Factors Related to Learning-Support Competencies of Junior Faculty at Nursing Universities

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Background: Competency development for university faculty has become a key priority ever since such faculty development became obligatory. A review of documentation (Davis et al., 2005; Guy, et al., 2010; Poindexter, 2013) on overseas nursing faculty competencies found differences in each nation’s nursing education system and in the social roles played by nursing faculty; thus, the application of competency items used for overseas nursing faculty in Japan was thought to be problematic. As a result, the Nursing Faculty Competencies Self-Assessment Scale (NFCSAS) was created in 2015 with the aim of measuring the competencies of faculty at nursing universities (Doi & Hosoda, 2016). The NFCSAS is comprised of core learning-support competencies, as well as research performance competencies, social contributions competencies, and organizational operation competencies. The NFCSAS has adequate internal consistency and stability, as well as construct and criterion-related validity (Doi & Hosoda, 2016).

Purpose: This study clarified factors related to the learning-support competencies of junior faculty at nursing universities to obtain suggestions for the effective faculty development of junior faculty.

Methods: From July to October 2015, a postal-mail questionnaire survey was conducted with 162 junior faculty members (assistant professors, under the age of 39, with less than three years’ experience as nursing university faculty) in Japan. This survey consisted of the NFCSAS (82 items), the Metacognition Scale for Adults (28 items) (Abe & Ida, 2010), the Mentoring Scale (48 items) (Ono, 2000), the General Self-Efficacy Scale (16 items) (Sakano et al., 1986), and questions regarding personal background. Covariance structure analysis was used to analyze the data. Data analysis was performed using IBM® SPSS® Amos Version 23. This study was performed with the approval of the Osaka Prefecture University Nursing Research Ethics Committee, Japan (application number 25-64). Participants received a request to participate in the study, which included information on the purpose of the study, a summary of the survey, a statement that participation was entirely voluntary, and explanations regarding how the study’s results would be published and how the confidentiality of personally identifiable information would be maintained.

Results: Valid responses (53.1% response rate) were received from 86 junior faculty participants (18 males, 20.9%; 68 females, 79.1%). Fourteen participants were in their 20s (16.3%), and 72 were in their 30s (83.7%). Mean years of experience as university faculty was 1.3 ± 0.8 years. As for highest education achieved, 2 participants (2.3%) had completed doctoral courses, 73 (84.9%) had completed master’s courses, and 11 (12.8%) had completed undergraduate courses. As for the academic degree obtained (multiple responses permitted), 2 participants (2.3%) had doctoral degrees, 75 (87.2%) had master’s degrees, and 60 (69.8%) had bachelor’s degrees. As for type of affiliated university of the junior faculty, 23 participants (26.7%) were at national universities, 27 (31.4%) attended public universities, and 36 (41.9%) attended private universities.

Mentoring, metacognition, age, and years of faculty experience had effects on the learning-support competencies of junior faculty. Further, a covariance structure model for yielding self-efficacy effects was set and used for analysis. The results showed the significance of the path coefficients from mentoring, metacognition, and years of faculty experience to learning-support competencies, and from learning-support competencies to self-efficacy. Nevertheless, as the path coefficient from age to learning-support competencies was not significant, this was deleted, and the data were reanalyzed. As a result, the goodness-of-fit of the model was within tolerance, with GFI = 0.916, AGFI = 0.845, CFI = 0.982, RMSEA = 0.060. The standardized estimate values of the path coefficient from mentoring, metacognition, and
years of faculty experience to learning-support competencies were, respectively, 0.307, 0.614, and 0.135, and the standardized estimate value of the path coefficient from learning-support competencies to self-efficacy was 0.682; thus, all were significant. The coefficients of determination were learning-support competencies: 0.589 and self-efficacy: 0.100.

**Conclusion:** The present study made it clear that mentoring, metacognition, and years of faculty experience had effects on the learning-support competencies of junior faculty, and that these also contribute to self-efficacy. Thus, suggestions for the promotion of effective faculty development for junior faculty were obtained.

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Abstract Summary:
The purpose of this study was to examine factors related to learning-support competencies of junior faculty at nursing universities. Our study made it clear that mentoring, metacognition, and years of faculty experience had effects on learning-support competencies of junior faculty, and that these also contribute to self-efficacy.

Content Outline:
Competency development for university faculty has become a key priority ever since such faculty development became obligatory. The purpose of this study was to examine factors related to learning-support competencies of junior faculty at nursing universities. The present study made it clear that mentoring, metacognition, and years of faculty experience had effects on the learning-support competencies of junior faculty, and that these also contribute to self-efficacy. Thus, suggestions for the promotion of effective faculty development for junior faculty were obtained. We thus obtained suggestions for promotion of effective faculty development for junior faculty.

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