

# Surface and Content Validity of the Mentoring Function Scale for Novice Nurses

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## Abstract

This study aimed to examine the surface and content validity of the Mentoring Function Scale for Novice Nurses, used to assess the mentoring of entry-level nurses, and to refine the scale items. In Study 1, six nurse education researchers, selected using convenience sampling, with five or more years of nursing experience and experience teaching novice nurses, were invited to an expert meeting in July 2015. A group interview was conducted that lasted approximately 120 minutes. Study 2 examined the content validity index. Between September and November 2015, we distributed a self-administered questionnaire survey to 11 participants selected by convenience sampling. The participants included five nurse education researchers with a minimum of five years of nursing experience and experience teaching novice nurses, as well as six clinical nurses with a master's degree or higher. Finally, 81 questionnaire items were retained from the initial 125 items. The 81-item Mentoring Function Scale for Novice Nurses had higher content validity than the original scale. To further increase the scale's applicability, future studies should assess its reliability, construct validity, and criterion-related validity.

## Keywords

Novice Nurses, Mentoring Function, Surface and Content Validity, Item-Level Content Validity Index

## 1. Introduction

In Japan, since 2010, clinical training has become a requirement for new nurses. Thus, improving education in clinical settings is important in Japan. However, a significant discrepancy exists between the clinical practice skills required in the field and those taught in primary nurse education. This gap contributes to high turnover rates [1]. Additionally, nursing students were unable to receive on-the-

job training during the COVID-19 pandemic; Therefore, additional support to help new nurses develop nursing competency is needed.

It is widely recognised that nurses require approximately three years to acquire the competence to practice as a full-fledged nurse [2] [3]. However, considering societal constraints, new nurse education is often limited to one year of training. Therefore, the period required to become a nurse should be reconsidered [4] [5], and long-term support should be provided to novice nurses.

Suzuki and Hosoda [6] found that an improvised apprenticeship system existed during the process of novice nurses developing into certified, registered nurse practitioners. Such apprenticeships, with mentors who guide young nurses, have a wealth of knowledge and experience, and serve as role models, are crucial [7]. The support provided by mentors is referred to as mentoring [8]. Mentoring novices, who are referred to as protégés, is considered a developmental relationship that may provide career and psychosocial advantages for both parties [8]. Jacobi [9] reviewed the literature on mentoring functions and stated that “most researchers have defined mentoring in terms of the functions that mentors provide or the roles they play in relation to protégés” and provided an overview of 15 functions or roles ascribed to mentors. Zhang et al. conducted a systematic review of the effectiveness of mentoring programmes for newly graduated nurses and found that “mentoring can enhance nursing competencies, establish a supportive work environment, and produce positive outcomes” [10]. Therefore, mentors provide long-term individual support to their protégés, and mentoring is an important part of a novice nurse’s development into a professional nurse.

According to Ono [11], the mentoring of nurses tends to deepen and diversify qualitatively and expand quantitatively as they progress beyond their fourth year of employment. However, the mentoring of novice nurses likely differs significantly from that of mid-career nurses, as the latter can potentially become mentors themselves. If novice nurses do not feel mentored, mentoring has no effect. Thus, this study identified the mentoring of novice nurses using a qualitative descriptive method based on a study by Furukawa and Hosoda [12].

In Japan, Ono’s [13] scale is widely used to assess mentoring of nurses. However, the requirement of at least three years of nursing experience limits its applicability. Furthermore, Senoo and Miki’s [14] scale considers only nurses up to their 21st year of experience as protégés. Consequently, no existing scale comprehensively measures the mentoring of novice nurses. Developing a new scale to evaluate the mentoring of novice nurses would help identify mentors for novice nurses and track the long-term developmental relationship between mentors and mentees. Moreover, novice nurses’ evaluation of the mentoring they received would enable them to reflect on their relationships with their mentors and provide an opportunity to receive valuable support. Therefore, this study aimed to examine the surface and content validity of the Mentoring Function Scale for Novice Nurses, used to assess the mentoring of novice nurses, and to refine the scale items.

## Operational Definition of Terms

Novice nurses are defined as those who have been working in the same department for less than three years since graduation. A mentor is an older person with a wealth of knowledge and experience who also serves as a role model for novice nurses. Mentoring functions are the effects of long-term personal support provided by mentors to novice nurses on personality development and professional growth.

