
ORIGINAL

Factors Associated with Clinical Teaching Behaviors of Novice Nurse Educators of Diploma Nursing Schools in Western Japan

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Abstract Aims : Challenges of novice nursing educators are initiated when they begin to engage in clinical teaching, often due to lack of support from experienced colleagues. This study was aimed to identify the factors associated with clinical teaching behaviors of novice nurse educators of Diploma Nursing schools in western Japan.

Method : Of 231 Diploma Nursing schools in Western Japan, 92 institutions (39.83%) agreed to participate. The study participants were 144 novice nursing educators with less than five years of teaching experience. Anonymized self-administered questionnaires including the Scale of Other Educators' Support (SOES) and organizational education, associated with the Scale of Clinical Teaching Behaviors (SCTB) were mailed to participants. The SOES factors of work and reflection supports, organizational education factors of information-sharing opportunity and mini-workshops were used to determine association with SCTB. The multiple regression analysis with stepwise method was used for SCTB.

Results : Conducting to multivariate analysis, age ($p = 0.01$), information-sharing among nursing educators ($p = 0.04$), participation in mini-workshops on clinical practice ($p = 0.04$), and work support ($p = 0.03$) were significantly associated with the improvement of SCTB. Then, reflection support was significantly associated with the deterioration of SCTB ($p = 0.02$).

Discussion : The work support meaning direct advice and guidance from other nursing educators can enhance the effectiveness for SCTB. The reflection support encouraged the novice nurses to reflect on their teaching behaviors, but only made them aware of problems to be solved, which lowered the SCTB. The information-sharing opportunity and mini-workshops might be effective opportunities to learn about teaching behaviors to increase the SCTB.

Conclusion : The SOES and organizational education factors enhance teaching behaviors measured by SCTB among novice nursing educators. Therefore, in developing novice nursing educators, it is necessary to create opportunities indicating these factors for novice nursing educators to learn about practical training and to collaborate with other nursing educators.

Key words : School Nursing, Surveys and Questionnaires, Nursing Education Research, Diploma Programs, Nursing Faculty Practice

INTRODUCTION

In recent years, the number of nursing colleges has rapidly increased to improve the quality and quantity of nursing care in Japan. However, approximately half of all nursing schools are diploma nursing schools, of which

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the roles and responsibilities are as good as those of nursing colleges.

In basic nursing education, clinical practice is an important training component that allows students to cultivate practical nursing skills. Field practice involves collaboration with professionals who represent different levels of healthcare in social interactions across various settings¹⁾. During clinical practice, nursing educators engage in teaching behaviors to help students achieve their goals²⁾. In addition to engaging in teaching behaviors, nursing educators should possess the required practical nursing and educational skills³⁾.

Novice nursing educators were reported to be expected experience the following challenges for clinical teaching behaviors: being in charge of practice in a specialty area in which they lack clinical experience^{4, 5)}, difficulties in coordinating with clinical practice instructors and adapting teaching methods based on student needs^{4, 6)}, and a lack of knowledge about practice^{4, 7)}. A nursing educator training course has to be completed to become a nursing educator in Japan, although it is difficult to be admitted into one lack opportunities to learn clinical teaching behaviors, and most they are trend to become nursing educators without adequate educational training. Furthermore, they are trend to be required to practice as independent nursing educators immediately after employment.

In addition to the three years from the time students enter school until they graduate, pedagogically it has been reported that it takes five years to become a full-fledged educator⁸⁾, so in this study, novice nursing educators were defined as less than five years.

Studies reveal that encouragement, feedback, and advice from other nursing educators help novice nursing educators develop their clinical teaching behaviors^{9, 10)}. Novice nursing educators also share information about practice situations amongst them and rely on a consultation system⁵⁾, while gaining new perspectives by reflecting upon teaching practice during case study meetings¹¹⁾. Senior nursing educators are considered to be their role models as they draw inferences about their expected roles and acquire information about how nursing educators are expected to work¹²⁻¹⁴⁾.

Although it has been reported that novice nursing educators are concerned with the teaching behaviors in clinical practice while receiving support, this aspect has not been explored in the literature. Therefore, it remains unclear whether demographic characteristics and support influence the teaching behaviors of novice nursing educators. Moreover, as past studies have exclusively used qualitative methods to explore these issues, quantitative investigations are required to validate these relationships.

