PJHRD Philippine Journal of Health Research and Development

RESEARCH ARTICLE

Translation and cross-cultural adaptation of the Canadian Occupational Performance Measure to Filipino

Mary-Grace D.P. Kang[1]*, Krysta Ellieza C. Perez[1], Kristel Faye M. Roderos[2], Ralph Kevin M. Genoguin[1], Rolando T. Lazaro [1,3]

*Corresponding author's email address: mldelapena2@up.edu.ph

[1]*Department of Physical Therapy, College of Allied Medical Professions, University of the Philippines Manila , Manila, Philippines*
[2]*Department of Occupational Therapy, College of Allied Medical Professions, University of the Philippines Manila, Manila, Philippines*
[3]*Department of Physical Therapy, California State University Sacramento, California, United States*

ABSTRACT

Background and Objectives: Person-centered care aims to involve people in making decisions for their health care. The Canadian Occupational Performance Measure (COPM) is an easy-to-use functional assessment scale that can facilitate person-centered care. However, cultural nuances and individual differences in English proficiency may affect the administration of the original tool. This study translated and adapted the COPM to Filipino.

Methodology: Two translators independently translated the COPM to Filipino. A multidisciplinary expert panel reviewed the translations and composed an initial Filipino version. The initial Filipino version was translated back to the source language. A second expert panel meeting produced a pre-final Filipino version of the tool. Pre-test and cognitive interviews followed, and revisions were made to generate a final version of the tool.

Results: The expert panel discussed issues such as preservation of the original thought, understandability to the local population, consistency with the terms used, and avoidance of redundancy during the evaluation of the proposed translations. Meanwhile, analysis of cognitive interviews revealed that despite the issues encountered in some of the translated words, the participants found the adapted version to be generally understandable and easy to follow. The semi-structured interview format also allowed elaborated assessment and goal setting for self-care, productivity, and leisure.

Conclusion: Findings of this study suggest the potential usefulness of the Filipino version of the COPM in further facilitating person-centered goal-setting in the Filipino context. Future studies are warranted to examine the psychometric properties of the instrument for use in specific client groups, conditions, or settings.

Keywords: *Canadian Occupational Performance Measure, Filipino COPM, Filipino, translation, cross-cultural adaptation, person-centered care*

Introduction

Person-centered care aims to bring people to the center of decision-making for their health care. As an approach, person-centered care provides "care that is respectful of and responsive to individual preferences, needs, and values and ensuring that people's values guide all clinical decisions" [1]. A benefit of using this approach is the holistic view of a person which allows health care services to respond dynamically to changes in the health of a person across time [2]. This approach has been found to improve patient satisfaction and health outcomes, as well as staff welfare [1]. Moreover, person-centered care was identified by The National Academies of Science, Engineering, and Medicine (NASEM) as part of the six dimensions to guide quality care, thereby recognizing its importance for responsive, effective, and acceptable health care [1].

According to Robinson and colleagues, only patients can claim that the care they received was person-centered, even if the health care provider observed otherwise [3]. Therefore, patient reports are most commonly used to understand a person's experience of health care [4]. Patient-reported outcome measures and patient-reported experience measures are known to assess outcomes related to person-centered care, such as a person's perception of

his/her overall health, level of functioning, and experience of health services [5].

An easy-to-use functional assessment scale which may facilitate person-centered care is the Canadian Occupational Performance Measure (COPM) [6]. The COPM is a tool used to identify a client's perceived issues in the performance of daily activities, specifically in self-care, productivity, and leisure. The tool is administered using a semi-structured interview where clients are asked to rate the perceived performance of and satisfaction in the current performance of their most important daily activities. The tool comes with a visual scale to assist clients in rating perceived performance and satisfaction – the use of which is associated with increased participation especially for groups of people who need some accommodation [6,7]. The tool is widely used for its individualized and client-centered approach, allowing a more comprehensive understanding of clients' roles and performance contexts. Several studies have also shown that the COPM has satisfactory to excellent test-retest reliability, concurrent and content validity, and responsiveness [8–23].

Although originally intended to facilitate person-centered clinical practice in occupational therapy, recent literature reflects that the COPM is now often used as an outcome measure in various settings [6]. Several of these studies used COPM in community settings, in interdisciplinary care, in other professions such as physical therapy, nursing, psychology, and social work, and in various age groups, such as youth, adults, and the elderly [15,24–38]. Regardless of medical diagnoses and care setting, the COPM adequately measures the perception of clients from various backgrounds [39]. The COPM has around 35 translations to date, specifically in languages spoken in Europe and Asia [40]. Though successful, previous translations have encountered problems in recruiting diverse samples [24], patients encountering difficulty in scoring, or some participants not using the tool as they deemed it too time consuming or because they thought their patients would not be able to participate [41].

A Filipino version of the COPM is still not available. Although Filipinos are generally proficient in using the English language [42], cultural nuances and individual differences in English proficiency may affect the interpretation of the tool's results. In practice, health care providers would use Filipino most of the time and would translate instructions and questions for an average Filipino patient. The reliability of the tool could be affected by inconsistencies in translation and interpretation by different health providers. The validity of interpretations could be negatively affected if construct is presented in a way that is not understandable to the respondents, thereby affecting its relevance and meaning to the end user. Moreover, one must ensure that the construct being measured by the tool and its wording is applicable to the context [43]. The use of 'occupation' is commonly associated with work and livelihood in the Philippines, which may not necessarily encompass how COPM uses the word. These issues could be targeted by translating and culturally adapting COPM to Filipino.

Questionnaires for use in another language require both translation and cultural adaptation [44,45]. Translation is defined as the process of converting the content from the "original language to the target language" [46] whereas adaptation entails both literal translation and modification based on cultural context [44,46]. A culturally adapted version of COPM to Filipino would ensure consistency of administration, applicability to context, and ease of understanding by the respondents.

