

# Assessing the content validity of the Nursing Students' Ethical Behavior Self-Evaluation Scale in Nursing Practice

Hiromi Aibara, Yasuko Hosoda

Osaka Prefecture University, Graduate School of Nursing

#### Summary

[Purpose] This study aimed to examine the validity of the Nursing Students' Ethical Behavior Self-Evaluation Scale in Nursing Practice.

[Method] Interviews were conducted with nursing students, clinical instructors, and the nursing faculty, and 55 items were created based on five representative concepts: "Building mutual relations based on respect" (19 items), "Protection of patients' rights" (10 items), "Responsible nursing practice" (11 items), "Improving nursing practice by team collaboration" (5 items), and "Learning attitude that is aware of responsibility" (10 items). In June-September 2017, the 55-item scale was administered to 10 participants with more than 5 years of clinical experience as nurses, a master's degree, and experience of teaching in nursing colleges. A self-administered questionnaire survey was distributed by mail to examine the validity of the content using the item-level content validity index (I-CVI). A four-point Likert scale was used to determine the relationship between the items and concepts. [Results] The I-CVI was calculated and items showing values of 0.78 or higher were included. Of the 55 items, 6 had an I-CVI less than 0.78. There were multiple open-ended opinions expressed concerning these 6 items. After excluding the 6 items with low I-CVI values, 49 items remained. [Conclusion] The content validity of the Nursing Students' Ethical Behavior Self-Evaluation Scale in Nursing Practice was acceptable.

**Keywords:** nursing student, nursing practice, ethical behavior, content validity, scale development

#### Introduction

To address ethical issues in nursing, the International Nurses Association's "The ICN Code of Ethics for Nurses" was introduced in 1953. In 2003, the Nursing Code of Ethics of the Japan Nursing Association was issued. These Codes of Ethics require behaviors which respect patient rights and the maintenance of ethical practices. The codes have been revised over time and in accordance with societal changes. Fry and Johnstone (2008, p.52) stated that "The ethical responsibilities of the nurse are clearly

> 2020年 2月 4日受付 2020年 5月 13日受理

stated: to promote health, to prevent illness, to restore health and to alleviate suffering." As nurses' required ethical behaviors are changing, they need to verify whether the nursing care provided to patients can be considered ethical. For nursing students, since "novices are also taught context-free rules to guide action in respect to different attributes" (Benner, 1984, p21), it is important to reflect on and evaluate their own ethical behavior in nursing practice.

Nursing students require a standard for reviewing and evaluating ethical behavior in nursing care. Through the qualitative illustration of the detail aspects of ethical student behavior and the development of appropriate measures, students can grasp their own ethical behavior concretely and objectively. Thus, a scale for evaluating ethical behavior is necessary.

In previous studies that qualitatively analyzed students' ethical behavior, we studied "Building mutual relations based on respect," "Protection of patients' rights," "Responsible nursing practice," "Improving nursing practice by team collaboration" and "Learning attitude that is aware of responsibility"; 5 core categories and 53 subcategories were extracted (2019, Aibara). Based on this research, 55 items were chosen through expert consultation to represent ethical behavior in college nursing student practice (2018, Aibara). Thus, previous research formed a detailed representation of the students' ethical behavior. These items covered the concepts of accountability and ethical nursing practice that are part of the basic care and practical abilities required of nurses at graduation, as specified in the 2019 Nursing Basic Education Review Committee Report (2019. Ministry of Health, Labor and Welfare).

Based on these two prior studies, we aimed to develop a self-assessment scale.

Previous studies have already been conducted to develop measuring tools for the ethical behavior of clinical nurses in Japan (Bando, 2014, Oide, 2019). Oide (2019) developed a scale consisting of three subscales: risk aversion (5 items), good care (5 items), and fair care (5 items). This scale can be used as a measure of Japanese nurses' ethical behavior. However, in the case of nursing students, fair care may be difficult to measure. Nurses must care for multiple patients, whereas nursing students care for one patient in order to practice their nursing skills. Thus, a measure for students should also evaluate their ethical behavior during actual nursing practice.