The purpose of this study is to examine the relationships between factors such as support from other nursing educators and organizational educational support and the clinical teaching behaviors of novice nursing educators. Our findings offer important insights into issues related to educational practice among novice nursing educators, which can aid in devising organizational strategies to promote nursing educators' development.

METHODS

A total of 231 diploma nursing schools in western Japan were invited to participate in this cross-sectional study; however, only 92 institutions (39.8%) accepted the invitation to participate. From the 92 institutions, the sample consisted of 269 novice nursing educators with less than five years of teaching experience. Anonymous self-administered questionnaires were mailed to them between March 1 and 31, 2019. Of the 269 eligible educators invited to participate, 158 responded to the survey, however, 14 participants were excluded for the following reasons: seven educators had more than five years of teaching experience and seven others provided no responses to the questions that assessed teaching behaviors and support from other nursing educators. Therefore, the final sample consisted of 144 novice nursing educators (see Figure 1).

Clinical Teaching Behaviors

The Scale of Clinical Teaching Behaviors (SCTB), which was developed by Nakayama et al. (2004), was used in this study. This 36-item scale consists of nine subscales (I = Use various teaching skills freely, II = Give feedback to students, III = Make suggestions to students to

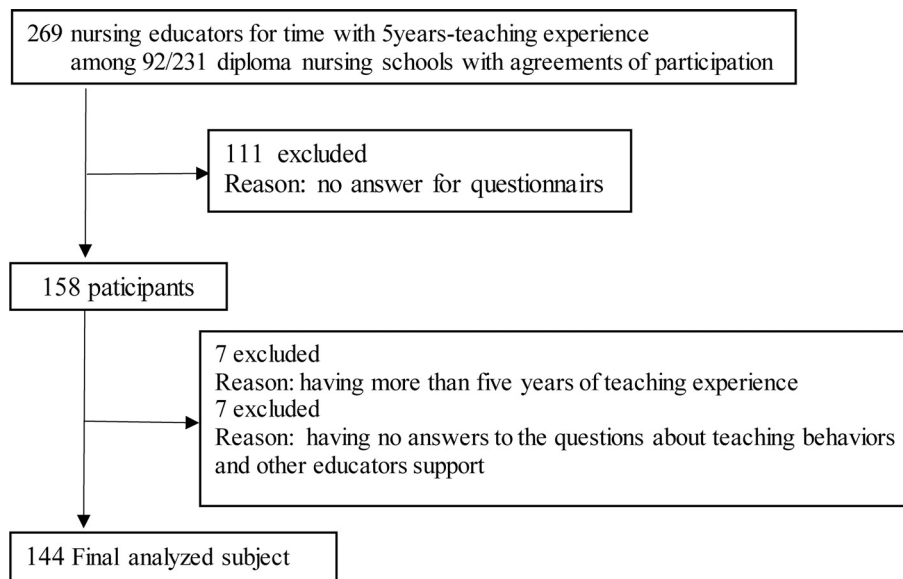


Figure 1 Study population

prevent or to solve problems, IV = Adjust teaching plan to the dynamic clinical setting, V = Accept students' emotions, VI = Decide the appropriate time and place to teach students individually, VII = Ask nursing staff with concerns to support students, VIII = Self-evaluate teaching behaviors based on student performance, and IX = Assure quality care for patients assigned to students¹⁵). Items were rated on a scale ranging from *always doing this* (5 points) to *never doing this* (1 point), and total and subscale scores were computed. The total score represents overall trends in clinical teaching behaviors, whereas the subscale scores indicate whether teaching behaviors are appropriately exhibited or if they require improvement. Thus, high scores are indicative of high-quality clinical teaching behaviors. The Cronbach's α of this scale was 0.96 in the original scale development study and 0.89 in this study, indicating sufficient reliability.

Support from Other Nursing Educators

The Scale of Other Educators' Support (SOES) was developed based on Nakahara's Scale for Other Support¹⁶. Participants were asked to respond to the scale based on the support they received from other nursing educators (concerning their clinical teaching behaviors). Permission was obtained from the scale developer (Nakahara) to include these instructions in the scale. This 14-item

scale consists of three subscales: work, reflection, and mental support. Items were rated on a scale that ranged from *describes me well* (5 points) to *does not describe me at all* (1 point). Work support refers to the reception of advice and guidance that directly relates to work execution, whereas reflection support refers to opportunities to objectively reflect upon one's work experiences and state of being. Mental support refers to interpersonal support that alleviates psychological stress. The Cronbach's α coefficients of the three subscales ranged from 0.75 to 0.89 in the original scale development study (adequate reliability) and from 0.81 to 0.87 in this study.