From personal anecdotes of practicing Filipino occupational therapists and published studies [47,48], COPM is popularly used in the assessment, goal-setting, and re-assessment stages of service provision to better understand the health, activity, and participation issues of clients. However, it is not as common to other Filipino health professionals. A self-reported outcome measure like COPM is important for delivering care responsive to patients' needs and respectful of their value and preferences [49]. This is highly needed in the Philippine context, where person-centered care is often set aside for decision-making led by the health provider [50]. A culturally adapted version of COPM may increase its usage to help facilitate a more person-centered healthcare practice for Filipinos and empower Filipino patients to be involved in their care.

There is a need, therefore, to translate the tool in Filipino and to adapt the tool in the Filipino context. In this study, the Canadian Occupational Performance Measure was translated and adapted in Filipino. The translated and adapted version of the COPM could aid in making the assessment, intervention, goal setting, outcome monitoring, and evaluation processes in health care more participatory and relevant to patients.

Methodology

Design

This study utilized a non-interventional, exploratory, methodological design to facilitate translation and cross-cultural adaptation of the instrument [51]. The methodological

approach was used to develop and assess the use of instruments in practice and research [51]. Further, this study adapted the international standardized guidelines proposed for use in translating and adapting health-related quality of life measures [45,51,52]. The two main parts of the process were translation and cross-cultural adaptation. The translation stage consisted of the following: forward translation, back-translation, and the expert panel's creation of the pre-final version of the adapted tool. Meanwhile, pre-testing and cognitive interviewing comprised the cross-cultural adaptation stage (see Figure 1) [44,46,53].

Setting

The members of the expert panel were recruited through purposive sampling. Translations, back-translations, and expert panel meetings were conducted in Manila. Meanwhile, convenience sampling was employed to identify participants for the pre-testing of the adapted tool. Participants were from communities in Makati, Manila, and Quezon City.

Participants

Participants of the pre-test and cognitive interview were potential users of COPM, namely health care professionals, community workers, clients, and caregivers. Participants were further classified into raters (*e.g.*, health care professionals, community workers) and respondents (*e.g.*, clients and caregivers). Eligibility criteria were as follows: (1) age of at least 18 years and (2) ability to follow instructions and verbalize responses. Beaton and colleagues recommended a convenience sample of 12 respondents for the pre-testing [46]. Informed consent was obtained from the participants prior to participation.

Twenty-nine participants engaged in pre-testing and cognitive interviews. Table 1 presents the demographic profile of the participants. Nine were health care professionals who served as raters. Most were occupational therapists and physical therapists. The remaining participants were clients with disabilities and caregivers who served as respondents. Most clients had neurologic conditions. The respondents were able to participate in the pre-test and cognitive interviews without assistance.

Instrument

The COPM is an evidence-based outcome measure to assess change in a client's perception and satisfaction in occupational performance. The use of the client-centered

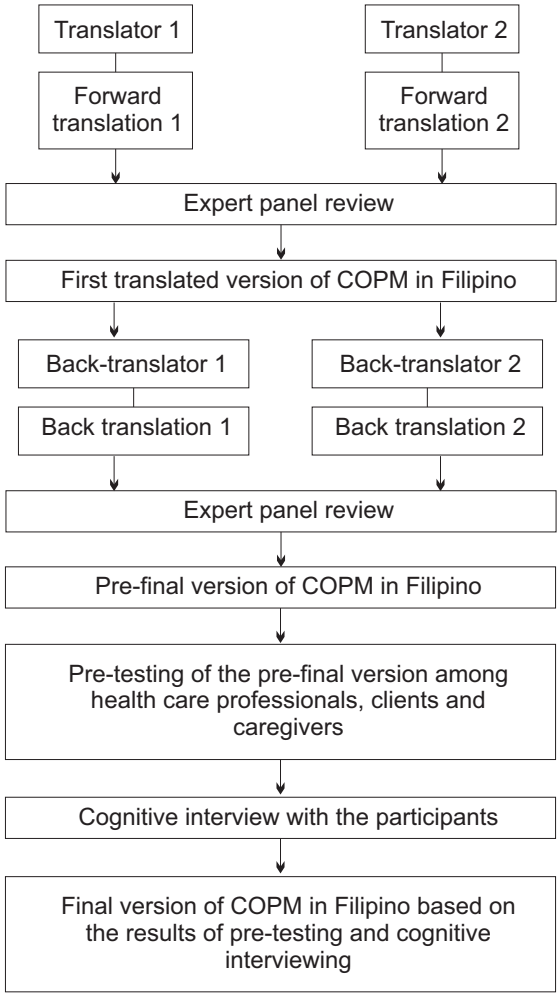

Figure 1. *Flow chart of the translation and adaptation process*

Table 1. *Demographic Characteristics of Participants*

Characteristics		Health care professionals (n=9)	Clients (n=20)
Age (mean, in years)	Male	22.00	49.50
	Female	23.13	58.70
Sex (in percent)	Male	11.11	50.00
	Female	88.89	50.00

approach allows clients to identify and prioritize issues based on their needs, wants, and expectations. The COPM uses a semi-structured interview to draw out client concerns in performing occupations under the areas of self-care, leisure, and productivity.

Issues in performing tasks under any of the three occupational areas are first identified by the client, with guidance from the therapist as needed. The client then

scores these problem areas based on their importance using a scale of 1 to 10 where 1 means not important at all and 10 as extremely important. The top five problem areas are then selected by the client as the priorities based on the previous importance rating.

For baseline scoring, the client rates each prioritized occupation based on perceived performance and satisfaction. Both factors are rated using a scale of 1 to 10 for each occupation. A performance score of 1 means the person is not able to do the occupation at all and a score of 10 means the person is able to perform the occupation extremely well. Meanwhile, satisfaction scores of 1 and 10 mean not satisfied at all and extremely satisfied, respectively. The performance and satisfaction scores are then separately multiplied by the importance rating for each occupation. The importance rating of each occupation here serves as a "weighting factor." Performance scores and satisfaction scores of all occupations are then added to get the total performance and total satisfaction scores. These scores are then divided by the number of occupations specified to get the average scores for performance and satisfaction. Changes in mean performance and satisfaction scores are checked during re-assessment.

