Cross-cultural Adaptation of the Begley and Glacken’s Assertiveness Scale for Use Among Sinhala Speaking Nursing Students in Sri Lanka

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Abstract

Background and Objective: Assertiveness is a crucial skill in the nursing profession to reinforce interprofessional relationships, prevent workplace violence, reduce work stress, improve professional efficacy, develop leadership skills, autonomy and job satisfaction. Assertiveness when inculcated among nursing students will immensely contribute to their professional development and a sustainable career. Since no standard tools are available to measure assertiveness among Sinhala speaking students, this study is aimed to cross-culturally adapt the Sinhala version of Begley and Glacken’s Assertiveness Scale among nursing students in Sri Lanka.

Methods: Permission to translate, cross-culturally adapt and use the 28-item Begley and Glackens’ Assertiveness Scale were obtained from its developers. The content and consensual validity of the translated version was assessed with a two round Delphi process using five experts and a consensus evaluation. If 70% or more of the ratings for an item are in categories 0-3 the item was removed or reworded. The process was repeated for the reworded items and those were retained if 70% or more of the ratings were in categories 4-6 and /or 7-9. Subsequently, Content Validity Index (CVI) was evaluated using I-CVI, Universal Agreement (S-CVI/UA) and Average CVI (S-CVI/Ave). Finally, the scale’s reliability was evaluated using Cronbach’s alpha in a randomized sample of 140 nursing undergraduates from the University of Colombo.

Results: All the items in category 4-6 and 7-9 were retained. Sinhala version of the assertiveness scale showed maximum CVI of all individual items (I-CVI=1.0) and maximum overall CVI (S-CVI/UA = 1.0; S-CVI/Ave = 1.0). The reliability analysis indicated Cronbach’s alpha of 0.753.

Conclusions: The Sinhalese version of the Begley and Glacken's assertiveness scale is a culturally adapted, valid and reliable instrument to measure assertiveness among nursing students.

Keywords: assertiveness, nursing students, Sinhala version of Begley and Glacken’s Assertiveness Scale, cross-cultural adaptation

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**Introduction**

Assertiveness is identified as the capacity possessed by individuals to value one’s and others’ beliefs and ideas equally. Further, it can be elaborated as being at a state that enables individuals to accomplish one’s needs, preserve one’s rights, and express one’s feelings, beliefs, and thoughts while concurrently accepting and giving due respect for the rights of others (Roya et al., 2014). Another perception of assertiveness is expressing rejection by saying ‘no’, yet conveying the desires and feelings associated with negativity and positivity (Lazarus, 1973), without offending others (Poroch & McIntosh, 1995).

**Advantages of assertiveness as a life skill**

It is essential to note that assertiveness plays a vital role as an interpersonal skill that facilitates mitigating the power imbalance among individuals (Alberti & Emmons, 2008). Assertiveness is directly correlated with the caring skills of nurses (Montini et al., 2008). It has been identified that individuals who possess high levels of assertiveness generally have a high degree of self-worth. Further, they have a high capacity to achieve success in their lives. In addition, it enhances their critical thinking skills, self-confidence, and awareness and it enables them to maintain positive social relationships with others (Hadavi & Nejad, 2018). Moreover, it facilitates expressing the needs and thoughts without being anxious or causing any harm to others (Taghavi et al., 2014).

Assertiveness is classified as one of the iconic skills in nursing as it carries numerous benefits (Roya et al., 2014). It becomes an essential factor in minimizing violence, and it reinforces the relationships among the working colleagues within the health care settings (Karaka & Okani, 2015). Further, the authors report that it can reduce stress related to occupation, minimize negligence and enhance nurses’ leadership skills. This can lead to enhanced job satisfaction, improved autonomy and efficacy in professionalism.