Other Factors

The questionnaire also assessed the following variables:

- 1) Demographic characteristics: Age, sex, final educational history in nursing, years of practical nursing experience, years of experience as a clinical practice instructor, years of experience as a nursing educator, completion of a clinical practice instructor training course, completion of a nursing educator training course, visiting the clinical facility, correspondence between practical nursing experience and practice instruction, and the presence of role models for practice instruction were all factors that were included in the study.
- 2) Organizational educational support: an educational

system for novice nursing educators, other nursing educators, information sharing among nursing educators, an atmosphere that is conducive to consultations with other nursing educators, case studies based on clinical practice, and mini-workshops on clinical practice were all included in the survey.

Statistical Analysis

Descriptive statistics were computed to examine demographic characteristics and organizational educational support. Concerning the SOES and SCTB, total and mean factor scores were calculated.

Group differences in total scores on the SCTB were examined using a *t*-test and one-way analysis of variance (ANOVA). The following variables were recoded into binary variables based on the number of cases in each category: final educational history in nursing (high school graduates with a major in nursing, diploma nursing school graduates, and nursing junior college graduates vs. nursing university and nursing graduate school graduates), practical nursing experience (less than vs. more than 15 years), experience as a nursing educator (less than vs. more than two years), experience as a clinical practice instructor (less than vs. more than three years of experience), information sharing among educators (very much vs. not much), and consultation atmosphere (very good vs. not good).

A multiple regression analysis was conducted using the stepwise selection method with Model 1 as the same entry and removal significance levels (0.25). The explanatory variables selected from them were statistically significant (*p*-value < 0.05 in the testing group difference). Age and sex were then considered in the model as necessary stay variables. Furthermore, the variables with a *p*-value > 0.15 in Model 1 were excluded in Model 2S. JMP Pro 14 version 14.2.0 (SAS Institute Inc., Cary, NC, USA) was used to conduct all analyses. The level of statistical significance was set as *p* < 0.05 (two-tailed).

Ethical Considerations

A document containing information about the study's objective, significance, and methods was sent to the heads of the target institutions. The document also stated that (a) participation was voluntary, (b) participants could withdraw their consent at any time, (c)

participant data would not be used for purposes other than research, and (d) data would be stored (safely) for five years. Furthermore, the institutional heads were informed that returning the anonymous self-administered questionnaire in an enclosed envelope will be considered as providing consent. Individual participants also received the same information in writing. Permission to use the aforementioned scale was obtained from the scale developer and the study was approved by the ethics committee of Saga University (No. 30-18).

RESULTS

Scores for the Scale of Clinical Teaching Behaviors

Participants (*N*=144) obtained a mean total score of 136.2 ± 18.3 on the SCTB. The highest mean emerged from Subscale V (i.e., Accept students' emotions; 17.1 ± 2.5). The lowest mean emerged from Subscale VIII (i.e., self-evaluations of teaching behaviors based on student performance; 13.4 ± 3.0; Figure 2).

Demographic Characteristics and Organizational Educational Support

Participants' mean age was 41.5 years, and their mean years of experience as nursing educators was 2.4 years. A total of 98 (68.5%) participants had completed a nursing educator training course, 69 (48.3%) participants reported correspondence between their practical nursing experience and practice instruction, and 66 (46.2%) participants had either a manager, senior nursing educator, or fellow nursing educator as a role model during practice instruction (Table 1).

Organizational Educational Support

The following results emerged for the variables associated with organizational educational support: independently providing student support = 115 participants (79.9%), information sharing among nursing educators = 16 participants (*very much*; 11.1%), and participation in mini-workshops on clinical practice = 39 participants (27.1%; Table 1).