Translation and Cross-cultural Adaptation

The authors of the original COPM granted permission to translate and adapt the measure and scorecards for use in the Philippine setting. Ethics approval from the University of the Philippines Manila Research Ethics Board was also obtained (UPMREB 2017-249-01).

In stage 1, two bilingual translators who had native proficiency in the Filipino language performed independent translation of the COPM from the source version (English) to Filipino. The translators were proficient in both source and target languages. They were composed of a healthcare professional who had a background in the use of COPM and a non-healthcare professional working in the community who was not familiar with COPM. A person who has native proficiency is someone who has "a speaking proficiency equivalent to that of an educated native speaker" and "has complete fluency of the language such that speech in all levels is fully accepted by educated native speakers in all of its features, including breadth of vocabulary and idioms, colloquialisms, and pertinent cultural reference" [52]. The two versions of the translation were submitted to a multidisciplinary expert panel (stage 2) who reviewed the translations and produced the first Filipino version of the COPM. The presence of a multidisciplinary expert panel ensured that the concepts from the original tool were retained during the translation process while reflecting equivalence between the source and target languages. The multidisciplinary expert panel for Stage 2 was composed of one health care professional specializing in community-based rehabilitation, one Filipino linguist, one community worker, one rehabilitation professional, and the two translators. The researchers oriented the expert panel about the study and their roles prior to the panel meeting. A moderator external to the group facilitated the discussion of the expert panel members about the two translations. Researchers and research assistants documented the proceedings of the meeting.

In Stage 3, another pair of translators who had native proficiency of Filipino formal and colloquial terminologies independently conducted back-translation of the synthesized forward translation by the expert panel. Both translators were health care professionals with no prior knowledge of the source version of the instrument. Back-translation ensured the translated material accurately reflected the content in the original language.

In Stage 4, the multidisciplinary expert panel, joined by the two back-translators, compared the back-translations to the source version. Discrepancies between translation were identified and resolved through consensus discussions. Modifications from the panel were then incorporated to ensure semantic, experiential, and/or conceptual equivalence between the source and translated versions. Issues encountered during translation and rationale for decisions were documented as the panel produced the pre-final version of the COPM in Filipino.

The pre-final version underwent pre-testing (Stage 5) among 29 target users such as health care professionals, clients, and caregivers. Every participant underwent a cognitive interview to probe for answers to the items in the adapted version, explore meanings attached to their responses in the different sections of the tool, and check for understanding of the translated items [54]. The authors developed a cognitive interview guide based on the cognitive aspects of survey methodology of Jabine and colleagues [54]. This method allowed the analysis of survey questions that explored comprehension of the items, retrieval from memory of relevant information, decision processes, and response processes [54]. The authors oriented the cognitive interviewers on the use of the guide. The project research assistants served as the cognitive interviewers. Two versions of the cognitive interview guide were formulated specifically for raters (*e.g.*, health care professionals) and for the respondents (*e.g.*, clients, caregivers) (see Table 2).

Table 2. *Cognitive Interview Guide for Raters and Respondents*

Rater	Respondent
1. Pakilarawan ang naranasan mo sa paggamit or pagsagot ng COPM. 2. Sa iyong sariling salita maaari mo bang ipaliwanag kung para saan ang COPM? 3. Ano ang pagkakaintindi mo sa instructions? Gaano ka kasigurado sa pagpapaliwanag mo ng instructions? 4. Para sa lahat ng section, alin sa mga salita o parte ng COPM ang madaling intindihin? 5. Para sa lahat ng section, alin sa mga salita o parte ng COPM ang nahirapan kang intindihin? 6. Ano ang iyong pagkakaintindi sa kahulugan o konsepto ng pangangalaga sa sarili? ● Sa “Personal na pangangalaga”? ● Sa “Pagkilos sa loob at labas ng bahay”? ● Sa “Paggawa ng mga gawain sa komunidad”? 7. Ano ang iyong pagkakaintindi sa kahulugan o konsepto ng mga "gawaing kapaki-pakinabang"? ● Sa “Bayad o di bayad na trabaho”? ● Sa “Pamamahala ng tahanan”? ● Sa “Gawain sa paaralan / paglalaro”? 8. Ano ang iyong pagkakaintindi sa kahulugan o konsepto ng “libangan” ? ● Sa “Tahimik na libangan”? ● Sa “Aktibong libangan” ? ● Sa “Pakikipag-ugnayan” ? 9. Ano ang iyong pagkakaintindi sa mga salita o kategoryang: ● Kahalagahan ● Pagganap ng gawain ● Kasiyahan 10. Sa iyong pagkakaintindi, paano ginagamit ang mga scorecard? ● Gaano ka kasigurado sa pagpapaliwanag mo sa kung paano gamitin ang score cards? 11. Maliban sa mga nabanggit, mayroon ka bang mga puna o mungkahi?	1. Pakilarawan ang naranasan mo sa pagsagot sa COPM. 2. Sa iyong sariling salita maaari mo bang ipaliwanag kung para saan ang COPM? 3. Paano mo naintindihan ang instructions? Pwede mo ba ipaliwanag gamit ang sarili mong pag-intindi? 4. Para sa lahat ng section, alin sa mga salita o parte ng COPM ang madaling intindihin? 5. Para sa lahat ng section, alin sa mga salita o parte ng COPM ang nahirapan kang intindihin? 6. Kamusta ang karanasan mo sa pag-alala ng mga gawaing hirap gawin? ● Gaano kadali o kahirap alalahanin ang mga nabanggit mong gawaing hirap kang gawin? ● Paano mo inalala ang mga gawaing nabanggit? ● Gaano ka kasigurado sa sagot mo? 7. Ano ang iyong pagkakaintindi sa kahulugan o konsepto ng pangangalaga sa sarili? ● Sa “Personal na pangangalaga”? ● Sa “Pagkilos sa loob at labas ng bahay”? ● Sa “Paggawa ng mga gawain sa komunidad”? 8. Ano ang iyong pagkakaintindi sa kahulugan o konsepto ng mga "gawaing kapaki-pakinabang"? ● Sa “Bayad o di bayad na trabaho”? ● Sa “Pamamahala ng tahanan”? ● Sa “Gawain sa paaralan / paglalaro”? 9. Ano ang iyong pagkakaintindi sa kahulugan o konsepto ng “libangan” ? ● Sa “Tahimik na libangan”? ● Sa “Aktibong libangan”? ● Sa “Pakikipag-ugnayan”? 10. Ano ang iyong pagkakaintindi sa mga salita o kategoryang: ● Kahalagahan ● Pagganap ng gawain ● Kasiyahan 11. Sa iyong pagkakaintindi, paano ginagamit ang mga scorecard? Gaano ka kasigurado sa pagbibigay ng puntos sa mga gawaing nabanggit? 12. Maliban sa mga nabanggit, mayroon ka bang mga puna o mungkahi?