A similar issue exists for ethical behavior and associated moral sensitivity. It has been pointed out that variation is large and reproducibility is low as a result of applying a scale designed for nurses to nursing students (Nakamura et al., 2001). Therefore, a scale dedicated to nursing students' learning stage and problems is necessary. In other words, in order to evaluate the ethical behavior of nursing students' ethical behavior, it is necessary to have a scale that matches the current state of their practice.

Developing a scale to measure nursing students' ethical behavior will enable them to assess their own ethical behavior concretely and objectively, leading to the formation of practical skills. Based on the ethical behaviors in nursing students' practice revealed in previous studies, developing a scale that they can use for self-assessment of their ethical behaviors is important. The scale can be used as a tool to evaluate practice, for nursing faculty and clinical instructors, and in educational programs as an index that objectively captures students' ethical behavior during practicum training. Therefore, to evaluate the appropriateness of nursing students' ethical behavior in nursing practice, which has been clarified in previous research, the scale items' validity was verified.

#### Purpose

The purpose of this study was to evaluate the content validity of the items on the Nursing Students' Ethical Behavior Self-Evaluation Scale in Nursing Practice using the item-level content validity index (I-CVI).

#### Methods

1) Participants

The participants were recruited using convenience sampling. A total of 10 nursing faculty and clinical instructors specializing in nursing education or nursing ethics who satisfied conditions (1) to (3) were included:

(1) Having more than 5 years of clinical experience as a nurse

(2) Having experience in providing practicum training to nursing students

(3) Having a master's degree or higher

#### 2) Data collection

An anonymous, self-administered questionnaire survey was distributed by mail and returned in enclosed envelopes. Consent for participation was assumed if the completed questionnaire was returned. The survey was conducted from June to September 2017.

#### 3) Survey contents

Measurement of I-CVI was conducted (Polit et al., 2007) on the Nursing Students' Ethical Behavior Self-Evaluation Scale in Nursing Practice (draft). The scale question items were evaluated using a four-point Likert format: "Extremely related" (4 points), "Relatively related" (3 points), "Slightly related" (2 points), and "Not related at all" (1 point). Additionally, we asked the participants for their opinion on the items. Specifically, we examined how well each concept matched the question items and examined the scale items' content validity.

#### 4) Analysis method

The items were quantitatively evaluated and an item-level effectiveness index was calculated. Measurement of I-CVI (Polit et al., 2007) was conducted for each item. The number of experts required to calculate I-CVI is approximately 5-10 (Lynn, 1986). Items with an I-CVI of 0.78 or higher were included on the final scale. The agreement rate was also calculated. In addition, a field was set up to include comments on the free-form description, the wording was examined by several researchers with reference to opinion and subsequently refined. The statistical analysis was performed using SPSS (ver25).

#### **Ethical considerations**

The study was conducted with the approval of the Osaka Prefecture University Graduate School of Nursing Research Ethics Committee (approval number 29-19). The participants received written explanations on the purpose of the research, their freedom to withdraw, protection of personal information, etc. Participants were informed that returning the completed survey was considered an informed consent to participate.

#### Results

Responses were obtained from 10 participants. Their background details are shown in Table 1. There were no blank entries, and all 10 participants' data were included in the analysis.

Table1. Characteristics of participants

	eren er par ere parte	(n=10)
	Characteristics	
Gender	Men	1
	Women	9
Age(years)	20-29	1
	30-39	3
	40-49	3
	50-59	2
	60-69	1
Affiliation	University	7
	Hospital	3
Years of experience as a nurse(average)		12.4
Years of experience as a teacher(average)		10.8

Items with I-CVI of 0.78 or higher were included on the scale (Table 2). Of the 55 items, 6 had an I-CVI of less than 0.78. In the free-form comments, there were multiple opinions on these 6 items. After excluding the six items with low I-CVI values, there were 49 items remaining for the final scale.

