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The Incivility in Nursing Education Revised (INE-R) Instrument: Translation and Validation in Indonesian

Christie Lidya Rumerung[1]*, Erniyati Fangidae[2], Peggy Sara Tahulending[3]
[1]Faculty of Nursing, Pelita Harapan University, christie.lidya@uph.edu
[2]Faculty of Nursing, Pelita Harapan University, erniyati.fangidae@uph.edu
[3]Faculty of Nursing, Pelita Harapan University, peggy.tahulending@uph.edu

*Corresponding Author: E-mail: christie.lidya@uph.edu

ARTICLE INFO	ABSTRACT
	Background: Professionalism is one important thing in the educational process as in the learning objectives of nursing. Nurses are required to form a professional behavior and achieve it starting from the educational stage. Thus, the process in nursing education needs to be able to identify patterns of students and teacher's behavior that are not professional or against the norms of decency. The Incivility in Nursing Education – Revised (INE-R) instrument, was first developed by Clark et al. in 2015. It is designed to assess incivility within nursing education, and there has been no Indonesian translated version recently. Inadequate translation quality can hinder researchers' capacity to gather and interpret data accurately, resulting in erroneous measurement. The broader impact can also result in failing to recognize or identify disrespectful behavior that may potentially lead to incivility behavior in nursing education. The purpose of this study is to produce an accurate research instrument of Incivility in Nursing Education Revised (INE-R) which is translated from English into Indonesian considering the cultural background and relevant issues in Indonesian context.
	Method: The method used in the translation process refers to the World Health Organization (WHO) instrument protocol, consist of forward translation, expert panel discussion, back translation, pre-testing, and cognitive interviewing until the final version. **Result:** This study found that the Incivility in Nursing Education Revised (INE-R) instrument is valid and reliable with Cronbach's alpha value of 0.745 and S-CVI 0.993. The result of the I-CVI score for each part of the questionnaire of student and teacher behavior assessment mostly have a score of 1 (one). **Conclusion:** This study translated the INE-R instrument formulated and developed by Clark. From the result of the I-CVI categorized, the translated instrument indicates a high content of validity.

INTRODUCTION

Education is the main foundation in producing health workers who are able to provide professional, competent and safe nursing care for patients. (1) explain that professionalism in healthcare includes achievement in the areas of clinical competence (skills), communication, and proper understanding of legal and ethical concepts. The application of professionalism principles in healthcare requires humanistic, accountable, and altruistic elements (1)(2). In nursing specifically, professionalism can be attained through establishing and maintaining a supportive learning environment and implementing civil behaviour such as norms, both within the classroom and in the clinical settings. Unable to address proper behaviour in nursing context may lead to incivility. Currently, incivility in nursing education has

become a very serious issue and requires further strategies to identify, prevent and to find alternative solutions. A study on incivility conducted by (3) in two nursing faculties in Indonesia (private and public) revealed that incivility is a significant concern, where 5 of 6 academic staff and 49% of students in the private faculty reported experiencing incivility, while in the public faculty, 10 out of 19 academic staff and 44.86% of students reported the same concern.