Data were coded using QSR International's NVivo Plus version 11 software and analyzed through active reading. The authors performed content analysis to examine the data from the cognitive interviews. Thematic analysis was then used to identify patterns, nuances, and understanding of the participants about the various areas of the adapted instrument. Finally, Stage 6 involved developing the final Filipino version of the COPM based on the results of the cognitive interview in coordination with the expert panel.

Results

Translation (stages 1-4)

The translation phase yielded two translated versions of COPM in Filipino and two back-translations. Content analysis of the expert panel proceedings to discuss forward and back-translations revealed points deemed critical in synthesizing the results that produced the pre-final version of the tool in Filipino. Table 3 presents the tally of instances the specific areas of the tool were discussed by the expert panel for both the forward and back-translations.

Preservation of the original thought, understandability to the local population, consistency with the terms used, and avoidance of redundancy were the main considerations during the evaluation of the proposed translations by the expert panel. As an example of the interplay of the various issues, forward translator 1 used *“pagbabagong magaganap”* and forward translator 2 used *“kalalabasan”* for outcome. Both translators used the word "*panukat*" to refer to measure. For the word outcome in outcome measure, the panel suggested using

Table 3. *Most Frequently Discussed Points during the Expert Panel Meetings According to Category*

Discussion points	Frequency of discussion	Examples	Translations
Preservation of the original thought	9	Occupational performance Outcome measure	Pagganap ng makahulugang pang-araw-araw na gawain Panukat ng pagbabago
Understandability to the local population	5	Problem areas Evaluate	Gawaing nahihirapang gawin Matasa
Consistency with the terms used	3	Progress	Kalalabasang pagbabago
Avoidance of redundancy	2	Occupational performance Outcome measure	Pagganap ng makahulugang pang-araw-araw na gawain Panukat ng pagbabago
Completeness of thought	2	Designed to detect	Ginawa para sukatin
Limited word choice	2	Satisfaction	Kasiyahan
Consideration of the sentence structure	1	Problem	Suliranin

"*kalalabasan ng therapy*" to situate outcome in the context of therapy. However, the panel members could not arrive at a consensus due to issues of equivalence. To reconcile the forward translations, the panel considered the term "*kalalabasang pagbabago*" but selected "*sukatan ng pagbabago*" in the end for completeness of thought. Specific to measure, despite considering "*matukoy*" to avoid redundancy with the use of "*sukat*", the panel still opted for "*sukat*" as the root word of all the translations of the word measure for consistency. The panel decided to adopt "*panukat ng pagbabago*" as the final translation for "outcome measure".

In another section, while the forward translations identified "*gawaing* (activity) *pantao* (human)" as the translation of "occupation" used by occupational therapists in the country, the panel questioned the term's understandability to the local population. Thus, the panel adopted the term "*gawaing* (activity) *pang-araw-araw* (daily)" to address the issue on understandability. However, the panel also deemed that the term might only capture self-care and not work. To resolve this issue, the term "*makahulugang* (meaningful)" was added to "*gawaing* (activity) *pang-araw-araw* (daily)". Occupation was eventually translated to "*makahulugang pang-araw araw na gawain* (meaningful daily activity)".

The panel also decided to use the term "*makahulugang* (meaningful)" instead of "*mahahalagang* (important)" for the translation of "occupational performance" to ensure consistency with the terms used. Further, the panel translated performance to "*pagganap* (to fulfill)" instead of "*paggawa* (to do)" to avoid sounding redundant with the translation of "occupation". Hence, the final translation of "occupational performance" was "*pagganap ng makahulugang pang-araw-araw na gawain*".

Throughout the translation process, the expert panel strived to maintain the content equivalence in the translated version. However, the panel experienced difficulties in translating jargons in consideration of the understandability to the target population. Due to this, the panel decided to elaborate on the translations to provide further context.

Cross-cultural Adaptation (stage 5)

Analysis of cognitive interviews revealed four pervading themes from the responses and experiences of the participants. The themes were (1) advantages of a tool translated in Filipino, (2) advantages of the semi-structured interview format of the translated tool, (3) familiarity with the terms used in the original version of the COPM, and (4) difficulties using a tool translated in Filipino.

Under the theme on advantages of a tool translated in Filipino, the majority of the respondents found the administration of the COPM in Filipino to be understandable and the instructions easy to follow. One respondent appreciated that it was delivered in Filipino while another respondent expressed that he was able to answer all items as questions required drawing from personal information and experiences. Meanwhile, for the theme on advantages of the semi-

structured interview format of the tool, the respondents were allowed to expound on their answers and use different strategies for information recall supporting their ability to answer all items. The respondents demonstrated the ability to retrieve information based on experience, long-term therapy goals, and rater's probing. According to one respondent, she was able to answer all questions as the rater was very particular in probing her answers.