I-CVIs below 0.78 were excluded. Free comments are shown in italics. Among the comments on item 9, "Bordering naturally without being influenced by information about what the patient my knew," one participant highlighted that *"It is difficult to tell whether natural contact is important to the dignity of the other party"*; the items with I-CVI lower than 0.78 was removed from the scale. Item 16, "Carefully handle the items at the clinical facility that are used in patient care," was removed. Because a participant wrote "the relationship with the patient is difficult to define since it is a training facility," and the corresponding I-CVI was 0.3. Item 23, "Consider the patient's personal space when providing care," solely took place at the time of care. We reviewed the original interview data and confirmed that fact. On that basis, this item was examined by several researchers and left unchanged. Regarding item 30, a participant wrote "I'm not sure if we are considering individuality. I think it is necessary to include it"; thus, the wording was changed to "Individually consider how to care for patients."

The concept "Building mutual relations based on respect" involves building a relationship with the patient by placing an emphasis on their dignity when communicating and engaging with them, acting as a specialist, and acting toward a mutual relationship. Of 19 items, 6 that had an I-CVI below 0.78 were excluded. "Protection of patients' rights" reflects actions to protect the rights of patients in their relationship with nurses, giving due consideration to privacy and shyness, and acting as a spokesperson. All 10 items for this concept exceeded an I-CVI of 0.78. The "Responsible nursing practice" concept included conducting nursing practices according to the patient's individuality and providing planned and effective assistance so that the practitioner can adequately assist the patient. This also involved adherence to rules. All 11 items exceeded an I-CVI of 0.78.

"Improving nursing practice by team collaboration" included actions to improve nursing practices for patients using group dynamics in medical teams. Since it is still difficult for to make judgments calls and practice alone, they should take action to maintain the quality of nursing practice required by patients, with the assistance of others. All 5 items exceeded an I-CVI of 0.78. "Learning attitude that is aware of responsibility" includes the behaviors required of a student to acquire the necessary nursing practice knowledge with preparedness. This included the actions needed for students to acquire the required knowledge and achieve their tasks. All 10 items exceeded an I-CVI of 0.78.

#### Discussion

I-CVI was calculated for researchers and clinical nurses who have a master's degree or higher, and the content validity was examined. I-CVI was calculated from a total of 10 researchers, including clinical nurses and experts in nursing education, who had experience in providing practicums for nursing students. Six items with an I-CVI of less than 0.78 were rejected because they were deemed less relevant and, therefore, less suitable as scale items. The Nursing Students' Ethical Behavior Self-**Evaluation Scale in Nursing Practice** (draft edition) has a total of 49 valid items extracted and 5 concepts. The content was validated and restructured.

The ethical behavior concepts of students in nursing practice included "Building mutual relations based on respect," "Protection of patients' rights," "Responsible nursing practice," "Improving nursing practice by team collaboration," and "Learning attitude that is aware of responsibility."

This study's limitation was that the 49 items may not include all ethical behaviors of nursing students. However, no previous studies qualitatively clarified nursing students' ethical behavior, nor did they examine this data quantitatively. Therefore, the 49 items confirmed through I-CVI in this study are considered important basic material for examining ethical behavior.

In the future, it will be necessary to study and refine the construct validity, criterion validity, and reliability of the Nursing Students' Ethical Behavior Self-Evaluation Scale in Nursing Practice.

#### Conclusion

The content validity of the Nursing Students' Ethical Behavior Self-Evaluation Scale in Nursing Practice was acceptable.

