

GREEN GOLF COURSE STANDARD FOR SUSTAINABLE SPORT TOURISM

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Abstract: Developing a standard for Green Golf Course for Sustainable Sport Tourism has become a crucial matter as it can enable Thailand to pioneer the Sport Tourism market, push forward golf in Thailand to receive international recognition in environmental conservation as well as support growth of golf in the near future. Therefore, applying the Golf Environment Organization (GEO)'s Sustainable Golf Development to Thailand's Green Golf Course Standard for Sustainable Sport Tourism is necessary. It will elevate Golf Sport Tourism to an international level and make it globally recognized and attract more golf tourists. For that reason, the objectives of this research were: (1) to study the properties of the Thai version of Green Golf Course Standard for Sustainable Sport Tourism and (2) to obtain a standard for Green Golf Course for Sustainable Sport Tourism that can be appropriately applied to Thailand.

Development of Green Golf Course Standard for Sustainable Sport Tourism is adapted from the original English version, Sustainable Golf Development, which we were granted permission to translate. The process of developing a Thai version of the Green Golf Course Standard for Sustainable Sport Tourism was referenced from Nantana Sawadipanich and Sujitra Tiansawad (2011: 19–27) and Beaton, Bombardier, Guillemin and Ferraz (2000) who proposed the translation and cultural adaptation process.

The population and the sample group for the research were purposely sampled, consisting of 9 experts in Physical Education, Golf, Environment, English, Research and Landscape Architecture. The sample group for the trial of application of the Green Golf Course Standard was also purposely sampled, yielding 30 people who were golf tourists, government employees and community leaders, executives and staffs from tour operators and experts. The area of the study included Bangkok, Phuket, Prachuap Khiri Khan (Hua Hin), Chonburi (Pattaya) and Chiangmai. The tool used in the study was the Green Golf Course Standard for Sustainable Tourism.

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The research results showed that:

(1) Content Validity: In terms of content validity, there was a comparison between the original version and the back-translated version of the Standard to consider the appropriateness of the language and grammar used. Index of Congruence (IOC) between the original version and the Thai version which was used as the trial version yields was also considered. The IOC result of the Thai version (pre-final version) yielded 0.57 - 1.00.

(2) Application of the Thai version of Green Golf Course Standard: Data inquired from the 30 samples was used to calculate Internal Consistency. The result of Cranach's alpha Coefficient for the Standard was 0.82 and the Item-to-total Correlation Coefficient was between 0.48 and 0.67, which was higher than the standard criteria of 0.30. Moreover, the Intraclass Correlation Coefficient yielded 0.86, resulting in high reliability.

In conclusion, the Green Golf Course Standard for Sustainable Tourism can be applied to Thailand in 3 stages namely 1) Planning which has 6 areas, 36 items; 2) Design which has 6 areas, 34 items; and 3) Construction which has 7 areas, 52 items. This then gives 122 items in total.

Keywords: Green Golf Course, Standard for Sustainable, Sport Tourism.

Introduction

Nowadays, Thailand places importance on the development of tourism, tourist attractions and the awareness in conservation of natural resources and the environment. It also emphasizes the development and promotion of Thai tourism industry to reach quality standards and achieve sustainable tourism, in order to compete in the world market which will lead it to become the Tourism Capital of Asia. Sustainable tourism is a form of tourism that can maintain values or benefits over a long time and causes little or no environmental degradation or destruction as well as conserves the environment for new generations in the future. Consequently, this will lead to the whole resource management in order to meet the needs of the economy, society and culture. It will also preserve cultural content and ecosystem processes necessary for biological diversity and other systems that support organisms, plants, animals and human beings (World Tourism Organization, 1988).

Thailand is highly active in sustainable tourism, together with expansion of the country's economy. Thai tourists turn to domestic travel more as they like to experience and learn local culture and folkways. Presently, sustainable tourism plays an important role in Thai tourism in many ways, e.g. activities, markets or, especially, tourist attraction development which supports the expansion of the number of tourists. The Tourism Authority of Thailand specifies and promotes sustainable tourism as a crucial way to develop tourist attractions in order to accommodate more tourists and become an international attraction. To develop attractions across the country to correspond to the sustainable tourism concept, identity, good will, and good image of the attractions must be created.