**Advantages of assertiveness for the nursing profession**

Assertiveness preserves the nursing professionals’ dignity and improves their critical thinking skills, making them capable of taking ethical and rightful decisions (Yin, 2011). Above all, assertiveness motivates nurses to develop team spirit, and it has clearly been stated that having higher degree of assertiveness and cooperation contribute to good team-building spirits (Boone et al., 2008). Assertiveness of nurses reduces the risks and prevents medical errors substantially (Mc Vanel & Morris, 2010). Increased levels of assertiveness will genuinely benefit nurses by ensuring the guarantee of improved patient care (Poroch & McIntosh, 1995; Tilden & Tilden, 1985).

Assertiveness is considered an essential requirement for effective nurse/patient communication, and having such skills improves the confidence of nursing professionals (Yurtsal & Özdemir, 2015). Inculcating assertiveness among nursing students, is important in producing confident nurses for the future, who would defend their rights as well as their patients (Ayhan & Seki, 2021). However, nursing students begin to encounter problems in clinical setting after commencing their clinical education causing a decrease in their assertiveness levels (Ünal, 2012). It is further observed that, if the nursing students become capable of maintaining good skills in communication and using their knowledge of professionalism and skills with competency, they would be identified as individuals with higher degrees of self-esteem and assertiveness. Therefore, nursing educators play an essential role in developing and implementing assertiveness training programmes for undergraduate nursing students and assessing them (Mc Cabe & Timmins, 2003). However, Sri Lanka lacks cross-culturally adapted instruments to assess the student nurses’ assertiveness.
Cross-Cultural Adaptation of the Begley and Glacken's Assertiveness Scale

Measuring assertiveness
There are many behavioural tools for measuring assertiveness. However, the more popular measures include the Behavioral Assertiveness Test- Revised (BAT-R) developed by Eisler et al. (1975) and the Assertive Interaction Coding System developed by Weeks and Lefebvre (1982). In addition, the Adaptive and Aggressive Assertiveness Scale (Thompson & Berenbaum, 2011), Assertion Inventory (Gambrill & Richey, 1975) and Assertiveness Self-Report Inventory (Herzberger et al., 1984) are tools used by researchers. Assertive Behavior in Nurses (Gerry, 1989) is one of the assertiveness scales used particularly for nurses. It has been developed based on three assertiveness measures; the Assertion Inventory (Gambrill & Richey, 1975), a 30-item schedule (Rathus, 1973) and the College Self Expression Scale (Galassi et al., 1974).

The Begley and Glacken’s Assertiveness Scale (Begley & Glacken, 2004) has been designed to measure assertiveness among nursing students, and it has been developed adopting the scale Assertive Behavior in Nurses (Gerry, 1989). It includes 28 items in a four-point Likert scale, with the options ‘always’, ‘often’, ‘rarely’ and ‘never’ (Begley & Glacken, 2004). The scale has no subscales. As per the scale guidelines, the items 4, 5, 7, 10, 11, 16,17,18,19, 20 and 24 are scored as always = 4 marks, often = 3, rarely = 2, and never = 1 and the items 1, 2, 3, 6, 8, 9, 12, 13 14, 15, 21, 22, 23, 25, 26, 27 and 28 are reverse - scored as always =1, often = 2, rarely = 3, and never = 4. A high final total score indicates a higher level of the person’s assertiveness.

The test for internal consistency (Cronbach’s alpha) rendered a value of 0.653 in a previous study, demonstrating an acceptable reliability coefficient (Deltisidou, 2009) and the instrument was thus considered appropriate to use in the current study.

Accordingly, the main aim of the present study was to cross-culturally adapt the Sinhala version of Begley & Glacken’s Assertiveness Scale for use among nursing students in Sri Lanka.

Methods

Translating the Begley & Glacken’s Assertiveness Scale to Sinhalese
Data collection of the validation sample was commenced once the ethical approval was obtained from the Ethics Review Committee (ERC), KAATSU International University, Sri Lanka (KIU/ ERC/ 21/ 28). Permission to cross-culturally adapt the assertiveness scale into Sinhala was obtained from its developers; Begley & Glacken (2004). Thereafter, the translation process and the cross-cultural adaptation based on the international guidelines were conducted under five stages; (I) Initial translation, (II) Synthesis of the translations, (III) Back translation, (IV) Expert Committee Delphi review and (V) Test of the pre-final version (Beaton et al., 2000).