One way to measure the extent of incivility perceptions and behaviours within the scope of nursing education is to develop an intervention strategy through research with the proper instrument. The Incivility in Nursing Education Revised (INE-R) questionnaire is a tool developed by (4) to measure in civil behaviour in the context of nursing education. However, there has been no current translated of the INE-R available in Bahasa Indonesia. Translating health-related questionnaires is crucial to ensure that the terms appropriately reflect the intended meaning in the target language (5). To effectively translate, adapt, and validate an instrument for use across different cultures, languages, and countries, it is essential to engage in meticulous planning and employ well-established, rigorous methodologies (6). Furthermore, cross-cultural concerns must be considered when assuring translation accuracy to portray cultural differences and similarities especially when there are various interpretations on how to define incivility in nursing education. (7) defined incivility as behaviour that violates social norms and may vary according to the rules or culture prevailing in an area of practice, this also suggests that perceptions of incivility may vary depending on the specific social groups, interpersonal relationship, and context involved (8)(9–13). (4) Also found that incivility may involve verbally and nonverbally abusive behaviour, as well as forms of disruptive behaviour along with disregard for others. The impact of incivility behaviour can affect a persons' psychological and physiological condition, and if not resolved, it can lead to a social threatening and create unsafe conditions (14). Thus, the role of nurse educators is important in promoting professional behaviour and civility during the learning process to start and create a healthy learning environment. Faculty can conduct further research to identify and recognize incivility behaviour. Achieving accurate results necessitates the use of a valid and reliable instrument. If an instrument tailored to the specific language and cultural context is unavailable, it is essential to undertake a process of translation, validation, and appropriate methodological adaptation.
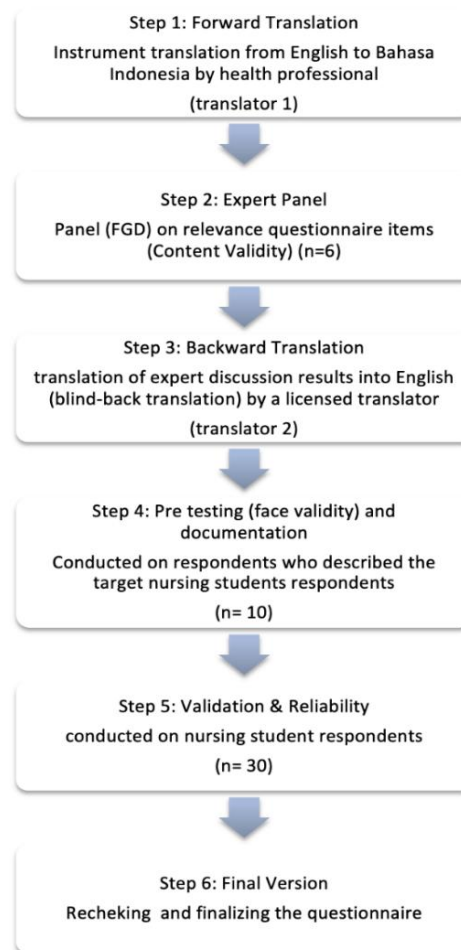
METHOD

The Incivility in Nursing Education - Revision (INE-R) instrument was translated following a protocol to create multiple language versions that are theoretically equivalent and suitable for use across different countries and cultures, ensuring that the translated version preserved the original meaning while addressing cross-cultural and conceptual considerations. Essentially, this means that instead of being confined to a single language or a direct translation, the instrument is adaptable and applicable in various contexts. The translation protocol used in this study involves three stages: cultural adaptation, psychometric testing, and validity and reliability testing. The cultural adaptation as the initial stage achieved through forward translation, expert panel discussion, and backward translation.

The INE-R questionnaire was adapted from Clark's Incivility in Nursing Education questionnaire, originally developed in 2009 and revised in 2015. The instrument translation begins with a forward translation from its original version to Bahasa Indonesia. Forward translation process should be done by an independent translator who are proficient in both target languages, bilingual and ideally having a preference of cultural understanding and experience related to both linguistic settings (15). The initial translation in this study was performed by a nursing lecturer who has expertise in incivility studies and an international educational background.

The translated instrument was then discussed in a Panel Group Discussion involving six experts with some criteria, such as: age between 36 – 45 years old, specializing in nursing education, and nursing management and leadership. The panel group discussion took place on Friday, 24 February 2023, via online platform meeting. One day before the panel discussion, participants received the INE-R draft and informed consent to outline the technical aspects and materials for discussion. After the panel discussion, the instrument was back translated from Bahasa Indonesia back to English language to ensure the accuracy. Back translated was performed by a certified translators who have been qualified with a translator certificate from The Indonesian Translators Association or Himpunan Penerjemah Indonesia (HPI). The finalized questionnaire was then distributed to 10 students as respondent for pre-testing and documentation. Subsequently, validity and reliability testing (VR) was conducted to 30 respondents from Nursing students. The VR test respondents were selected based on inclusion and exclusion criteria. The inclusion criteria covered the age of around 17 – 20 years old and have been studied nursing for over a year which is second or third-year nursing students, and the exclusion criteria are the down cohort students and those who were on academic

leave. The VR test took place on Thursday, March 30, 2023, at one private University in Tangerang. The flow of instrument translation can be seen in graphic 1 below.