## 2. Methods

### 2.1. Study 1: Examination of the Surface and Content Validity of the Scale Items

Six nurse education researchers were selected using convenience sampling. These researchers had five or more years of nursing experience and experience teaching novice nurses. They were invited to an expert meeting in July 2015, during which a group interview was conducted lasting approximately 120 minutes. The interview was recorded with the participants' permission.

The initial item pool consisted of 125 draft scale items derived from sub-categories identified qualitatively and inductively by Furukawa and Hosoda [12]. The experts discussed the consistency, sequencing, clarity of expression, and ease of response for each concept and question item to examine surface validity. Additionally, the experts' demographic information, including age, gender, nursing experience, and experience teaching novice nurses, was collected.

The analytical method was based on opinions obtained at the expert meeting. Items were refined by discussing the orderliness, clarity of expression, and ease of response.

### 2.2. Study 2: Examination of the Content Validity Index

Between September and November 2015, we distributed a self-administered questionnaire survey to 11 participants who were selected using convenience sampling. The participants included five nurse education researchers with a minimum of five years of nursing experience and experience teaching novice nurses, as well as six clinical nurses with a master's degree or higher.

The survey asked respondents to rate the degree to which each concept and scale item matched on a 4-point Likert scale from "fairly relevant (4 points)" to "not relevant at all (1 point)" using items that had surface validity and content validity as a result of Survey 1 of this study.

In addition, we provided a free-response section for any comments the participants had regarding each item. Furthermore, we collected demographic information, such as age, gender, degree, nursing experience, and experience teaching novice nurses.

We assessed the item-level content validity index (I-CVI) [15] for each item. An I-CVI score of 0.78 or higher indicated adequate content validity [15],

whereas items scoring less than 0.78 were eliminated from the scale. We also refined our scale items based on the comments provided in the free-response section.

### 2.3. Ethical Considerations

This study was approved by the Osaka Prefecture University Nursing Research Ethics Committee (approval number 27-21, 27-41). Participation was voluntary, and written informed consent was obtained prior to distributing the survey via an intentional survey postcard. The participants were informed that they could withdraw from the study at any time, that data were strictly managed, and that the study results would be published.

## 3. Results

### 3.1. Study 1

The group of nurse education researchers consisted of six individuals (one man and five women). Two were in their 30s, one in their 40s, and three in their 50s. They had an average of  $12.9 \pm 9.0$  years of nursing experience and  $8.3 \pm 6.8$  years of experience teaching novice nurses.

We reviewed the consistency of each concept and scale item. The results revealed that [feedback] and [advice] shared similar content and differed only in the timing of when a mentor provided [advice]. As such, they were integrated into the overarching concept of [coaching]. Similarly, [reward] and [encouragement] were merged into the category of [approval], as their definitions did not differ significantly from [approval] as an act of mentoring. The [promotion of knowledge acquisition] was merged with the item [promotion of socialisation], as the content of the former item did not refer only to knowledge, and overlap existed with the latter item. This item was newly conceptualised as [orientation], with the following definition: *encouraging learning to help the protégé acquire skills necessary for work*. Finally, [interest], [listening], and [affinity] were merged due to multiple similarities in the mentor's actions. These concepts were newly conceptualised as [friendship], with the following definition: *Treating protégés in a manner that allows them to open up to mentor*. For clarity of expression, items that contained words indicating degree or frequency, such as “high” and “always”, in the scale items were deleted, and the wording was modified.

To facilitate the response, wording familiar to novice nurses was retained; however, questions that considered personal experiences in which the situation was clearly limited were eliminated.

For ordinality, items considered to be clearly influenced by the number of years since graduation (skill level as a nurse) among novice nurses were sorted such that the lowest score was first.

Six items were split into two parts per item, 41 items were modified for wording, and 21 items were eliminated. In addition, 15 concepts ([modelling],

[coaching], [advice], [assistance], [feedback], [promotion of knowledge acquisition], [reward], [approval], [encouragement], [adjustment of human relations], [protection], [affinity], [interest], [listening], and [promotion of socialisation]) were consolidated and revised into seven concepts. The seven concepts are defined as follows:

[Modelling]: *Being a role model for novice nurse and setting an excellent example.*

[Coaching]: *Teaching specific nursing practices and guiding them in the desired direction.*

[Assistance]: *Helping novice nurses in their nursing practice.*

[Orientation]: *Encouraging learning so that one can acquire skills necessary for work.*

[Approval]: *Affirming and recognising the novice nurse's work performance.*

[Protection]: *Protecting the novice nurse from difficult and stressful situations.*

[Friendship]: *Treating novice nurses in a manner that allows them to open up to the mentor.*

Finally, the questionnaire was revised from 125 to 110 items.