In stage I, the English (source language) scale was translated into Sinhala (target language) by two local professional translators who are bilingual experts and native Sinhala speakers. Firstly, the forward translation of the original items, instructions, and responses was carried out independently by the two translators. In stage II, both translators and the local coordinator discussed the translations and agreed on a reconciled version. Measures were taken to ensure that the questionnaire is conceptually equivalent to the original questionnaire and the language was made conversational and easy to understand by the target population. In stage III, a local professional translator who is a native speaker of the source language and an expert in the target language translated the first Sinhala version of the questionnaire (produced in stage II) back into the source language. The original version of the questionnaire was not available to the translator during this stage.
Assessing content and consensual validity of the translated tool and reducing redundant items

A panel of experts consisting of two registered clinical psychologists, a nursing educator, a sociologist, and a methodologist evaluated the translated questionnaire for content validity and consensual validity using the Modified Delphi Technique (Hecht, 1979; Jones & Hunter, 1995). The three aspects evaluated are as follows. 1) appropriateness of each item in the Sinhala version for use by nursing students, 2) wording of the Sinhala version in a manner that retains the conceptual meaning of its original English version, 3) cultural relevance of each item in the Sinhala version to the Sri Lankan context. The experts critically reviewed each item in the instrument and expressed their opinion on a scale of 0 to 9. In the evaluation, zero indicated the expert’s total disagreement and a score of 9 indicated the expert’s total agreement. Based on the Delphi process, if 70% or more of the ratings for an item are in categories 0-3 the item was removed or reworded to make it acceptable. If an item was reworded, the process was repeated and the item was retained if 70% or more of the ratings were in categories 4-6 and/or 7-9 (summatively).

Based on the results obtained at the consensus of the panel of experts, the content validity of individual items (I-CVI) and the overall scale (S-CVI) were assessed. There are two methods for calculating S-CVI; one is the UA among experts (S-CVI/UA), and the second, the Average CVI (S-CVI/Ave) (Polit & Beck, 2006). S-CVI/UA was measured by proportions of items on a scale that achieves a relevant rating of 4-6 or 7-9 categories by all the experts, and S-CVI/Ave value was measured by obtaining the average of I-CVIs for all the items on the scale.

Pre-testing the validated scale

A pre-test of the scale was conducted among 30 nursing students who had completed their final year examination at the Faculty of Allied Health Sciences, General Sir John Kotelawala Defence University to determine the difficulty level of the items, ease of understanding of concepts in the items, any discomfort when responding and the appropriate length of the instrument.

Assessing reliability of the cross-culturally adapted scale

A descriptive cross-sectional study was conducted among nursing undergraduates of the Faculty of Nursing, University of Colombo, to assess the reliability of the validated Sinhala Begley & Glacken’s Assertiveness Scale. The nursing undergraduates who could read and understand the Sinhala language and consented to participate were included in the study. The sample size for internal consistency reliability analysis should be 5-10 times the number of items in the instrument (Kyriazos, 2018). Accordingly, the minimum sample size for the scale to be validated was 140 (28 items×5). A systematic random sample of 140 students was selected from all three batches of nursing undergraduates using their attendance registers, and the online version of the translated and cross-culturally adapted Sinhala Begley and Glacken’s Assertiveness Scale was shared exclusively. Descriptive statistics were used to explain the level of assertiveness and the demographic characteristics of the participants using the Statistical Package for Social Sciences (SPSS) version 23.0. The internal consistency reliability of the scale was measured using Cronbach’s alpha.