Step 1: Forward Translation

Instrument translation from English to Bahasa Indonesia by health professional

(translator 1)

Step 2: Expert Panel

Panel (FGD) on relevance questionnaire items (Content Validity) (n=6)

Step 3: Backward Translation

translation of expert discussion results into English (blind-back translation) by a licensed translator

(translator 2)

Step 4: Pre testing (face validity) and documentation

Conducted on respondents who described the target nursing students respondents

(n= 10)

Step 5: Validation & Reliability

conducted on nursing student respondents

(n= 30)

Step 6: Final Version

Recheking and finalizing the questionnaire

Graphic 1. Flow Chart of INE-R Instrument Translation

There are various approaches in developing a standard protocol for translating research instruments and assessing the content validity. The content validity index (CVI) is one of the widely used method for assessing the content validity of instruments, such as questionnaires. The I-CVI itself has two types of content validity namely the Item-Level content validity index (I-CVI) and Scale-Level content validity index (S-CVI) (16). The I-CVI is determined using a four point rating scale for each item in the instrument, or by the number of experts who rate an item as "very relevant" divided by the total number of experts (17). The scale-level content validity index (S-CVI) was calculated to demonstrate content validity. Content validity measures how well an item in an assessment tool represent the intended construct. A higher content validity score indicates a more accurate measurement of the instrument (18). The Psychometric testing in this study is carried out by determining the content validity index (I-CVI and S-CVI). The I-CVI used to evaluate the relevance and the clarity of individual items of the instrument. The final step as the validity and reliability are assessed through initial testing, documentation and further examinations to confirm that the final version adheres to the necessary standards.

RESULTS

The INE-R instrument and its translation process are structured into three main sections: demographic data tailored to research objectives and specific study needs; an evaluation of student and lecturer incivility behavior over the past 12 months; and four open-ended questions about perceptions and strategies to enhance civility in nursing education. The research conducted over approximately seven months from December 2022 to June 2023 at one private university in Tangerang, involved lecturers and students, expert panels and pre-testing respondents. The study has been ethically approved with the number 006/IRB-UPH/I/2023. The initial stage of cultural adaptation involved translating the content from English to Indonesian. This process was carried out by a nursing practitioner with criteria that align with the research objectives. The expert panel consisting of six lecturers with over a year of teaching experience in nursing education, nursing management and nursing leadership. The ideal number of participants for focus group, in indicating data saturation, typically occurs of 6 to 12 participants. This range is also practical for discussion that need experts' insights (19). The panel discussion was held through an online meeting application, where the experts received question guideline prior to the discussion day. This guideline included all elements of the instrument, a scoring column, and space for notes on any unclear words or sentences that required correction or further discussion. Table 1 below presents examples of statements that were modified during the discussion.

Table 1. Example of INE-R Statement Improvement

No	English original	Forward Translate	Panel Expert discussion
1	Eye rolling, finger pointing	Eyes rolling, fingers pointing	Indifferent stares, pointing fingers
2	Skipping class or other scheduled activities	Missing	Missing class, skipping class
3	Being distant and cold toward others (unapproachable, rejecting faculty or other **student's** opinion)	Being distant and cold towards others (unapproachable, dismissive of teachers or other students' opinions)	Being distant and indifferent to others (unapproachable, rejecting the opinions of teachers or other students)
4	Demanding make-up exams, extensions, or other special favors	Requesting a make-up exam, extension, or other special assistance	Requesting a make-up exam, extension of time, or other special assistance
5	Unresponsive to emails	Not responsive to email	Not responding to emails
6	Threats of physical harm against others (implied or actual)	Threatening physical harm to another person (implied or actual)	Threats of physical violence against another person (implied or actual)
7	Property damage	Property damage	Damaging property

There were seven questions required more detailed discussion and underwent minor revisions due to differences in meaning during the translation to Indonesian. It illustrates examples of question items that were modified from the forward translation to the expert panel discussion, since certain phrases present challenges during translating. For example, the term "eye rolling" was initially rendered as "mata bergulir" in Indonesian, but during panel discussion, the term would be "tatapan tidak acuh." Similarly with the phrase "being distant and cold toward others" was originally translated literally as "menjauh dan bersikap dingin terhadap orang lain" and during panel discussion it adjusted to "menjauh dan bersikap tidak acuh" for improved clarity.