Both raters and respondents accounted their comprehension of COPM in Filipino to familiarity with the terms used in the original version of the COPM. Raters, in particular, were given an orientation about COPM and its method of administration while some respondents already experienced answering the original version of COPM in previous therapy sessions. Finally, issues regarding the nature of the Filipino language, the current usage of the Filipino language, and comprehension being reliant on the interviewer's aptitude were identified under difficulties with a tool translated in Filipino. As an example, some words in the translated version were no longer used in everyday Filipino conversation. Some of the identified words and phrases under this issue were "*suliranin*", "*tahimik na libangan*", "*paggawa ng mga gawain sa komunidad*" and all the words having the root word "*tasa*". It was then recommended to use the word "*problema*" for "*suliranin*", "evaluate" for "*tasa*", and provide examples for "*paggawa ng mga gawain sa komunidad*" such as "*pamamasyal*" and "*pamamalengke*".

In the aspect of administration, only one rater identified an issue with administration time during cognitive interviews. Specifically, it took more time to administer the translated tool compared to when administering the original version. The rest of the raters were able to administer the tool as per instructions and within the usual administration time.

Discussion

This study aimed at producing a culturally-adapted version of the COPM in Filipino following the guidelines of the WHO and Beaton and colleagues [45,46,53]. The COPM provides a semi-structured method of assessing the client's perception of performance of self-care, productivity, and leisure. Results of the study suggest the potential usefulness of the Filipino COPM in further facilitating person-centered goal-setting across populations and settings in the Philippines.

While the adapted instrument strived to preserve the content and the structure of the original COPM, issues were encountered during the translation and adaptation process. To illustrate, results of pre-test and cognitive interviews revealed the participants' difficulty with some Filipino words which they perceived were not usually spoken during everyday conversation (*e.g.*, *tasahin* as the translation of "to evaluate"), thus affecting the instrument's understandability to the local population. This can be attributed to using only the Filipino language in translating despite the capacity of Filipinos for bilingualism [55]. Paz argued that natural translation could only occur if the context of intended users were adequately considered [56]. At present, there has been an increase in the utilization and preference for Tagalog-English code-switching or Taglish among Filipinos from different socioeconomic backgrounds [57]. In addition, some terms such as "occupation" and "occupational performance" could be considered foreign concepts with limited or no direct local translations. As such, the expert panel attempted to provide further context during the translation process to ensure understandability to the target culture. Considering this development can aid in translating and adequately reflecting the language nuances of Filipinos in the adapted version of COPM. As an example, the authors recommend the inclusion of concrete references to sample activities to elucidate the construct of particular items with no direct local translations.

Comprehension difficulties encountered with the tool can also be attributed to the nature of the Filipino sentence structure exhibited by lengthy sentences in the translated version. Guillemin and colleagues proposed to utilize concise and direct sentences and commonly used keywords to ensure the preservation of comprehensibility of the tool [44]. However, this posed a challenge to the translation process as the Filipino language naturally possesses lengthy sentence structure and several verb complements in addition to affixations, stress shifting, consonant alteration, and reduplication [58]. As an example, the first step in completing the COPM stated as "Identify occupational performance problems" in the original version was translated as "*Tukuyin ang mga suliranin sa pagganap ng mga pang-araw-araw na makahulugang gawain*" in the adapted version. In contrast to the English language, Filipino language is more flexible in terms of word order and more open to different structural arrangements [58]. A potential consequence of this feature is the increased time required in administering the tool. Nonetheless, this study demonstrated a similar duration of administration of 20 to 45 minutes with other studies that examined the psychometric properties of COPM in different settings [29,59].

Meanwhile, the varying knowledge levels of the translators about the COPM and its testing procedures could have also resulted in comprehension difficulties. Only one out of the four translators had prior knowledge about the tool and its method of administration. While the translators were oriented about the goal of the study and the target end users

of the translated instrument, the translators might have focused more on the language equivalence during the translation process. The expert panel accounted for this tendency by examining content equivalence.

Despite issues in the translation process, respondents still found the Filipino version to be generally understandable and easy to use. This may be attributed to the study's effort to rigorously adhere to the recommendations and guidelines in translating and adapting instruments. In addition, the multidisciplinary expert panel strived to ensure the content, semantic and language equivalence during translation. The panel's consideration of the understandability to the local population and preservation of the original thought were reflected as positive points perceived by respondents in the use of the translated tool.

Consistency with the tool's person-centered approach, aside from the use of culturally accepted language, also seemed to contribute to the feasibility of the translated tool to both raters' and respondents' contexts. The respondents' ability to draw answers from their experience and goals indicates the understandability and ease of use of the tool. In addition, a recent translation study of the COPM asserts that raters' probing and familiarity with the original version were found to increase the utility and acceptability of the translated tool [24]. Similarly, participants in this study affirmed that rater probing contributed to their overall comprehension of the tool. This study, thus, supports probing in the use of the adapted version of the COPM in eliciting responses from the clients.

The raters' comprehension of the tool's general intent and procedures, despite the unfamiliarity of some with the original version, further shows the potential use of the Filipino COPM for interdisciplinary care which uses the goals of the client as a guide for planning and designing care [6]. Existing literature has already shown the English version's use in interdisciplinary teams for different populations [27–29,60].