Scores for the Scale of Other Educators' Support

Participants obtained a mean total score of 48.7 ± 11.3 on the SOES. The following means emerged for the subscales: work support = 22.5 ± 4.4, mental support =

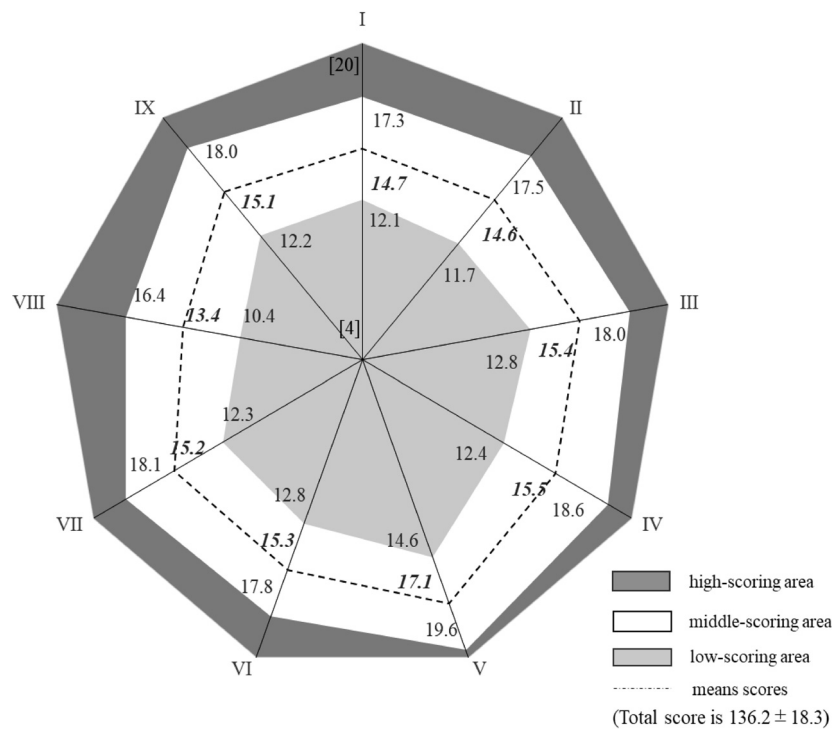


Figure 2 The scale of clinical teaching behaviors (SCTB) scores in study population ($n=144$)

- I = Use various teaching skills freely
- II = Give feedback to students
- III = Make suggestions to students to prevent or to solve problems
- IV = Adjust teaching plan to the dynamic clinical setting
- V = Accept students' emotions
- VI = Decide the appropriate time and place to teach students individually
- VII = Ask nursing staff with concerns to support students
- VIII = Self-evaluate teaching behaviors based on student performance
- IX = Assure quality care for patients assigned to students

15.2 ± 5.4, and reflection support = 11.0 ± 2.5 (Table 2).

Relationships Between Clinical Teaching Behaviors, Demographic Characteristics, and Organizational Educational Support

To examine group differences in total scores on the SCTB as a function of each demographic characteristic and organizational educational support, a t -test and one-way ANOVA were conducted. There were significant group differences as a function of age ($p = 0.03$), nursing work experience ($p = 0.04$), information sharing among nursing educators ($p = 0.02$), and participation in mini-workshops on clinical practice ($p = 0.02$). There were no significant differences between clinical instructor, nursing educator training course, and education system for novice nursing educators. (Table 1).

Factors Related to Clinical Teaching Behaviors Scale Scores

To avoid the problem of multicollinearity, correlations among the explanatory variables were examined and a multiple regression analysis was conducted. Subscale scores on the SOES (i.e., work, reflection, and mental support), age, practical nursing experience, information sharing among nursing educators, and participation in mini-workshops on clinical practice served as the explanatory variables, and total SCTB scores served as the objective variable. The results revealed that age ($\beta = 0.351$, $p = 0.01$), work support ($\beta = 0.306$, $p = 0.03$), information sharing among nursing educators ($\beta = 0.192$, $p = 0.04$), participation in mini-workshops on clinical practice ($\beta = 0.168$, $p = 0.04$), and reflection support ($\beta = -0.292$, $p = 0.02$) were associated with SCTB (Table 3).