### 3.2. Study 2

Eleven participants were included in the study: five nurse education researchers and six clinical nurses. Of the 11 research participants, four (36%) were men and seven (64%) were women. In addition, six (55%) were in their 30s and five (45%) were in their 40s. Furthermore, two (18%) had doctoral degrees and nine (82%) had master's degrees. They had an average of  $9.0 \pm 2.3$  years of nursing experience and an average of  $5.4 \pm 2.2$  years of experience teaching novice nurses.

The questionnaire utilised a four-point Likert scale (1 = not relevant at all; 4 = fairly relevant). Items with an I-CVI score of 0.78 or higher were selected, adhering to the guidelines of Polit and Beck [15]. In the case of [modelling], one item was eliminated, reducing the count from 24 to 23. In the [coaching] section, eight items were eliminated, leaving 19 items of the initial 27. Similarly, two items were eliminated from the [assistance] category, leaving 10 items. Four items were eliminated from the [orientation] section, resulting in a total of five items. In the [approval] category, two items were eliminated, leaving nine. Four items were eliminated from the [protection] category, resulting in three. Finally, six items were eliminated from the [friendship] category, reducing the number of items to 14 (Table 1). In addition, two items were revised after analysing feedback from the research participants, and two items were eliminated owing to redundant phrasing (as items 30, 31, and 43 had overlapping expressions, item 30 was adopted and items 31 and 43 were deleted) Finally, 29 scale items were eliminated, and 81 scale items were retained from the initial 110 items.

**Table 1.** I-CVI of the mentoring function scale for novice nurses.

	<b>Modelling (24 items)</b>	<b>I-CVI Value</b>	<b>Result</b>
1	The mentor demonstrates exceptional assessment skills.	1.00	
2	The mentor demonstrates prompt patient care.	0.91	
3	The mentor demonstrates excellence in nursing skills.	1.00	
4	The mentor demonstrates excellent communication skills.	1.00	
5	The mentor shows me predictable movement.	1.00	
6	The mentor shows me personalised nursing care.	1.00	
7	The mentor shows me how to look at my surroundings with a broad perspective.	1.00	
8	The mentor shows me how they follow up with those around them.	0.91	
9	The mentor appears energetic and enjoys working with me.	0.82	
10	The mentor advocates their opinions to those around them in a positive way.	0.91	
11	The mentor treats everyone fairly.	0.82	
12	The mentor demonstrates the ideal image of a nurse that I want to become.	0.82	
13	The mentor shows me how to think and act in a patient-centred way.	0.91	
14	The mentor shows me how to treat patients kindly and with a smile.	0.91	
15	The mentor shows me how to relate to each patient with care.	0.91	
16	The mentor is attentive to the feelings of patients and their families.	1.00	
17	The mentor has earned the trust of patients and families.	1.00	
18	The mentor shows me that they are sincere as nurses in dealing with patients.	1.00	
19	The mentor shows me that they have the trust of doctors.	0.91	
20	The mentor demonstrates similar in-depth knowledge as doctors.	<u>0.36</u>	Delete
21	The mentor shows me that they are willing to learn and acquire knowledge.	1.00	
22	The mentor shows me a richness of humanity.	0.82	
23	The mentor sets an example for me in terms of my attitude as a member of society.	0.91	
24	The mentor sets an example for me in terms of working language.	0.91	
	<b>Coaching (27 items)</b>		
25	The mentor provides tips to improve my nursing skills.	0.91	
26	The mentor reviews my procedures for nursing skills with which I am inexperienced.	0.91	
27	The mentor provides specific guidance on nursing skills.	1.00	
28	The mentor elicits questions from me.	0.82	
29	The mentor teaches me how to think about patients from various perspectives.	0.91	
30	The mentor is respectful of my opinions.	0.91	
31	The mentor respects my ideas and guides me.	0.91	
32	The mentor provides logical guidance.	<u>0.73</u>	Delete
33	The mentor focuses on guiding me to overcome my weaknesses.	0.82	
34	The mentor observes each of my nursing practices.	<u>0.73</u>	Delete
35	The mentor teaches me each nursing practice carefully.	0.91	
36	The mentor provides objective guidance.	0.91	
37	The mentor helps me recognise things I did not notice.	0.91	
38	The mentor asks me questions to help me think independently.	0.91	
39	The mentor shows me how they would handle things themselves.	<u>0.64</u>	Delete
40	The mentor encourages me to reflect and gives me advice on how to maximise the benefit thereof.	1.00	
41	The mentor gives me advice on what I need to do to grow.	0.91	
42	The mentor gives me specific advice on both my strengths and weaknesses.	1.00	
43	The mentor gives me positive feedback and advice.	0.91	
44	The mentor provides advice on goal setting.	0.91	
45	The mentor always answers my questions.	<u>0.55</u>	Delete