This study is not without limitations. First, although the minimum composition of the expert panel is in line with the recommendations of Beaton and colleagues, major stakeholders of the Filipino version of the instrument are the persons with disabilities. As such, experts in the fields of disability studies and anthropology who are knowledgeable of the target culture, and psychologists for measurement of behavior should have representation in the decision-making body of the adaptation process. The inclusion of all possible stakeholders in the research process is practiced in various studies involving the development, refinement, and cross-cultural adaptation of instruments [61–63]. Second, the adaptation process was conducted in clinical settings, where – although not exactly considered a highly controlled environment – the variability of participant characteristics may have been low compared to all other settings where the Filipino version of the instrument may be used. For example, it would be worthwhile to note potential differences in the experiences in the use of the adapted version in the clinic as compared to therapy services delivered at home. Other participant characteristics such as socioeconomic status, ethnic background, geographical location (e.g., rural and urban settings), and history of receiving prior therapy can provide further data to inform potential variations in the use of Filipino in an adapted tool. Additionally, the health care practitioners who participated in this study were relatively in their early years of practice. Future research can examine the potential influence of age and years of experience on the translation process, as the inclusion of health care practitioners with more years of experience may have unique contributions to the refinement of the adapted instrument. Third, the cross-cultural adaptation process primarily focused on the instrument as a method of goal-setting. Future research may further refine the adapted instrument as a tool to measure outcomes and change. Finally, although the cross-cultural adaptation process was comprehensively conducted, other measures could have been implemented to increase the rigor of the adaptation process. These included the provision of a protocol for raters regarding testing conditions and probing options, and further exploring statistical considerations in presenting results on equivalence in content and language in the adapted version [64]. The researchers also recommend the evaluation of the psychometric properties of the Filipino COPM as a future research direction.

Findings of this study suggest the potential usefulness of the Filipino version of the COPM in further facilitating person-centered goal-setting in the Philippine setting. Future studies are warranted to examine the psychometric properties of the instrument for use in specific client groups, conditions, or settings.

Acknowledgments

The authors would like to thank the following individuals for assisting in data collection and analysis:

Ayana B. Almario, Gabrielle A. Fortuna, Jeanine Bianca P. Lastino, Carlos Dominic D. Olegario, Jezza N. Palomo, Krizia Nicolle E. De Leon, Ofelia Angela A. Ibanez, Eris Orlan SD. Muñoz, Chelsea Kaye A. Pacheco, Yna Paulina A. Palma, and Joshua Matthew D. Rosario.

References

1. National Academies of Sciences, Engineering, and Medicine. (2018) Crossing the global quality chasm: Improving health care worldwide. Washington, D.C.: National Academies Press. doi: 10.17226/25152
2. Starfield B. (2011) Is patient-centered care the same as person-focused care? The Permanente Journal 15(2):63-69. doi: 10.7812/TPP/10-148
3. Robinson JH, Callister LC, Berry JA, Dearing KA. (2008) Patient-centered care and adherence: Definitions and applications to improve outcomes. Journal of the American Academy of Nurse Practitioners 20(12):600-607. doi: 10.1111/j.1745-7599.2008.00360.x
4. Lavallee DC, Chenok KE, Love RM, *et al.* (2016) Incorporating patient-reported outcomes into health care to engage patients and enhance care. Health Affairs 35(4):575-582. doi: 10.1377/hlthaff.2015.1362
5. Santana MJ, Manalili K, Jolley RJ, Zelinsky S, Quan H, Lu M. (2018) How to practice person-centred care: A conceptual framework. Health Expectations 21(2):429-440. doi: 10.1111/hex.12640
6. Law M, Baptiste S, McColl M, Opzoomer A, Polatajko H, Pollock N. (1990) The Canadian Occupational Performance Measure: An outcome measure for occupational therapy. Canadian Journal of Occupational Therapy 57(2):82-87. doi: 10.1177/000841749005700207
7. Grandisson M, Hébert M, Thibeault R. (2017) Practice guidelines for program evaluation in community-based rehabilitation. Disability and Rehabilitation 39(12):1243-1251. doi: 10.1080/09638288.2016.1189604
8. Bowie C. (1999) Exploring the responsiveness of the COPM in an outpatient rehabilitation program. Faculty of Graduate Studies, University of Western Ontario.
9. Boyer G, Hachey R, Mercier C. (2000) Perceptions of occupational performance and subjective quality of life in persons with severe mental illness. Occupational Therapy in Mental Health 15(2):1-15. doi: 10.1300/J004v15n02_01
10. Carpenter L, Baker GA, Tyldesley B. (2001) The use of the Canadian Occupational Performance Measure as an outcome of a pain management program. Canadian Journal of Occupational Therapy 68(1):16-22. doi: 10.1177/000841740106800102
11. Chan CCH, Lee TMC. (1997) Validity of the Canadian Occupational Performance Measure. Occupational Therapy International 4(3):231-249. doi: 10.1002/oti.58
12. Chen Y-H, Rodger S, Polatajko H. (2002) Experiences with the COPM and client-centred practice in adult neurorehabilitation in Taiwan. Occupational Therapy International 9(3): 167-184. doi: 10.1002/oti.163
13. Cup EHC, Scholte op Reimer WJM, Thijssen MCE, van Kuyk-Minis MAH. (2003) Reliability and validity of the Canadian Occupational Performance Measure in stroke patients. Clinical Rehabilitation 17(4):402-409. doi: 10.1191/0269215503cr635oa
14. Law M, Darrah J, Pollock N, *et al.* (1998) Family-centred functional therapy for children with cerebral palsy: An emerging practice model. Physical & Occupational Therapy in Pediatrics 18(1):83-102. doi: 10.1080/J006v18n01_06
15. McColl MA, Paterson M, Davies D, Doubt L, Law M. (2000) Validity and community utility of the Canadian Occupational Performance Measure. Canadian Journal of Occupational Therapy 67(1):22-30. doi: 10.1177/000841740006700105
16. Pan A-W, Chung L, Hsin-Hwei G. (2003) Reliability and validity of the Canadian Occupational Performance Measure for clients with psychiatric disorders in Taiwan. Occupational Therapy International 10(4):269-277. doi: 10.1002/oti.190
17. Ripat J, Etcheverry E, Cooper J, Tate R. (2001) A comparison of the Canadian Occupational Performance Measure and the Health Assessment Questionnaire. Canadian Journal of Occupational Therapy 68(4):247-253. doi: 10.1177/000841740106800408
18. Sewell L, Singh SJ. (2001) The Canadian Occupational Performance Measure: Is it a reliable measure in clients with chronic obstructive pulmonary disease? British Journal of Occupational Therapy 64(6):305-310. doi: 10.1177/030802260106400607
19. Simmons DC, Crepeau EB, White BP. (2000) The predictive power of narrative data in occupational therapy evaluation. American Journal of Occupational Therapy 54(5):471-476. doi: 10.5014/ajot.54.5.471
20. Van Meeteren NLU, Strato IHM, Van Veldhoven NHMJ, De Kleijn P, Van Den Berg HM, Helders PJM. (2000) The utility of the Dutch Arthritis Impact Measurement Scales 2 for assessing health status in individuals with haemophilia: A pilot study. Haemophilia 6(6):664–671. doi: 10.1046/j.1365-2516.2000.00440.x
21. Veehof MM, Sleegers EJA, van Veldhoven NHMJ, Schuurman AH, van Meeteren NLU. (2002) Psychometric qualities of the Dutch language version of the Disabilities of the Arm, Shoulder, and Hand questionnaire (DASH-DLV). Journal of Hand Therapy 15(4):347-354. doi: 10.1016/S0894-1130(02)80006-0
22. Wressle E, Samuelsson K, Henriksson C. (1999) Responsiveness of the Swedish version of the

