much larger sample of patients. The results will consolidate and validate the instrument for the Goan population, while providing a more representative view of how Goan population view healthy lifestyle in Goa. Healthy lifestyle behaviour skills can effectively be taught, and continuing education or awareness programs could incorporate these skills. A critical component would be to incorporate more robust healthy lifestyle behaviour skill training into Goan and also Indian population.

The scope of Occupational Therapy practice is the promotion of health and wellness for all populations to optimize participation in daily occupations, namely, "Living Life To Its Fullest TM" (AOTA, 2010). As lifetimes grow longer due to medical advances and living life to its fullest will require prevention of health risks and maintenance of health promoting behaviors to ensure a healthier lifestyle and greater quality of life in old age. To that end, assessing and monitoring lifestyle behaviors become essential roles of occupational therapists working with the older adult population. The 15-item HELP-Screener<sup>15,16,17</sup> and the 56-item HELP<sup>12,13,14</sup>

were recently developed to fill the gap in lifestyle measurements. The 15-item HELP-Screener is a reliable and valid tool designed to serve as a time-efficient screen that determines if further evaluation with the original 56-item HELP is needed for a client. The further evaluation using the 56-item HELP can provide a more in-depth understanding of particular areas of the client's life warranting lifestyle modifications or regimens.

A limitation of the study is that we used the Konkani version of the HELP-Screener only in participants visited in Goa Medical College and Hospital, results would have been generalised if we use participants across Goa state and different socio-cultural background.. Small sample size was used in this study. For the generalisation of the study results, study can be done by using large sample size and also validation of psychometric properties of the Konkani version needs to be conducted before implementation of this tool.

**Conclusion**

In summary, we have provided Konkani version of HELP-Screener tool for detecting healthy lifestyle behaviours. This adaptation exhibited a satisfactory level of semantic equivalence between the Goan (Indian) target and the original English source version. The Konkani version was tested in the Goa Medical College and

Hospital setting, but is expected to be equally viable in other settings such as Primary Care and also other parts of India.

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