Sports tourism in Thailand has started to draw attention since Thailand hosted regional multi-sport events like the SEA Games; pan-continental multi-sport events like the ASIAN Games and specific sports event such as the Thailand Open and Golf

LPGA. The events were participated by a large number of athletes from all over the world, team staff, referees, and sports fans, resulting in a positive trend and promising direction of sports tourism. Moreover, there were several factors that affected tourism such as the economic and political drive and shifted social attitudes and values. People nowadays place more importance on their health, playing golf, which was acknowledged as a sport for the rich, has also become more popular. Sports is therefore a first choice for most people. Furthermore, the motivation inspired by athletes, such as getting to be close to them or seeing them as a role model, induces more sport fans.

Golf is a popular sport with players around the world including Thailand. It attracts an increasing number of both Thai and foreign tourists each year and creates large revenue for the country. According to a survey on Thai golf courses, with cooperation of Tourism Authority of Thailand in 2011, the number of golf courses in Thailand is 240; most of which, 41%, are located in the Central region followed by North-Eastern, Northern and Eastern regions respectively. As tourism competition is rather intense at present, people involved in golf tourism management try to compete in order to attract tourists to increase travel to their own countries.

According to news from media or extreme anti-golf articles, there are a large number of people have that have negative attitudes towards golf, believing golf destroys the environment. O'Connor (O'Connor. 2003) wrote a book *Observer* saying that developing an environmentally friendly green golf course was merely a futile concept which could never be actualized. Burnside (Burnside. 2001) also wrote an disparaging article in *The Guardian* that he could not bear living with golf courses as golf destroys the environment. He stated that to build a golf course, forests and natural water sources must be destroyed; also, it releases greenhouse gases which affects local climate and severely pollutes the environment which directly affects local plants and animals. Likewise, Platt (Platt. 1994) wrote an article in *World Watch* that many a time, golf course development caused a community to migrate, destroyed the habitat of plants and animals, and released air and water pollution.

As a result, agencies and organizations started to cooperate in developing a more environmentally friendly golf course. In England, there are agencies that certify environmentally friendly golf courses, for example, the Golf Environment Organization (GEO) whose objective is to sustainably develop golf. The organization cooperates with golf stakeholders, the government and the community and is a member of the European Institute of Golf Course Architects, American Society of Golf Course Architects and the Society of Australia in designing environmentally friendly golf courses. Most of the renowned golf courses around the world are members of the GEO such as ST. ANDREWS Golf Course, Burhill Golf & Leisure and Gil Hanse Golf Course that will be used for the Olympics in Rio.

The European Golf Association reported that the growth on world-wide golf courses is 100% and on golf participants is 350%. The Golf Research Group confirmed that there are about 32,000 golf courses and 60 million golf players world-wide today.

Apparently, sports tourism, especially golf, has received increasing attention. Golf course development therefore needs to have good management and be concerned with environmental effects such as effects on physical environment,

economy and culture, which can cause problems and reduce the number of tourists. Consequently, there must be a standard to be used as an index or indicator in maintaining the standard and quality of the sustainable, environmental friendly sport tourism.

From the perspectives of people towards golf, both positive and negative, as well as the increasing trend of the number of golf players, we believe that developing an environmentally friendly golf course, finding a way to push golf in Thailand forward in order to be acknowledged in environmental conservation, receiving acceptance from global community and supporting the growth of golf in the near future will enable Thailand to open a sports tourism market that can attract more golf tourists. The Green Golf Course Standard (Sustainable Golf Development) for sustainable sport tourism is a standard that is widely used in various countries. In addition, usage or the Thai translation of the Green Golf Course Standard has not been developed.

Hence, we are interested in studying the Green Golf Course Standard for Sustainable Sport Tourism and wish to develop a Thai version of the Golf Environment Organization (GEO)'s Sustainable Golf Development so that it could be applied to Thailand, carrying Thai golf tourism forward to an international level and getting recognized by world-wide tourists.

Objectives

There are two objectives for the study

1. To study the properties of a Thai version of the Green Golf Course Standard for Sustainable Sports Tourism
2. To obtain a Green Golf Course Standard for Sustainable Sports Tourism that can be applied to Thailand.

Research Benefits

There are two benefits

1. Obtain a Thai version of the Green Golf Course Standard for Sustainable Sport Tourism that can be applied to Thailand.
2. Obtain results of the study that will be used as a guideline to establish Golf Tourism in Thailand.