Table 1 Relation of Total SCTB scores to each of the basic characteristics and organizational educational support ($n=144$)

| Personal factor | <i>n</i> or mean (%) or SD | Total SCTB score | | |
|--|----------------------------|------------------|-------|-----------------|
| | | Mean | SD | <i>P</i> -value |
| Age (year) | 41.5 6.0 | | | |
| Missing | 2 | | | 0.03* |
| Sex | | | | |
| Males | 15 (10.5) | 128.93 | 8.40 | 0.10 |
| Female | 128 (89.5) | 137.22 | 19.07 | |
| Missing | 1 | | | |
| Final educational history in nursing | | | | |
| High school/ Diploma school/ Junior college | 115 (81.6) | 137.20 | 17.76 | 0.52 |
| University/ Graduate School | 26 (18.4) | 134.65 | 20.39 | |
| Missing | 3 | | | |
| Years of practical nursing experience | | | | |
| Under 15 years | 65 (45.1) | 132.70 | 18.22 | 0.04* |
| Over 15 years | 79 (54.9) | 139.15 | 18.12 | |
| Years of experience as a clinical practice instructor | | | | |
| No experience | 52 (36.9) | 132.67 | 18.20 | 0.12 |
| Under 3 years | 31 (22.0) | 135.67 | 18.91 | |
| Over 3 years | 58 (41.1) | 140.51 | 17.93 | |
| Missing | 3 | | | |
| Years of experience as a nursing educator | | | | |
| Under 2 years | 49 (34.0) | 132.30 | 19.10 | 0.16 |
| Over 2 years | 95 (66.0) | 138.27 | 17.77 | |
| Completion of a clinical practice instructor training course | | | | |
| No | 110 (76.9) | 136.55 | 19.52 | 0.70 |
| Yes | 33 (23.1) | 135.12 | 14.54 | |
| Missing | 1 | | | |
| Completion of a nursing educator training course | | | | |
| No | 45 (31.5) | 136.95 | 16.95 | 0.76 |
| Yes | 98 (68.5) | 135.91 | 19.08 | |
| Missing | 1 | | | |
| Visiting clinical facility | | | | |
| No | 82 (57.7) | 134.35 | 17.50 | 0.10 |
| Yes | 60 (42.3) | 139.51 | 19.12 | |
| Missing | 2 | | | |
| Correspondence between practical nursing experience and practice instruction | | | | |
| May not match | 74 (51.7) | 134.32 | 19.12 | 0.19 |
| Match | 69 (48.3) | 138.37 | 17.60 | |
| Missing | 1 | | | |
| Presence of role models for practice instruction | | | | |
| Not there | 29 (20.3) | 138.31 | 16.58 | 0.79 |
| Choose one | 66 (46.2) | 137.00 | 18.36 | |
| Choose two | 38 (26.6) | 134.39 | 18.46 | |
| Choose three | 10 (7.0) | 133.70 | 24.87 | |
| Missing | 1 | | | |
| Education system for novice nursing educators | | | | |
| No | 110 (76.4) | 136.92 | 18.61 | 0.47 |
| Yes | 32 (22.2) | 134.27 | 17.95 | |
| Missing | 2 | | | |
| Other nursing educators | | | | |
| Novice nursing educator alone | 115 (79.9) | 141.48 | 16.36 | 0.09 |
| Collaborate with other nursing educators | 29 (20.1) | 134.92 | 18.70 | |
| Information sharing among nursing educators | | | | |
| Not at all/ Not much | 53 (36.8) | 130.93 | 21.17 | 0.02* |
| Somewhat | 75 (52.1) | 133.41 | 16.73 | |
| Very much | 16 (11.1) | 141.84 | 18.71 | |
| Atmosphere that is conducive to consultation with other educators | | | | |
| Not at all difficult to consult/ Not much difficult to consult | 27 (18.8) | 133.44 | 17.85 | 0.09 |
| Somewhat easy to consult | 73 (50.7) | 134.21 | 18.74 | |
| Very easy to consult | 44 (30.6) | 141.31 | 17.48 | |
| Case studies based on clinical practice | | | | |
| No | 110 (76.4) | 135.89 | 18.84 | 0.68 |
| Yes | 34 (23.6) | 137.38 | 17.08 | |
| Mini-workshops on clinical practice | | | | |
| No | 105 (72.9) | 134.02 | 17.82 | 0.02* |
| Yes | 39 (27.1) | 142.20 | 18.79 | |

* $P < 0.05$, according to the t-test and one-way ANOVA. SD, standard deviation.

DISCUSSION

Data were collected from 144 novice nursing educators, and the valid response rate was 53.5%. As the SCTB and SOES yielded acceptable reliability coefficients (Cronbach's α), their scores were subjected to further analyses.