## Continued

46	The mentor gives me a fair and convincing admonition regarding my weaknesses.	0.64	Delete
47	The mentor highlights my errors so that I can grow.	0.91	
48	The mentor thoroughly explains my mistakes.	0.64	Delete
49	The mentor thoroughly explains what I am not doing well.	0.73	Delete
50	The mentor understands my personality and adapts their guidance accordingly.	0.82	
51	The mentor points out my lack of effort.	0.73	Delete
<b>Assistance (12 items)</b>			
52	The mentor helps me when I have trouble.	0.82	
53	The mentor assists me unasked.	0.82	
54	The mentor calms me down when I panic.	0.91	
55	The mentor supports me in my work even when I am busy.	0.64	Delete
56	The mentor checks for potential mistakes before I make them.	0.91	
57	The mentor cares about the condition of my patients.	1.00	
58	The mentor helps me prioritise my work.	1.00	
59	The mentor works with me to determine any lack of understanding on my part.	1.00	
60	The mentor takes the time to work with me until I have a complete understanding of the patient.	0.82	
61	The mentor works with me to find solutions so that I do not repeat the same mistakes.	1.00	
62	The mentor encourages me when my work is not going well, and I am feeling down.	0.82	
63	The mentor provides emotional support so that I do not feel down.	0.73	Delete
<b>Orientation (9 items)</b>			
64	The mentor provides me with easy-to-understand reference books to deepen my knowledge.	0.82	
65	The mentor invites me to attend trainings, conferences, seminars, etc. outside the hospital.	0.73	Delete
66	The mentor gives me individualised assignments for my professional knowledge.	0.73	Delete
67	The mentor points out my lack of knowledge about my disease.	0.73	Delete
68	The mentor gives me suggestions on how to learn more to deepen my knowledge.	0.91	
69	The mentor learns with me what I couldn't understand through self-study.	0.82	
70	The mentor provides opportunities for me to improve my nursing skills.	1.00	
71	The mentor provides direction for my learning assignments.	0.91	
72	The mentor gives me advice on working etiquette.	0.64	Delete
<b>Approval (11 items)</b>			
73	The mentor praises me for the little things I do unconsciously.	0.82	
74	The mentor gives me specific praise for the things I am doing well.	1.00	
75	The mentor praises my character strengths.	0.64	Delete
76	The mentor compliments my work-related efforts.	1.00	
77	The mentor compliments my attitude as a nurse.	0.91	
78	The mentor ensures my awareness of growth by verbalising it.	1.00	
79	The mentor recognises my growth without overlooking it.	0.91	
80	The mentor recognises my accomplishments when I am feeling down about my work.	0.82	
81	The mentor is willing to assist me learn that which I do not yet know.	0.45	Delete
82	The mentor respects my ideas.	1.00	
83	The mentor communicates others' positive evaluations of me.	0.91	
<b>Protection (7 items)</b>			
84	The mentor protects against unreasonable reprimands from physicians and senior nurses.	1.00	