#### References

- Aibara, H., & Hosoda, Y. (2018). A study of the surface validity and content validity of the Nursing Students' Ethical Behavior Self-Evaluation Scale in Nursing Practice by the Expert Conference, Journal of Japan Society of Nursing Research, 41(3), 444.
- Aibara, H., & Hosoda, Y. (2019).
  Qualitative study on ethical behaviors in practice of nursing bachelor students. Journal of Japanese Nursing Ethics, 12(1),11-19.
- Bando, K., Nishida, M., & Takama, S. (2014). An attempt to create an Ethical Behavior Measurement Scale in nursing activities of psychiatric nurses. The Japanese Psychiatric Nursing Society, 57(2), 121-125.
- Benner, P. (1984). From Novice to Expert: Excellence and Power in Clinical Nursing Practice. Addison-Wesley Company, California.
- Fry, S. T, & Johnstone, M.J. (2008). Ethics in Nursing Practice,3rd edition: A Guide to Ethical Decision Making. Blackwell Publishing, Oxford.
- Ministry of Health, Labor and Welfare

(2019). Basic Nursing Education Study Group Report. Internet, Access date 2020.4.10. https:// www.mhlw.go.jp/content/ 10805000/000557411.pdf

- Nakamura, M., Ishikawa, M., Hidejima
  Y., Fukuzawa, H., Date, K., &
  Nishida, Y. (2000). Examination of the reliability and the validity of
  Moral Sensitivity Test (Japanese version) 1st edition. Bulletin of
  Yamanashi Medical University, 17, 52-57.
- Oide, J. (2019). Developing a revised edition of the nurses' ethical behavior scale. Journal of Japanese Nursing Ethics, 11(1), 13-19.
- Lynn, M.R. (1986). Determination and quantification of content validity. Nursing Research, 35(6), 382-385.

Polit, D.F., Beck, C.T., & Owen, S.V. (2007). Is the CVI an acceptable indicator of content validity? Research in Nursing & Health, 30, 459-467.

### 医学と生物学 (Medicine and Biology)

		I-CVI Value	Handle
	Building mutual relations based on respect		
1	Provide an explanation to the patient to obtain consent when observing patient care.	0.9	
2	Try to communicate while gaining understanding of the patient's perceptions.	1.0	
3	Make time to communicate with the patient.	0.6	Remove
4	Communicate with the patient while considering his/her condition.	1.0	
5	Be understood get across with patients while providing care so that information can be collected.	0.5	Remove
6	Try to communicate with the patient in order to understand his/her feelings.	1.0	
7	Provide a careful self-introduction to the patient and his/her family.	0.9	
8	Be aware of the value of the patient's and his/her family's time.	0.9	
9	Bordering naturally without being influenced by information about what the patient my knew.	0.6	Remove
10	Always be polite when communicating with the patient about his/her care.	1.0	
11	Bordering the patient's feelings while caring for the his/her feelings.	1.0	
12	Act with awareness that others will see me as a member of the healthcare profession.	0.5	Remove
13	Bordering patients with care of greetings, grooming, and how to use words.	0.9	
14	Build relationships with patients while understand my own tendencies .	0.7	Remove
15	Cope with conciderring the meaning and significance of the patient's acts of kindness (e.g., letters and gifts).	1.0	
16	Carefully handle the items at the clinical facility that are used in patient care.	0.3	Remove
17	Carefully handle the patient's personal belongings.	1.0	
18	Appreciate the patient's acceptance of having a student in charge of him/her.	1.0	
19	Respect the patients' response to my care.	0.9	
	Protection of patients' rights		
20	Carefully handle practical records that contain patient information.	1.0	
21	Handle patient information according to the rules that protect patient's rights.	1.0	
22	Observe confidentiality obligations regarding what I have seen and heard in the clinical facility.	1.0	
23	Consider the patient's personal space when providing care.	0.9	
24	Report details about the patient in the ensuring that his/her privacy is protected.	1.0	
25	Communicate considering the patient's need for shyness.	1.0	
26	Make full use of nursing skills that takes into account the patient's need for shyness.	1.0	
27	Advocate to a patient's words and thoughts.	0.9	
28	Support the patient's self-determination by capturing his/her words and thoughts.	1.0	
29	Bordering provide optimal care to all patients without distinction.	0.9	