Related Concepts and Theory

Concepts Regarding a Standard

The standard used for this study is Sustainable Golf Development developed by the Golf Environment Organization (GEO) of Scotland. It proposes the standard regarding management of an eco-friendly golf course which consists of three stages: 1) Planning, 2) Design and 3) Construction. Each stage needs to regard 6 areas namely 1) landscape & ecosystems, 2) water, 3) energy & resources, 4) products & supply chains, 5) environmental quality and 6) people & communities.

Translation Process and Cross-Cultural Content Validity

Cross-cultural study (Cha; Kim; & Erlen. 2007) is a use of a good evaluation form to reduce time and effort in creating a desired evaluation form. The main importance in

those aforementioned stages is translation process where direct translation is not accepted as it is not content equivalent. Back-translation is another pivotal process that is used in the cross-cultural study as it gives better accuracy.

Stages in developing an evaluation form from English to Thai is referenced from Beaton; et al. (2000) who proposed a 5-stage translation and cultural adaptation process. Through the literature reviews in Medicine, Sociology and Psychology as well as the application from the American Association of Orthopaedic Surgeons (AAOS), the method yields content validity. Its stages are as follows:

Stage 1 Beginning of translation is a forward translation from the original work to the Thai language by 2 experts who are proficient in both Thai and English. The two experts have different backgrounds, one has an understanding in clinical/medical concept and perspective while the other hasn't, which results in non-technical terms or normal language usage. Therefore, there are 2 versions of the translated Thai evaluation form (T1, T2).

Stage 2 Translation synthesis by the two experts is conducted. An observer records the synthesis and hence obtain a combination of the two versions (T-12).

Stage 3 Back translation is a process when the T-12 evaluation form is translated back to English by another 2 language experts who never see the evaluation form before and have no background in Medicine in order to remove data bias. This is a validity checking method. This stage results in 2 English versions of evaluation forms (BT1, BT2).

Stage 4 Consideration by expert committee is an important stage for content equivalence between the translated and the original version. Seven experts, which consist of an expert in research methodology, an expert in health, an expert in English and the 4 experts who perform translations in Stage 1-3, play a part in gathering all evaluation forms from stage 1-4 and together develop a pre-final version. Preparation of the original English version and evaluation forms of each stage is needed in order to find consistency in 4 areas: semantic equivalence, idiomatic equivalence, experiential equivalence and conceptual equivalence. The experts will perform validity checking on the translation of the translated evaluation form.

Stage 4 Trial of the Pre-final version was conducted on 30-40 people who answer a self-evaluation form and an interview regarding understanding in each topic and choices. There may be a go-back or repeat in those mentioned stages during the form improvement. Two popular methods that are used to check mistakes or changes in translation (Guillemin; et al. 1993) are Probe technique and Appraisal by bilingual individual which compare the translated version to the original one or find differences between the two versions.

Research Conceptual Framework

(See Figure 1 on the next page)

Research Procedures

We developed the Green Golf Course Standard for Sustainable Sport Tourism by translating the original English-written Sustainable Golf Development. We contacted GEO to ask for permission to translate, then started the procedure as follows:

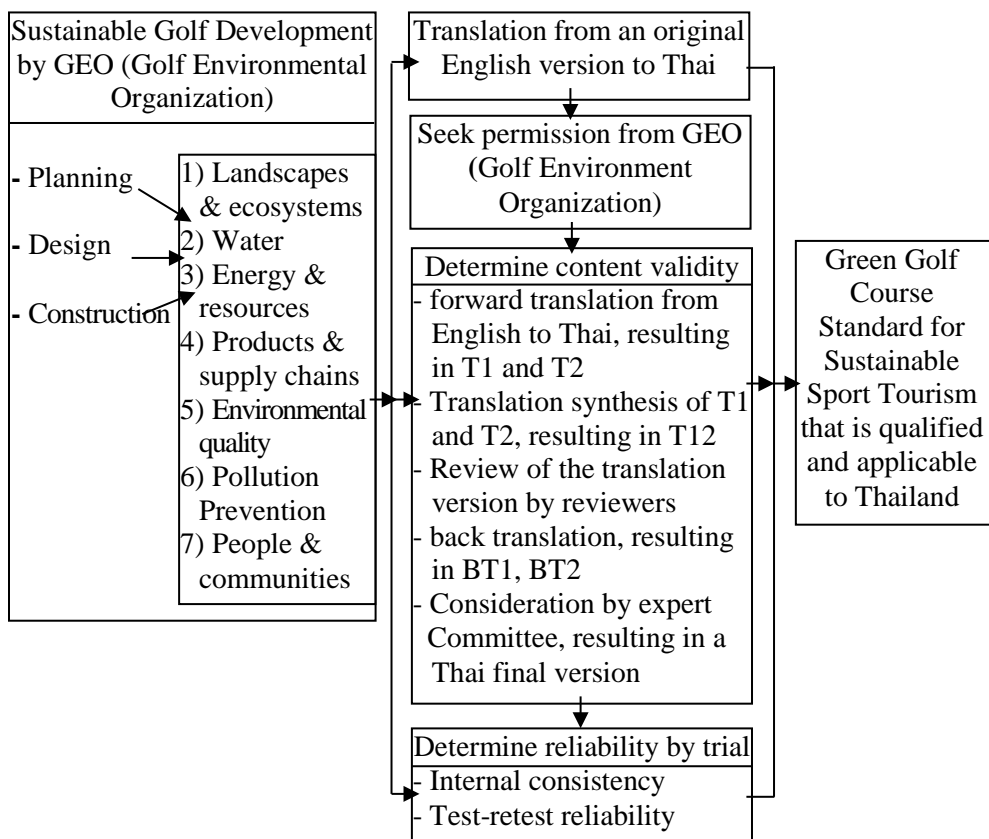


Figure 1: The Conceptual Framework of the Study

Stage 1 Content Validity of the Green Golf Course Standard

We conducted the research with reference to Nantana Sawadipanich and Sujitra Tiansawad (2011:19-27) and Beaton, Bombardier, Guillemin and Ferraz (2000), who proposed the following translation and cultural adaptation process:

1. We studied to understand the standard and asked for permission to use a research tool from GEO and were granted approval.

2. We performed English to Thai forward translation through a symmetric translation approach. Two translators, both fluent in Thai and English, had different backgrounds: one was an expert in golf and landscape architecture of golf courses while another had no background in Golf. An executive of Institute of Physical Education and environmental scholar of the Center of Environmental Technology Transfer and Development was selected accordingly.

After the translations were finished, we obtained 2 Thai versions of the Green Golf Course Standard namely T1 and T2.

3. We synthesized the translated materials, T1 and T2, as well as compared the translations. We then held a meeting, inviting the two experts to co-process the results of the translation and concluded into 1 version namely T-12.

4. The dissertation advisor reviewed the translated version to ensure the linguistic correctness and appropriate use of language.

5. We performed a back translation of the T-12 by having two language experts from Mahasarakham University and another from Prince Songkla University, Phuket campus, who never saw Green Golf Course Standard before and had no background in golf, which reduced data bias. They performed validity checking on each topic resulting in 2 standards: BT1 and BT2.

6. The expert committee compared the original version and the back-translated version in order to consider suitability and appropriateness of language and culture, resulting in data equivalence for Green Golf Course Standard that is used under different context. The committee consisted of 9 experts as follows:

- 1) 4 experts who performed translation and back translation in 2-4
- 2) 2 experts on language and Physical Education
- 3) A former director general of the department of Physical Education
- 4) A golf expert and CEO of Krung Kravi Company whose expertise lies in landscape architecture
- 5) An expert on environment

The expert committee cooperated to check cultural validity between the original and the Thai version by determining IOC value, in order to create a pre-final version of Green Golf Course Standard.

7. The trial of the pre-final version of the Green Golf Course Standard was conducted in order to find cultural content validity. A trial sample group of 30 people (Beaton et al, 2000; Asgari & Kramer, 2008) comprising of golf tourists and executives and staffs of tour operators answer questions and gave interviews on their understanding of each topic and choices. We then use the obtained data to revise and modify the standard. At this stage, we finally had the final version of Thai Green Golf Course Standard that is culturally valid.

Stage 2 Trial of the application of the translated Green Golf Course Standard

From the previous stage, we obtained the Thai Green Golf Course Standard which was then tried by the sample group. Interviews on understanding of each topic were performed and data collected was used to adjust and improve the standard, resulting a final version that was culturally valid and possible to determine reliability.