**Continued**

85	The mentor protects me from verbal abuse and difficult situations with patients.	0.91	
86	The mentor understands the limits of my abilities.	<u>0.64</u>	Delete
87	The mentor tries to understand my current nursing abilities.	0.82	
88	The mentor respects my opinions and speaks for others.	<u>0.73</u>	Delete
89	The mentor includes me in the conversation circle during breaks to help me fit in.	<u>0.73</u>	Delete
90	The mentor provides me with information about relationships in the hospital.	<u>0.27</u>	Delete
<b>Friendship (20 items)</b>			
91	The mentor talks to me in depth about their views on nursing.	<u>0.64</u>	Delete
92	The mentor makes me laugh to ease my frustration and nervousness.	0.82	
93	The mentor cares about me as an ally.	0.91	
94	The mentor creates an atmosphere where I feel comfortable talking to them.	1.00	
95	The mentor helps me with my personal problems.	<u>0.45</u>	Delete
96	The mentor does not drag me down after reprimanding me but talks to me normally.	1.00	
97	The mentor shows their love for me in a strict manner.	1.00	
98	The mentor empathises with my feelings.	1.00	
99	The mentor makes me feel that I can talk about my true feelings.	1.00	
100	The mentor shares their experiences when they were a novice.	<u>0.73</u>	Delete
101	The mentor is concerned about my development.	0.82	
102	The mentor cares about my existence.	1.00	
103	The mentor cares about my work.	0.82	
104	The mentor cares about my physical and mental health.	0.91	
105	The mentor is interested in what I have been studying.	0.91	
106	The mentor cares about me specifically more than other nurses.	<u>0.36</u>	Delete
107	The mentor listens to me when I am having a hard time.	0.82	
108	The mentor listens to my ideas and rationale for nursing practice.	0.82	
109	The mentor listens to the problems and complaints that I cannot express to other senior nurses.	<u>0.64</u>	Delete
110	The mentor stops and listens to me even when they are busy.	<u>0.73</u>	Delete

## 4. Discussion

The novice nurse in this study is defined as the three years before becoming a full-fledged certified registered nurse practitioner. This period can be said to correspond to the “initiation phase” and “training phase” of the four phases of Kram’s [8] mentoring relationship. In the “initiation phase”, it is said that the protégés’ have valuable experiences through their interactions with their mentors. The scale items for this study were selected because of their content representing the beginning of the development of informal relationships with their mentors.

Collins, Brown and Newman [16] identified the concept of a cognitive apprenticeship, in which learners deepen their learning in stages. In cognitive apprenticeship theory, the learner is considered to be a novice in a certain domain, who learns from an expert (parent, teacher, or adult) and becomes proficient in that domain themselves. The process consists of six stages: (1) modelling, (2) coaching, (3) scaffolding & fading, (4) articulation, (5) reflection, and (6) exploration. In addition to [modelling] and [coaching], “scaffolding” such as [assistance] and [orientation] were also present in the concept of the Mentoring



Function Scale for Novice Nurses. The scale items that encourage “reflection” such as “*The mentor helps me recognise things I did not notice*” and “*The mentor encourages me to reflect and gives me advice on how to make the most of it*” were adopted for [coaching]. Furthermore, there was an “approval” function, whereby novice nurses were given an “articulation” of the excellent nursing practices they had implemented. In this way, the adopted scale items indicated that novice nurses perceive the mentor as their mentors and deepen their learning as learners. The novice nurse is aware of the [protection] they are receiving from the mentor and is in the process of moving towards “exploration” while considering the informal relationship with the mentor as [friendship].

In Study 1, we examined the surface and content validity of the scale items related to the mentoring of novice nurses. To ensure the credibility, criticality, and confirmability of our qualitative data, we conducted group interviews with six nurse pedagogy experts with experience in teaching novice nurses. We used peer debriefing, which is a useful technique through which experts review and explore various aspects of qualitative data. Based on the researchers’ extensive experience teaching novice nurses, we firmly believe that the discussions in this study have refined the qualitative validity of the Mentoring Function Scale. The outcomes of similar discussions further enhanced its surface and content validity as a measurable item.

In Study 2, we analysed the content validity of the scale items. The I-CVI was calculated by nurse education researchers and clinical nurses, both with a master’s degree or higher and at least five years of nursing experience, including teaching novice nurses. The participants consisted of nurses with significant experience in mentoring novice nurses, understanding daily nursing practices, and expert knowledge of nursing research. A minimum of three experts is required for an expert panel, and a stable CVI can be achieved with a panel of five to ten experts [17]. As the panel in this study comprised 11 experts, the I-CVI was considered stable.

We set the standard I-CVI at 0.78 or higher, as recommended by Lynn [17] and Polit and Beck [15]. Consequently, we eliminated 29 items from the questionnaire, including one from [modelling], ten from [coaching], two from [assistance], four from [orientation], four from [protection], two from [approval], and six from [friendship].

A review of the eliminated items revealed that they were inconsistent with the concepts and items. Additionally, as the participants based their responses on their experiences as mentors, they avoided including support that was not intended for or oriented towards the growth of novice nurses. Particularly in [coaching], where the novice nurses’ personal experiences were reflected, such as “The mentor provides logical guidance” and “The mentor points out my lack of effort”. Therefore, it is likely that there was no relationship between the concepts’ definition and the scale items.