Table 2. Nursing Students' Ethical Behavior Self Evaluation Scale in Nursing Practice (draft) (I-CVI)

## 医学と生物学 (Medicine and Biology)

	Responsible nursing practice	
30	Individually consider how to care for patients.	0. 8
31	Develop the nursing plan according to the patient's situation.	1.0
32	Provide care that is focused on the patient's priorities.	0. 9
33	Provide care that puts the patient's needs first.	0. 9
34	Carefully prepare the care to minimize the burden on the patient.	1. 0
35	Provide care to be flexible for providing care that is tailored to each patient's situation.	1.0
36	Be aware of changes in the patient's reserve and physical condition.	1.0
37	Provide care considering the patient's timing.	1.0
38	Obtain patient information without preconceived biases.	0. 9
39	Provide care based on my own nursing expertise knowledge.	1. 0
40	Provide care while considering patient safety.	1.0
	Improving nursing practice by team collaboration	
41	Speak patient important information to the medical team when participating in care.	1.0
42	Provide my own opinion on patients to the medical team.	0. 9
43	Use student conferences to solve problems while protecting patient privacy.	0. 9
44	Report, contact and consult to the nurse on the patient based on the situation.	0. 9
45	Accurately report the information obtained to the nurse.	1. 0
	Learning attitude that is aware of responsibility	
46	Obediently accept advice from others.	0. 9
47	Carefully consider the advice of others and apply it to practice.	1.0
48	Seek out the help needed to other in caring for the patient.	0. 9
49	Provide care in a practical manner, in cooperation with nurses.	0. 9
50	Get in shape, and practice as a care provider.	1.0
51	Utilize study methods that will effectively improve my nursing abilities.	0. 9
52	Have individual taskls and visions for myself as a nursing.	0. 9
53	Carry out the processes to complete practical learning assignments.	0. 9
54	Reflect on and self-evaluate my practice and performance.	0. 9
55	Uphold the rules of nursing practicum.	1.0

### 看護大学生の看護実践における倫理的行動評価尺度項目の 内容妥当性の検討

相原 ひろみ、細田 泰子

大阪府立大学大学院看護学研究科

要旨

【目的】看護大学生の看護実践における倫理的行動評価尺度項目の内容妥当性を検討する。 【方法】看護学生と実習指導者と看護学教員を対象に行ったインタビューの結果から作成 した 55 項目とそれを構成する 5 概念【尊重に基づく相互関係の構築】19 項目、【患者の 権利の擁護】10項目、【看護実践の責任ある遂行】11項目、【チームでの協働による看 護実践の向上】5 項目、【責任を自覚した学習姿勢】10項目との関連を、内容妥当性指 数(the item-level content validity index: I-CVI)にて検討した。2017 年 6 月~9 月に、 看護師として 5 年以上の臨床経験と看護大学教員の経験がある修士以上の学位を持つ 10 名を対象に、看護大学生の看護実践における倫理的行動評価尺度の内容妥当性を検討する 自記式質問紙調査を郵送法により実施した。尺度項目と各概念との関連について、「かな り関連がある(4 点)」「関連がある(3 点)」「わずかに関連がある(2 点)」「まったく関 連がない(1 点)」の4 段階リッカート形式で評価を行った。

【結果】I-CVIを算出し、0.78以上の値を示す項目を採用した。55項目のうち、I-CVI が0.78以下の項目は、6項目であった。各項目の文章に対しての自由意見では、6つの 削除項目に対する意見が多くみられた。削除項目を除き、49項目となった。看護大学生 の看護実践における倫理的行動評価尺度の内容妥当性が確保された。

キーワード:看護学生、倫理的行動、看護実践、内容妥当性、尺度開発