To determine Internal Consistency and Test-Retest Reliability of the Green Golf Course Standard, we developed a questionnaire to study the evaluation properties of the questionnaire, which was reliability.

A sample group for the study was divided into 2 groups: one for the trial on cultural validity which was comprised of 9 people while another for the trial on finding Internal Consistency and Test-Retest Reliability which was comprised of 30 people. Both groups were selected via the same method (Terwee, 2007) and members in both groups were not mutual. Moreover, the area of the study included Bangkok, Phuket, Prachuap Khiri Khan (Hua Hin), Chonburi (Pattaya) and Chiangmai.

Research inclusion criteria for being a member of the sample group were:

- 1) A golf tourist, government employees and community leaders, executives and staff from tour operators and experts in Physical Education, Golf, Environment, English, Research and Landscape Architecture.

2) Willingness to participate.

Process of asking for cooperation

- 1) We contacted the sample group, explained the research project, research procedures and participants agreed to join.
- 2) We confirmed that all members volunteered to be in the research.
- 3) A research assistant explained that the privacy and confidentiality of participants would be assured. Details that might lead to identity of the participants was concealed and closed to public access. In case the article was published, names and addresses of the participants would always be kept confidential. Documents received from the participants would be destroyed according to the standard measures as soon as the research paper was finalized.

A tool used in the research was the Sustainable Golf Development which was brought to translate and utilized.

Descriptive Analysis was used in Data analysis to analyze personal data. Frequency, Percentage, Average and Standard Deviation, and Cronbach's alpha Coefficient were used to determine Internal Consistency and Intraclass Correlation Coefficient to determine Test-Retest Reliability.

Research Results

Research Results from Stage 1 Content Validity of the Green Golf Course Standard

1. The forward translation process from the original English version to Thai by two experts yielded two Thai versions of Green Golf Course Standard, T1 and T2, and showed that the content of every item of the standard gave no difference in meaning. Although the translators used different words or transliterated, the important keywords remained. The results of the translation showed that there were 81 items of exact translations or slight differences and 41 items of the same meaning but words and idioms were different, totaling 122 items.

Table 1: An Example of Green Golf Course Standard Translation (T1 and T2)

		Thai translation	
Item	Original English Data	Translator 1	Translator 2
Messages that have the same translation			
13	Masterplan development impacts a way from existing natural zones of hydrological interest.	การวางแผนแม่บทต้องไม่มีผลกระทบต่อน้ำธรรมชาติที่มีอยู่	การวางแผนแม่บทต้องไม่มีผลกระทบต่อน้ำธรรมชาติที่มีอยู่
21	Drive sustainability through the projects supply chain via a central ethical and environmental procurement policy	ขับเคลื่อน (ผลักดัน) อย่างยั่งยืนผ่านห่วงโซ่อุปทานของโครงการด้านนโยบายการจัดซื้อจัดจ้าง (จัดหา) กลางที่ถูกต้องในเชิงจริยธรรมและค่านึงถึงสิ่งแวดล้อม	ขับเคลื่อน (ผลักดัน) อย่างยั่งยืนผ่านห่วงโซ่อุปทานของโครงการด้านนโยบายการจัดซื้อจัดจ้าง (จัดหา) กลางที่ถูกต้องในเชิงจริยธรรมและค่านึงถึงสิ่งแวดล้อม

2. The back translation from the Thai version to English by two language experts gave two English versions of Green Golf Course Standard, TB1 and TB2, and showed that the content from the translations conformed. Word choices might differ as they were technical terms in Golf, Landscape Architecture and Environment, however, meanings were similar.

Table 2: An Example of Back Translation by Experts (BT1 and BT2)

Item	Original English Data	English translation	
		Translator 1	Translator 2
3	หลีกเลี่ยงการกำหนดรูปแบบสนามและเครื่องหมายเพิ่มการตลาด เช่น ป้ายพื้นที่ชุ่มน้ำ ฯลฯ	Avoid predetermined design styles and marketing tags such as links, forest, wetlands, heathland etc.	Avoid the format field, and increase the market marketing tags such as like, forest, wetlands, health land etc.
36	สร้างความเจริญอย่างแท้จริงโดยการเพิ่มและขยายการให้บริการสิ่งอำนวยความสะดวกในกีฬากอล์ฟมากกว่าการแข่งขันกับสนามกอล์ฟที่มีอยู่แล้ว	Create real growth adding to and diversifying golf facility provision rather than competing with existing golf courses	Growth the actual increase of diversifying golf facility and supply facilities, golf course rather than compete with existing ones.