Canadian Occupational Performance Measure. Scandinavian Journal of Occupational Therapy 6(2):84-89. doi: 10.1080/110381299443771

23. Eyssen ICJM, Steultjens MPM, Oud TAM, Bolt EM, Maasdam A, Dekker J. (2011) Responsiveness of the Canadian Occupational Performance Measure. The Journal of Rehabilitation Research and Development 48(5):517. doi: 10.1682/JRRD.2010.06.0110
24. Enemark Larsen A, Jessen Winge C, Christensen JR. (2019) Clinical utility of the Danish version of the Canadian Occupational Performance Measure. Scandinavian Journal of Occupational Therapy 28(3):239-250. doi: 10.1080/11038128.2019.1634150
25. Jenkinson N, Ownsworth T, Shum D. (2017) Utility of the Canadian Occupational Performance Measure in community-based brain injury rehabilitation. Brain Injury 21(12):1283-1294. doi: 10.1080/02699050701739531
26. Enemark Larsen A, Carlsson G. (2012) Utility of the Canadian Occupational Performance Measure as an admission and outcome measure in interdisciplinary community-based geriatric rehabilitation. Scandinavian Journal of Occupational Therapy 19(2):204-213. doi: 10.3109/11038128.2011.574151
27. Tuntland H, Aaslund MK, Espehaug B, Førland O, Kjeken I. (2015) Reablement in community-dwelling older adults: A randomised controlled trial. BMC Geriatrics 15(1):145. doi:10.1186/s12877-015-0142-9
28. Tonak HA, Kitis A, Zencir M. (2016) Analysis of community participation levels of individuals who are physically disabled and working in industrial environments. Social Work in Public Health 31(7):638-645. doi: 10.1080/19371918.2016.1160336
29. Tuntland H, Aaslund M, Langeland E, Espehaug B, Kjeken I. (2016) Psychometric properties of the Canadian Occupational Performance Measure in home-dwelling older adults. Journal of Multidisciplinary Healthcare 9:411–23. doi: 10.2147/JMDH.S113727
30. Verhoef JAC, Miedema HS, Van Meeteren J, Stam HJ, Roebroeck ME. (2013) A new intervention to improve work participation of young adults with physical disabilities: a feasibility study. Developmental Medicine & Child Neurology 55(8):722-728. doi: 10.1111/dmcn.12158
31. Verhoef JAC, Roebroeck ME, van Schaardenburgh N, Floothuis MCSG, Miedema HS. (2014) Improved occupational performance of young adults with a physical disability after a vocational rehabilitation intervention. Journal of Occupational Rehabilitation 24(1):42-51. doi: 10.1007/s10926-013-9446-9
32. Wressle E, Lindstrand J, Neher M, Marcusson J, Henriksson C. (2003) The Canadian Occupational Performance Measure as an outcome measure and team tool in a day treatment programme. Disability and Rehabilitation 25(10):497-506. doi: 10.1080/0963828031000090560
33. Stukstette M, Hoogeboom T, de Ruiter R, *et al*. (2012) A multidisciplinary and multidimensional intervention for patients with hand osteoarthritis. Clinical Rehabilitation 26(2):99-110. doi: 10.1177/0269215511417739
34. Mirek E, Logan D, Boullard K, Hall AM, Staffa SJ, Sethna N. (2019) Physical therapy outcome measures for assessment of lower extremity chronic pain-related function in pediatrics. Pediatric Physical Therapy 31(2):200-207. doi: 10.1097/PEP.0000000000000587
35. IJspeert J, Janssen RMJ, Murgia A, *et al*. (2013) Efficacy of a combined physical and occupational therapy intervention in patients with subacute neuralgic amyotrophy: A pilot study. NeuroRehabilitation 33(4):657-665. doi: 10.3233/NRE-130993
36. van de Ven-Stevens LAW, Graff MJL, Peters MAM, van der Linde H, Geurts ACH. (2015) Construct validity of the Canadian Occupational Performance Measure in participants with tendon injury and Dupuytren disease. Physical Therapy 95(5):750-757. doi: 10.2522/ptj.20130590
37. Law M, Anaby D, Imms C, Teplicky R, Turner L. (2015) Improving the participation of youth with physical disabilities in community activities: An interrupted time series design. Australian Occupational Therapy Journal 62(2):105-115. doi: 10.1111/1440-1630.12177
38. Raghavendra P, Newman L, Grace E, Wood D. (2015) Enhancing social participation in young people with communication disabilities living in rural Australia: Outcomes of a home-based intervention for using social media. Disability and Rehabilitation 37(17):1576-1590. doi: 10.3109/09638288.2015.1052578
39. The Canadian Occupational Performance Measure. (n.d) About the COPM. http://www.thecopm.ca/about/
40. The Canadian Occupational Performance Measure. (n.d.) Transl.ations. http://www.thecopm.ca/buy/translations/
41. Larsen AE, Morville A-L, Hansen T. (2019) Translating the Canadian Occupational Performance Measure to Danish, addressing face and content validity. Scandinavian Journal of Occupational Therapy 26(1):33-45. doi: 10.1080/11038128.2017.1388441
42. Education First. (2019) EF English proficiency index: A ranking of 100 countries and regions by English skills.
43. Cook DA, Beckman TJ. (2006) Current concepts in