After a review of surface and content validity by nursing education researchers and a further review of content validity by subjects with experience teaching

novice nurses, the 81-item Mentoring Function Scale for Novice Nurses was reconstructed.

## 5. Conclusion

The proposed Mentoring Function Scale for Novice Nurses was reconstructed after confirming its content validity. The scale consists of 81 items and is rated on seven sub-concepts: [modelling], [coaching], [helping], [orientation], [approval], [protection], and [friendship]. To further increase the scale's applicability, future studies should assess its reliability, construct validity, and criterion-related validity.

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## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

## References

- [1] Ministry of Health, Labour and Welfare (2014) The 1st Study Group on the Supply-Demand Outlook for Nursing Staff (Ref. 3-1) Current Status and Trends of Nursing Staff.
- [2] Benner, P. (2001) From Novice to Expert: Excellence and Power in Clinical Nursing Practice, Commemorative Edition. Prentice Hall.
- [3] Takahashi, M. (2012) How to Develop Professional Specialist Capabilities in Nursing (2)—Methods and Structures of Learning in Workplace. *The Annual Reports of the Graduate School of Education Tohoku University*, **60**, 99-124.
- [4] Ishii, C., Fujiwara, T., Kawakami, A., Nishimura, K., Niinomi, M., Machiura, M. and Nio, K. (2007) Nurses' Support Contributes to Patients' Resilience. *Journal of Japan Society of Nursing Research*, **30**, 21-29. <https://doi.org/10.7748/ns2007.08.21.49.30.b658>
- [5] Katsuyama, A., Hosoda, Y. and Kamino, Y. (2019) Workplace Experiences That Relate to the Self-Direction of Novice Nurses. *Journal of Japan Society of Nursing Research*, **42**, 175-183.
- [6] Suzuki, A. and Hosoda, Y. (2014) Experiences that Affect Nursing Skill Acquisition of Novice Nurses Working in the Emergency Field: Focusing on the Interaction within Communities of Practice. *Journal of Japan Society of Nursing Research*, **37**, 1-11. <https://doi.org/10.1155/2014/167674>
- [7] Kumura, K. (2002) Psychology of Career Development: Work, Organization, and Lifelong Development. Kawashima Shoten.

- 
- [8] Kram, K.E. (1988) *Mentoring at Work: Developmental Relationships in Organizational Life*. Scott, Foresman.
- [9] Jacobi, M. (1991) Mentoring and Undergraduate Academic Success: A Literature Review. *Review of Educational Research*, **61**, 505-532. <https://doi.org/10.3102/00346543061004505>
- [10] Zhang, Y., Qian, Y., Wu, J., Wen, F. and Zhang, Y. (2016) The Effectiveness and Implementation of Mentoring Program for Newly Graduated Nurses: A Systematic Review. *Nurse Education Today*, **37**, 136-144. <https://doi.org/10.1016/j.nedt.2015.11.027>
- [11] Ono, K. (2002) An Interview Study of the Influence of the Mentor on the Nursing Career Development Process. *Asia University Management Review*, **37**, 47-74.
- [12] Furukawa, A. and Hosoda, Y. (2022) Mentoring Functions for Novice Nurses. *Journal of Japan Academy of Nursing Education*, **32**, 13-25.
- [13] Ono, K. (2000) On the Validity and Reliability of the Mentoring Scale. *Asia University Management Review*, **35**, 1-20.
- [14] Senoo, A. and Miki, A. (2012) Development of Mentoring Function Scale for Nurses, and Evaluation of Its Reliability and Factorial Validity. *Journal of Japan Society of Nursing Research*, **35**, 55-61.
- [15] Polit, F.D. and Beck, C.T. (2021) *Nursing Research: Generating and Assessing Evidence for Nursing Practice*. 11th Edition, Lippincott Williams & Wilkins.
- [16] Collins, A., Brown, J.S. and Newman, S.E. (1989) Cognitive Apprenticeship: Teaching the Craft of Reading, Writing, and Mathematics. In: Resnick, L.B., Ed., *Knowing, Learning, and Instruction: Essays in Honor of Robert Glaser*, Erlbaum, 453-494. <https://doi.org/10.4324/9781315044408-14>
- [17] Lynn, M.R. (1986) Determination and Quantification of Content Validity. *Nursing Research*, **35**, 382-386. <https://doi.org/10.1097/00006199-198611000-00017>