Results

Assessing content and consensual validity of the translated tool and removing redundant items

Based on the Delphi process, all the items for the Sinhala version of the Begley and Glacken’s Assertiveness scale were retained as 70% or more of the ratings were in categories
4–6 and 7–9 (summatively). Some words were changed to retrieve their appropriate cultural meaning. For instance, the words ‘compliment’ and ‘praise’ have several meanings in the Sinhala language. Therefore, different Sinhala words were used to describe these as appropriate to different items of the scale. Further, the Delphi process was repeated in the second round for all the items, and the re-ratings were in categories 7–9. Therefore, finalized Sinhala version of the Begley and Glacken’s Assertiveness Scale indicated maximum content validity of all the individual items (I-CVI=1.0) and maximum overall content validity (S-CVI/UA = 1.0; S-CVI/Ave = 1.0). The consensus revealed that the Sinhala version of the Begley and Glacken’s Assertiveness Scale is a valid tool in assessing assertiveness.

Assessing the reliability of the cross-culturally adapted scale

The cross-culturally adapted Sinhala version of the assertiveness scale was then administered to a validation sample of nursing undergraduates enrolled in the Faculty of Nursing, University of Colombo, to assess its reliability. The mean age of the sample was 23.45±1.24. The majority (98.6%, n=139) of the sample was Sinhalese. The sample consisted of nursing undergraduates from first (34.8%, n=49), second (29.8%, n=42) and third years (35.5%, n=50) (Table 1). The mean assertiveness of the sample was 79.24 ± 7.19 and the Cronbach’s alpha value was 0.753 indicating a good internal consistency of the validated scale.

Discussion

The healthcare system in Sri Lanka is overburdened with patients and a lack of resources, and thereby most Sri Lankan nurses generally react passively in the work setting (De Silva, 2010). Therefore, a change in nursing education is imperative to prepare nurses with assertiveness and technical competence to work in the rapidly changing healthcare environment (Jayasekara & McCutcheon, 2006). Moreover, it is essential to assess assertiveness among nursing students before embarking on making necessary changes in nursing education in Sri Lanka. Since there had never been a cross-culturally adapted Sinhala assertiveness scale in the Sri Lankan context, the current study led to translate and adapt the scale developed by Begley & Glacken (2004).

There is no universal agreement on how to adapt an instrument for using in another cultural setting. However, there is an agreement that it is inappropriate to simply translate and use a questionnaire in another linguistic context (Beaton et al., 2000; Guillemin et al., 1993; Herdman et al., 1998; Reichenheim & Moraes, 2007; Wang et al., 2006). Five stages of cross-cultural adaptation of Begley and Glacken’s Assertiveness Scale into Sinhala were conducted and obtained acceptable content and consensual validity (Beaton et al., 2000; Fink et al., 1984; Jones & Hunter, 1995) and excellent CVI values.

Reliability is concerned with the ability of an instrument to measure consistently and internal consistency is widely used for reliability testing as it describes the extent to which all

| Variable   | Category | n    | %   |
|------------|----------|------|-----|
| Gender     | Male     | 32   | 22.9|
|            | Female   | 108  | 77.1|
| Nationality| Sinhala  | 138  | 98.6|
|            | Muslim   | 01   | 0.7 |
|            | Tamil    | 01   | 0.7 |
| Academic year| First | 49   | 35.0|
|            | Second   | 42   | 30.0|
|            | Third    | 49   | 35.0|
the items in a test measure the same concept or construct (Tavakol & Dennick, 2011). In the present study, the reliability of the assertiveness scale was measured using Cronbach’s alpha and it was found acceptable (a= 0.753). This might be due to the standardized international guidelines (Beaton et al., 2000) followed at all stages in this study. Similarly, acceptable reliability levels were reported on the same assertiveness scale as in previous studies (Begley & Glacken, 2004; Deltsidou, 2009).

The strengths of this study were application of standard validation process in collaboration with a multidisciplinary team and the total sample responding without attrition. However, there could be some limitations due to the cross-sectional descriptive design of the study. Further, data collection had to be done online as universities were closed due to COVID-19 pandemic.

Conclusions

The findings of the study confirm that the cross-culturally adapted Sinhala version of the Begley and Glacken's Assertiveness Scale is a valid and reliable instrument to measure assertiveness among Sinhala speaking nursing students. Future research could be focused on modifying this tool to assess assertiveness of students in medical and other allied health sciences.

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Conflict of interest
The authors declare that they have no conflict of interests.

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