validity and reliability for psychometric instruments: Theory and application. The American Journal of Medicine 119(2):166.e7-166.e16. doi: 10.1016/j.amjmed.2005.10.036

44. Guillemin F, Bombardier C, Beaton D. (1993) Cross-cultural adaptation of health-related quality of life measures: Literature review and proposed guidelines. Journal of Clinical Epidemiology 46(12):1417–1432. doi: 10.1016/0895-4356(93)90142-N
45. Beaton DE, Bombardier C, Guillemin F, Ferraz MB. (2000) Guidelines for the process of cross-cultural adaptation of self-report measures. Spine 25(24):3186–3191. doi:10.1097/00007632-200012150-00014
46. Beaton D, Bombardier C, Guillemin F, Ferraz M. (1998) Recommendations for the cross-cultural adaptation of health status measures. Journal of the American Academy of Orthopaedic Surgeons 12: 1–9.
47. Gonzalez-Suarez C, Dizon J, Grimmer K, *et al.* (2015) Protocol for audit of current Filipino practice in rehabilitation of stroke inpatients. Journal of Multidisciplinary Healthcare 8:127-138. doi: 10.2147/JMDH.S61813
48. Gonzalez-Suarez CB, Dizon JM, Grimmer K, *et al.* (2013) Implementation of recommendations from the Philippine Academy of Rehabilitation Medicine's Stroke Rehabilitation Guideline: A plan of action. Clinical Audit 5:77-89. doi: 10.2147/CA.S46056
49. Tzelepis F, Sanson-Fisher R, Zucca A, Fradgley E. (2015) Measuring the quality of patient-centered care: Why patient-reported measures are critical to reliable assessment. Patient Preference and Adherence 9:831-835. doi: 10.2147/PPA.S81975
50. Romualdez AG Jr, dela Rosa JFE, Flavier JDA, *et al*. (2011) The Philippines health system review (Volume 1 Number 2). Manila, Philippines: World Health Organization, Western Pacific Region.
51. Portney LG, Watkins MP. (2009) Foundations of clinical research: Applications to practice. Upper Saddle River, NJ: Pearson/Prentice Hall.
52. International Center for Language Studies (n.d.). ILR Proficiency Levels. https://www.icls.edu/foreign-language-programs/ilr-proficiency-levels/
53. World Health Organization. (n.d.) Process of translation and adaptation of instruments. https://www.who.int/substance_abuse/research_tools/translation/en/
54. Jabine TB, Straf ML, Tanur JM, Tourangeau R (ed.) (1984) Cognitive aspects of survey methodology: Building a bridge between disciplines. Washington, DC: National Academies Press.
55. Tupas R, Martin IP. (2017) Bilingual and mother tongue-based multilingual education in the Philippines. In: García O, Lin AMY, May S (ed.). Bilingual and Multilingual Education, Cham: Springer International Publishing, p. 247–258. doi: 10.1007/978-3-319-02258-1_18
56. Paz CJ. (2005) Ang wikang Filipino: Atin ito. Sentro ng Wikang Filipino, Unibersidad ng Pilipinas.
57. Labitigan RLD. (2013) Tagalog-English code-switching: Issues in the nominal domain. Yale University.
58. Manguilimotan E, Matsumoto Y. (2011) Dependency-based analysis for Tagalog sentences. 25th Pacific Asia Conference on Language, Information and Computation, p. 343–352.
59. Kjeken I, Slatkowsky-Christensen B, Kvien TK, Uhlig T. (2004) Norwegian version of the Canadian Occupational Performance Measure in patients with hand osteoarthritis: Validity, responsiveness, and feasibility. Arthritis & Rheumatism 51(5):709-715. doi: 10.1002/art.20522
60. McColl MA, Law M, Baptiste S, Pollock N, Carswell A, Polatajko HJ. (2005) Targeted applications of the Canadian Occupational Performance Measure. Canadian Journal of Occupational Therapy 72(5):298–300. doi: 10.1177/000841740507200506
61. Power MJ, Green AM, THE WHOQOL-DIS Group. (2010) The Attitudes to Disability Scale (ADS): Development and psychometric properties: Disability Scale. Journal of Intellectual Disability Research 54(9):860–874. doi: 10.1111/j.1365-2788.2010.01317.x
62. Bresick G, Sayed A-R, Le Grange C, Bhagwan S, Manga N. (2015) Adaptation and cross-cultural validation of the United States Primary Care Assessment Tool (expanded version) for use in South Africa. African Journal of Primary Health Care & Family Medicine 7(1). doi: 10.4102/phcfm.v7i1.783
63. Burkey MD, Adhikari RP, Ghimire L, *et al.* (2018) Validation of a cross-cultural instrument for child behavior problems: The Disruptive Behavior International Scale – Nepal version. BMC Psychology 6(1):51-63. doi:10.1186/s40359-018-0262-z
64. International Test Commission. (2018) ITC guidelines for translating and adapting tests. International Journal of Testing 18(2):101-134. doi: 10.1080/15305058.2017.1398166