We observed that more than half of all participants were educators whose practical nursing experience did not correspond to their area of practice instruction, and 31.5% had not attended a nursing educator training course. This finding is consistent with recent trends observed among novice nursing educators (i.e., few systematic educational programs, case study groups, and study groups)³⁻⁵.

Clinical Teaching Behavior

Participants obtained a mean total score of 136.2 on the SCTB. This finding is similar to that reported by Nakata et al. (2014), who surveyed nursing educators across

eight nursing schools that offered three-year courses. This indicates that the novice nursing educators believed that they were able to consistently engage in effective teaching behaviors¹⁷.

Concerning the SCTB subscales, high scores emerged for Subscale V (validate students' emotions). Students encounter several stressors such as the anxiety caused by the ward environment, interpersonal relationships, and applying nursing skills to clinical practice for the first time¹⁸. Chikamura (2007) found that students experience high levels of anxiety before practice and that these levels become even higher during clinical practice¹⁹. Novice nursing educators may be better equipped to understand the anxiety and stress that students experience during clinical practice, engage in appropriate teaching behaviors, and empathize with them. However, participants obtained low scores on Subscales I (use various teaching skills freely), II (provide feedback to students), and VIII (self-evaluations of teaching behaviors based on student performance). These findings suggest that participants' engagement in these core teaching behaviors, which are related to the achievement of practice goals², was insufficient. Further research is needed to validate these findings.

Factors Related to Clinical Teaching Behavior

There was a significant positive relationship between age and total scores on the SCTB. It is thought that older age implies more experience, and older novice

Table 2 The Scale of Other Educators' support (SOES) scores ($n = 144$)

| Variable | Mean | SD | Min-Max |
|--------------------|------|------|---------|
| Total | 48.7 | 11.3 | 14-70 |
| Subscale | | | |
| Work support | 22.5 | 4.4 | 6-30 |
| Reflection support | 11.0 | 2.5 | 3-15 |
| Mental support | 15.2 | 5.4 | 5-25 |

Cronbach's α coefficients : 0.81-0.87

Table 3 Factors related to the scale of clinical teaching behaviors by multiple regression models

| Variable | Model 1 | | Model 2 | |
|---|-------------|---------|-------------|---------|
| | St. β | P-value | St. β | P-value |
| Age (year) | 0.342 | 0.01 | 0.351 | 0.01 |
| Sex, female | 0.116 | 0.15 | - | - |
| Information sharing among nursing educators | 0.176 | 0.06 | 0.192 | 0.04 |
| Mini-workshops on clinical practice, yes | 0.165 | 0.05 | 0.168 | 0.04 |
| SOES | | | | |
| Work support scores | 0.310 | 0.01 | 0.306 | 0.03 |
| Reflection support scores | -0.277 | 0.03 | -0.292 | 0.02 |
| R^2 -value | | 0.17 | | 0.16 |
| Adjusted R^2 -value | | 0.13 | | 0.12 |

The sex and mini-work shop meeting on clinical practice were used as discrete variables.

The others were used as continuous variables.

St. β , Standardization partial regression coefficient β ; SOES, scale of other educators' support.

Multiple regression analysis was conducted using the stepwise selection method with the same entry and removal significance levels of 0.25 as Model 1. The explanatory variables were selected from them were statistically significance (p-value < 0.05 in the testing group difference). Then, age and sex were considered in the model as necessarily stay variables. Furthermore, in Model 2, the variables with p-value > 0.15 were excluded from the Model 1.

nursing educators were better equipped to effectively engage in teaching behaviors. Older novice nursing educators tend to have more practical nursing experience, and mid-level nurses possess the ability to perceive situations holistically and recognize and respond to changes in goals and circumstances in a mature and flexible manner²⁰. Thus, novice nursing educators may have an advantage in terms of engaging in teaching behaviors by applying the knowledge and experience that they have acquired.

There was a positive association between total scores on the SCTB and information sharing among nursing educators. Information exchange leads to the modification of educational behaviors because nursing educators tend to independently engage in clinical teaching behaviors²². Novice nursing educators who shared more information were better equipped to effectively engage in teaching behaviors and receive work support. Novice nursing educators should realize the importance of sharing information about the status of clinical practice with other nursing educators and for other nursing educators to have access to a system through which they can share information and benefit from consultations.