During the psychometric testing phase, the content validity index (I-CVI and S-CVI) was calculated. The four-point rating scale were assessed for each item in the instrument and most questions achieved an I-CVI score of 1, with only one question item scoring 0.833 (question 24). Based on the I-CVI intepretation, which overall score ≥ 0.78 being considered acceptable and indicating good content validity of item (20). The average result of the Scale-level Content Validity Index (S-CVI) was 0.993 for the questionnaire, which includes the assessment of students and lecturers. An average S-CVI score ≥ 0.9 indicates that the items have excellent content validity and no need for certain modify (20). The validity and reliability (VR) test was conducted on 30 participants with Cronbach's Alpha value = 0.745. Reliability refers to the accuracy and consistency of an instrument that measures specific attributes. According to (21), a high Cronbach's alpha value greater than 0.90 indicates excellent reliability and a value of ≥ 0.70 indicates that the items measure the same underlying construct and adequatly reliable. The overall score of I-CVI and S-CVI shown on table 2.

Table 2. Content Validity Index

Item	I-CVI	S-CVI
Q1	1.0	0.993
Q2	1.0	
Q3	1.0	
Q4	1.0	
Q5	1.0	
Q6	1.0	
Q7	1.0	
Q8	1.0	
Q9	1.0	
Q10	1.0	
Q11	1.0	
Q12	1.0	
Q13	1.0	
Q14	1.0	
Q15	1.0	
Q16	1.0	
Q17	1.0	
Q18	1.0	
Q19	1.0	
Q20	1.0	
Q21	1.0	
Q22	1.0	
Q23	1.0	
Q24	0.833	

DISCUSSION

The Incivility in Nursing Education-Revised (INE-R) tool development involved an extensive literature review, interviews with both students and faculty, as well as a pilot study. Throughout this process, the instrument underwent multiple modifications to focus on specific objectives related to incivility among students and faculty within nursing education. The INE-R evaluates incivility behaviors both qualitatively and quantitatively from the viewpoints of students and educators (4). This tool aims to aid researchers in assessing the occurrence and potential for incivil behavior in both students and faculty. The INE-R can be administered to only students or faculty, it can be divided into distinct sections for each group depending on the study's obejectives. Additionally, the demographic items can be adjusted to align with the study's goals in order to identify and mitigate incivil conduct through interaction and dialogue (4). Although the definitions of incivility are extensive and subject to varied interpretations, particularly within the realm of higher education. Perception levels may also vary based on factors such as gender, age, ethnicity, and education levels (22) (23–26). Individual interpretation refers to a person's internal process of understanding, adapting, and interpreting the connotation or literal meaning of a sentence. Based on experts feedback during the discussion, certain statements were adjusted to prevent differences in meaning as in adjusting to Indonesian language culture. Similar findings were reported (5) during the translation of the instrument from English to Norwegian, where changes in grammar, unfamiliar words, and sentence meanings necessitated modifications. Research conducted by (27) similarly highlights that language adaptation is challenging due to the influence of individual interpretation and cultural adaptation at nearly every stage of translation. Emphasizing research with the right instrument on uncivil behavior is crucial as it can aid in preventing potential incidents, identifying issues and addressing misconduct. Failure to recognize incivility may result in educators mistreating students, or students showing disrespect towards educators, and the emergence of unprofessional behavior. Such dynamics can adversely affect the overall learning process and consequently to patient care (28).

This study aims to develop an accurate and initial Indonesian translation of the INE-R instrument, acknowledging that perceptions of incivility itself may vary based on social perceptions. The validated Indonesian version of the INE-R is expected to identify and prevent potential uncivil behaviours in nursing education, thereby fostering a safe learning environment and enhancing professionalism in higher education. A limitation of this study is that most of the expert panel members were from the same institution, with only one expert from different institution. Consequently, the variation in ideas or general perspectives related to language understanding and the context of incivility behavior is primarily viewed from a single standpoint.

Recommendations for Future Research

Further studies are expected to implement psychometric achievements in a larger and more detail including the construct validity, content validity, and criterion validity to ensure the theoretical construction, concept and relevant outcome criterion. Based on this study limitation, it also recommends involving more experts with diverse backgrounds, encompassing a variety of relevance nursing institutions or involving more faculties from different nursing institutions with educational specializations related to uncivil behaviour identification.

CONCLUSION

Instrument to identify and address patterns of incivility is crucial in preventing the escalation of unsafe learning environments. Incivility in higher education impacts morale and productivity, it is highlighting the need for faculty and students to take actions in preventing series of disruptive behaviours which potentially abuse or lead to threatening situations. Some suggestions include the implementation of policies and training programs to promote civility, establishing clear guidelines policies, and the significant need for mentoring and counselling highlighting the need for mental health support in affected situations.

AUTHOR'S CONTRIBUTION STATEMENT

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