3. The consideration process by expert committee examined content validity on language and grammar was used. The committee compared the original version of the standard to the back-translated version to check appropriateness of language and grammar used in order to create an easy-to-understand and unambiguous standard. IOC between the English version and the Thai version that was used as trial version (pre-final version) was also considered. The result showed that IOC value for the pre-final version was between 0.57-1.00.

In addition, in this process, we used focus group for the experts to exchange ideas and opinions. This resulted in language improvement for better language use and better understanding as depicted in Table 3.

Table 3: An Example of Comments from the Experts to Obtain the Pre-Final Version

Item	English Version	Original Translation	Improved Translation by experts
1	Visualize an ecologically-rich landscape at the heart of your golf product	วาดภาพภูมิประเทศที่มีความเหมาะสมเชิงนิเวศให้เป็นหัวใจ (จุดสำคัญ) ของผลิตภัณฑ์ด้านกอล์ฟของท่าน	นิมภาพสนามกอล์ฟของท่านที่มีภูมิทัศน์ทางนิเวศวิทยาที่สมบูรณ์ในสนามกอล์ฟที่ท่านสร้าง
4	Avoid premature decisions on golf course length, and number of holes to be built	หลีกเลี่ยงการตัดสินใจเรื่องความยาวของสนามจำนวนหลุมที่จะสร้างไว้ก่อนเวลาอันสมควร	หลีกเลี่ยงการตัดสินใจก่อนเวลาอันสมควรในเรื่องจำนวนหลุมที่จะสร้างและละความยาวของพื้นที่สนามกอล์ฟ

Results from Stage 2 Trial of the Application of the Translated Green Golf Course Standard

At this stage, we used the complete version of the Green Golf Course Standard in questionnaire format to study an evaluation property of the questionnaire, reliability, which could be presented in two ways:

Internal Consistency

Data collected from the 30-people sample group was used to calculate Internal Consistency. We found that the Thai Green Golf Course Standard had Cronbach's Alpha Coefficient of 0.82, which was greater than an appropriate level of congruence of 0.80 (Boonjai Srisatitnarakul. 2012) and had Item-to-total correlation Coefficient of 0.48 - 0.67, which was greater than an appropriate level for all topics of 0.30.

Test-Retest Reliability of the Thai version the Green Golf Course Standard

The Green Golf Course Standard had Intraclass Correlation Coefficient of 0.86 which was considered high reliability.

In conclusion, the Green Golf Course Standard for Sustainable Tourism can be applied to Thailand in 3 stages namely 1) Planning which has 6 areas, 36 items; 2) Design which has 6 areas, 34 items; and 3) Construction which has 7 areas, 52 items. This then gives 122 items in total.

Research Result Discussion

Content Validity of the Green Golf Course Standard for Sustainable Tourism

The results showed that IOC value fell between 0.57-1.00 which might be on account of translation process referenced from Nantana Sawadipanich and Sujitra Tiansawad (2011: 19- 27, Beaton; Bombardier; Guillemin and Ferraz (2000); and The American Association of Orthopaedic Surgeons : AAOS). The process was considered as a standard cultural validity process and was suggested as an approach in research and development of a questionnaire to match the cultural content of the user (Beaton et al, 2000 referenced by Pitchapak Siangtrong, 2013: 60). The most important point specified in the process was that the translated version must maintain concept, content and performance of the tool as much as possible. Moreover, the crucial stage that allowed the outcome to reach the goal was the back translation process, which brought about cultural validity (Brislin, 1970 referenced in Cha, Kim & Erlen, 2007). There was also a suggestion that the back translators never saw Green Golf Course Standard before and be fluent in both the original and destination languages to ensure equivalence between the two questionnaires. For this research, the two experts have rather equal language capability. The back translators were native Thai and English lecturers, considered fluent in both languages. Furthermore, the English language used in the original version was not complicated and sport technical terms or terminology could be transliterated as they were widely used.

