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# Effects of Educational Instructors' Support From Others and Experiential Learning on the Clinical Learning Environment

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**Aim:** The purpose of this study was to reveal the effects of educational instructors' support from others and experiential learning on the clinical learning environment (CLE).

**Background:** In clinical practice, educational instructors are involved in the design of the clinical learning environment for nursing students. Clinical learning is embedded in the community in which practitioners of various skill levels, from beginner to master, work. There are three types of support received from others in the workplace: work support, reflective support, and mental support. The relationship between these is also being studied. The process of experiential learning (Kolb, 1984) includes concrete experience, reflective observation, abstract conceptualization, and active experimentation, and a relationship to the learning environment has been suggested. The CLE is considered as a setting for experiential learning in nursing practice that can promote the development of students' problem-solving ability and has been studied from diverse viewpoints. Investigating the effect of experiential learning and support received by educational instructors from others in the workplace on the CLE will provide new data for advancing the clinical learning of students.

Methods: The subjects comprised 1,153 educational instructors at 101 hospitals with a capacity of 200 or more general hospital beds in Japan. A questionnaire survey including subject attributes, the most valued relationships with others (bosses, superiors/seniors, colleagues/peers, subordinates/juniors), a scale of the support received from these others (subscales: work support, reflective support, mental support), the Experiential Learning Scale (subscales: concrete experience, reflective observation, abstract conceptualization, active experimentation), and the Clinical Learning Environment Diagnostic Inventory: CLEDI (subscales: affective CLE, perceptual CLE, symbolic CLE, behavioral CLE, reflective CLE) was mailed to the study participants from November 2017 to March 2018. Educational instructors who responded to these three scales were used as subjects. One-way analysis of variance and multiple comparison were performed using IBM® SPSS® Statistics. Covariance structure analysis was performed using IBM® SPSS® Amos. Ethics approval was granted by the Ethical Review Board for Nursing Research of Osaka Prefecture University.

**Outcomes:** The number of valid responses was 416 (36.1%); mean age was 40.94 years (SD=7.56); years of nursing experience was 18.24 years (SD=7.36); and years of experience in student guidance was 7.56 years (SD=6.48). Regarding employment departments, there were 88 subjects in the adult surgical ward

(18.8%), 78 in the adult internal medicine ward (21.2%), 74 in the adult mixed ward (17.8%), 29 in the pediatric ward (7.0%), 28 in the obstetrics ward (6.7%), 14 in the psychiatric ward (3.4%), and 105 in other departments (25.2%).

The most common response subjects gave for the most valued relationships with others was "subordinates/juniors" with 134 responses (32.2%) followed by "colleagues/peers" with 120 responses (28.8%). A significant difference was seen in the results of comparison of subscales for the most valued relationships with others (work support, reflective support, and mental support). The support received from "bosses," "superiors/seniors," and "colleagues/peers" for these three subscales was significantly higher than that received from "subordinates/juniors." Further, for mental support, the support received from "colleagues/peers" was significantly higher than that received from "bosses." Based on the hypothesis that experiential learning and support from others in the workplace and affect CLE, "support from others," "experiential learning," and "CLE" were used as latent variables while the scores for each subscale were used as observation variables. Assuming covariance between "support from others" and "experiential learning," a multiple index model was created in which both affect "CLE." Analysis of the results revealed that the goodness-of-fit indicators were GFI = 0.957, AGFI = 0.934, CFI = 0.969, and RMSEA = 0.053. All path coefficients were significant, and the correlation coefficient between "support from others" and "experiential learning" was 0.12. The standardized coefficients from "support from others" and "experiential learning" to "CLE" were 0.14 and 0.35, respectively, and the square of the multiple correlation coefficient was 0.15.

**Implications:** It was suggested that educational instructors' "support from others" and "experiential learning" affect the "CLE." The model's goodness-of-fit indicators met the necessary standards. However, as the contribution rate from these factors to the "CLE" was low, it is necessary to search for other related factors. As the path coefficient for "support from others" received by educational instructors was low, it is necessary to examine if this support does not directly affect "CLE" but is instead mediated by another variable. In the future, it is essential to reveal factors related to educational instructors' CLE designs that promote student learning and to use the results in the development of a support program for educational instructors.

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### Title:

Effects of Educational Instructors' Support From Others and Experiential Learning on the Clinical Learning Environment

#### **Keywords:**

clinical learning environment, covariance structure analysis and educational instructor

#### References:

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## **Abstract Summary:**

This quantitative study was to reveal the effects of educational instructors' support from others and experiential learning on the clinical learning environment using covariance structure analysis. Results showed that educational instructors' support from others and experiential learning affect the clinical learning environment. The model's goodness-of-fit indicators met the necessary standards.

#### **Content Outline:**

#### I. Introduction

Educational instructors are involved in the design of the clinical learning environment (CLE) for nursing students. The CLE is considered as a setting for experiential learning in nursing practice that can promote the development of students' problem-solving ability. This quantitative study was to reveal the effects of educational instructors' support from others and experiential learning on the clinical learning environment.

## II. Outcomes

**A. Main Point #1** A significant difference was seen in the results of comparison of subscales for the most valued relationships with others (work support, reflective support, and mental support) using one-way analysis of variance. Multiple comparisons were performed. First, the support received from "bosses," "superiors/seniors," and "colleagues/peers" for these three subscales was significantly higher than that received from "subordinates/juniors." Second, for mental support, the support received from "colleagues/peers" was significantly higher than that received from "bosses."

#### B. Main Point #2

Assuming covariance between "support from others" and "experiential learning," a multiple index model was created in which both affect "CLE." The model's goodness-of-fit indicators met the necessary standards. The correlation coefficient between "support from others" and "experiential learning" was 0.12. The standardized coefficients from "support from others" and "experiential learning" to "CLE" were 0.14 and 0.35, respectively, and the square of the multiple correlation coefficient was 0.15.

#### III. Conclusion

It is suggested that educational instructors' "support from others" and "experiential learning" affect the "CLE." It is essential to reveal factors related to educational instructors' CLE designs that promote student learning and to use the results in the development of a support program for educational instructors.

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