There was a positive association between total scores on the SCTB and participation in mini-workshops on clinical practice. To improve the quality of education, it is necessary to establish a system that facilitates systematic and regular reviews of educational methods²³. Mini-workshops on clinical practice provide novice nursing educators the opportunity to learn teaching behaviors.

By the stepwise method, in the SOES, work support and reflection support were included in the multiple regression model to see the relationship with SCTB, but mental support was not included. There was a positive association between SCTB and work support of SOES and a negative association with reflection support of SOES.

Total scores on the SCTB were positively related to work support, and novice nursing educators who had received more work support were more likely to effectively engage in teaching behaviors. Novice nursing

educators find it difficult to fully understand student readiness and the challenges faced by students⁵, and they may not know how to adapt their teaching methods based on situational demands⁶. However, work support meaning direct advice and guidance from other nursing educators can enhance the effectiveness of their teaching behaviors. Clinical practice differs from in-school lectures in that it unfolds during complex human interactions and across diverse locations¹. In such dynamic situations, it is important to flexibly respond to situational demands based on the guidance²¹. These findings indicate that direct work support from other nursing educators is an important source of support.

There was a negative association between total scores on the SCTB and reflection support. Nakahara (2013) underscored the importance of reflecting upon and making sense of experiences with others (rather than independent reflection)²⁴, as well as investing time in reflecting on teaching behaviors. Although receiving reflection support from other nursing educators may have encouraged them to reflect upon their teaching behaviors, novice nursing educators' total scores on the SCTB could have been lower due to a greater awareness of the issues that had to be solved. Novice nursing educators need reflection support from other nursing educators since they must not only identify the issues that affect their teaching behaviors but also improve their teaching behaviors based on the outcomes of their reflections. Thus, other nursing educators should encourage novice nursing educators to reflect upon and clarify issues related to teaching behaviors, as well as support them in a manner that leads to improved teaching behaviors.

The presence of other nursing educators was indispensable to the teaching behaviors of novice nursing educators in clinical practice, as it was related to receiving direct advice and support for reflection from other nursing educators. Although it was clarified that the existence of Mimi-workshops on clinical practice leads to the improvement of the quality of teaching behaviors, there is a problem that Mimi-workshops are not often held in diploma nursing school in reality. In addition, diploma nursing school educators may have to take

charge of clinical practice instruction they have never experienced due to a lack of human resources, so if they can share information with other nursing educators, they can supplement their professional knowledge and skills. Therefore, in developing novice nursing educators, it is necessary to create opportunities for novice nursing educators to learn about practical training and to collaborate with other nursing educators.

Study Limitations and Future Directions

Data was collected from novice nursing educators who were pursuing three-year courses in nursing schools in western Japan, and therefore, the generalizability of the present findings is limited.

Concerning participation in workshops on clinical practice and reflection support, which emerged as factors that are related to teaching behaviors, further research is needed to explore the contents of these workshops and the underlying processes behind reflection support, as this can positively impact teaching behaviors. Moreover, future studies should also examine the relationships that the subfactors of the SCTB have with scores on the SOES and demographic characteristics.

CONCLUSIONS

This study aimed to identify factors related to clinical teaching behaviors measured by SCTB. A total of 144 novice nursing educators who were pursuing three-year courses in nursing schools in western Japan participated in this survey. The results indicated that the novice nursing educators were receptive and empathetic towards students. However, there was inadequate use of teaching materials and techniques, evaluation and communication of goal achievement as well as evaluation and revision of nursing instruction based on the observed effectiveness of instruction. A positive association was observed between teaching behaviors measured by SCTB and age, work support as SOES, information sharing among nursing educators as organizational education, and participation in mini-workshops on clinical practice as organizational education, whereas a negative association was found for reflection support as SOES.

Novice nursing educators should share information about the status of clinical practice with other nursing educators. Direct advice and guidance from other nursing educators will promote effective engagement in teaching behaviors. Issues identified through introspection (with the support of other nursing educators) should be addressed to enhance subsequent teaching behaviors. The organizational education of mini-workshops on clinical practice and a system that facilitates information sharing among novice nursing educators and consultations will also enhance teaching behaviors. Therefore, in developing novice nursing educators, it is necessary to create opportunities indicating these SOES and organizational education factors for novice nursing educators to learn about practical training and to collaborate with other nursing educators.

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CONFLICT OF INTEREST

None of the authors have any conflict of interest to declare.

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