We also held a (focus group) meeting so that experts could comment and give further suggestions to reduce time in developing the Golf Course Standard. The selected experts have proficiency in related branches: Golf, Physical Education, Environment and Landscape Architecture, allowing them to exchange opinions and

give instant suggestions for improvement. Moreover, the standard contained technical terminology and specific content in these areas. If we separately asked the experts to consider the content, there might not be a correct and complete summary. The focus group meeting method, hence considered important, could provide conclusion for the standard with better accuracy and clarity as well as improve language used for better conciseness and comprehensibility for readers' better understanding. Moreover, the research results also conformed to the research results of Soontree Srigosai and Srirawan Taweewattanapreecha (2012) who used the same translation process. This research was a study of Psychometric Properties of the Life Congruence Scale Based on the Satir Model in Thai Version and we found that the evaluation form had 1.0 content validity value both in terms of items and in total. The work of Pitchapak Siangtrong (2013) who studied Accuracy and Validity of self-evaluation in daily life activities (Thai version) also showed that the evaluation form was in a good level of content validity which was congruent to Thai culture and could be used to assess activity therapy recipients in Thailand. Therefore, it could be concluded that, as suggested by Nantana Sawadipanich and Sujitra Tiansawad, a research tool that was translated by standardized approaches with detailed translation process, such as a symmetric translation approach, a back translation approach and a cultural validity approach, yielded the same content validity and reliability as the original version. In fact, to translate a research tool from one language to another causes change in internal structure of the tool. The translated tool might not be valid and lack reliability even though it was correctly translated by an expert and is a linguistic equivalent tool as it might not be applicable for certain population that has specific culture in their study. As a result, to translate research tools, researchers should consider quality assessment of both the translation and the translated tool. In terms of reliability, cultural equivalence should also be taken into consideration. This research performed translation procedures in agreement with the mentioned translation process and suggestions, resulting the Green Golf Course Standard culturally valid.

Results of Trial of Application of the Green Golf Course Standard

The result of the trial showed that the Green Golf Course Standard had an internal consistency value between 0.48 – 0.67 which was in a very good to excellent level, meaning that the standard had topics or statements that were related or evaluated or categorized the same element (Boonjai Srisatitnarakul, 2012). This showed that the standard statements in each topic were related and evaluated the same item or the same characteristic.

Two weeks after the first trial, we repeated the trial to find the Intraclass Correlation Coefficient (ICC). Data obtained from the two evaluations showed that the study was reliable. The questionnaire responses from both trials gave the same pattern or characteristics without any addition, moves or rewording, which were called the actual change (Wolfe & Chiu, 1999). The result also showed that the Intraclass Correlation Coefficient (ICC) value was 0.86, which was remarkably high. Therefore, this confirmed that the Green Golf Course Standard has Test-Retest Reliability, showing consistency of answers in both trials of different time.

In accordance with the saying it is impossible for tools that lack validity to be reliable (Polit; & Hunhler. 1999; & Grove. 2001 referenced by Boonjai

Srisatitnarakul. 2012.), high result values of Cronbach's alpha Coefficient and Intraclass Correlation Coefficient reassured cultural validity of the process. Reliability was a property of the tool that could evaluate variables to match the desired properties (Boonjai Srisatitnarakul. 2012.). It showed consistency or constancy of the result values obtained from the same tools, sample groups and areas. Consequently, the Green Golf Course Standard was cultural valid, internally consistent and Test-Retest reliable and is usable for further researches.

Recommendation

To apply the Green Golf Course Standard, one should be reconsider suitability and feasibility in the Thai context in order to adjust the details of the standard to match Thailand's social and economic state.

There should be a regional review or conference that allows involved parties such as geographers, golf course owners, and sports tourism experts, to re-analyze/re-synthesize.

This Thai version of the Green Golf Course Standard was approved to be published on the GEO's website, which is considered international. If interested, one can learn further to build or improve their golf courses and suggest their ideas or comment on the application.

If any parties involving standard enforcement are interested in developing a Golf Course Standard for the environment in Thailand, it can use this standard as a basis to create a new Green Golf Course Standard for Thailand that has gone through national standard process and been critiqued by a professional association and/or public hearing in order to be accepted by the stakeholders. Moreover, if a Golf Course Standard is enforced, Thai golf courses will then be accepted on an international level.

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