

Learning Flow, Critical Thinking Disposition, and Communication Competency of Nursing College Students

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Abstract

Background/Objectives: The purpose of this research is to investigate the relationships of learning flow, critical thinking disposition, and communication competency among nursing college students.

Methods/Statistical analysis: For data collection self-reported questionnaires were used to 132 senior nursing students in nursing college in South Korea. Data were collected from September 2 to 20, 2018. Data were analyzed by descriptive statistics for general characteristics. Correlation coefficient was used to explore the relations of the learning flow, critical thinking disposition, and communication competency among nursing college students.

Results: In this study, the mean of learning flow, critical thinking disposition, and communication competency were 2.69 ± 0.52 , 96.16 ± 14.13 , 3.36 ± 0.44 , respectively. The learning flow showed statistically significant relationships with critical thinking disposition ($r = -.496$, $p < .001$) and communication competency ($r = .473$, $p < .001$). The critical thinking disposition showed negative correlation with communication competency ($r = -.819$, $p < .001$).

Improvements/Applications: It is needed to figure out other variables related with learning flow. And various teaching methods and environment should be considered to enhance learning flow of nursing college students.

Keywords: learning, flow, critical thinking, communication, nursing

1. INTRODUCTION

The concept of education has changed from teacher-centered instruction to learner-centered learning model. In nowadays students' self-directed learning has been an important concept to improve learning outcomes. Also nursing educators use various teaching methods to improve learning outcomes by encouraging students' self-directed leaning and participation.

Learning flow or learning immersion has paid attention as the new concept that represents the psychological phenomenon of learners' active learning. Improved learning outcome has been associated with a flow state [1].

“Flow” is the ability to be highly involved in a variety of activities, especially work and study [2]. Csikszentmihalyi said flow experiences involve three qualities: (1) intense concentration, (2) highly developed, almost effortless performance of skills, and (3) a belief that the activity is worth doing for itself without reward. Flow is defined optimal state when the level of challenge corresponds to the level of skill development; when the level of challenge is low, it causes boredom, and the overly high level of challenge causes anxiety [2, 3]. In flow, a person becomes fully involved in activities, experiences many positive empirical characteristics, such as freedom from self-consciousness, great enjoyment of the process, etc [4].

Learning flow was an important factor affecting problem-solving ability [5], and has relationships with academic self-efficacy and major satisfaction among college nursing students [6]. Problem-solving ability had a positive effect on learning motivation and self-directed learning in previous research [7]. And there were meaningful positive relationships in the critical thinking disposition, problem solving capability, and clinical competency [8].

Nurses are needed critical thinking abilities and communication skills to care patients. The critical thinking disposition is unchanged internal motivation to make decisions by using thought [9]. Critical thinking ability has significant relationships with nursing competence [10].

The communication competence is a person's ability to impress and to judge self-thinking to others clearly in communication settings [11]. Communication skill has highly correlated with critical thinking disposition, and critical thinking disposition was as influencing factor to communication skill [12].

As previous researches showed relationship with learning flow and learning outcomes, it is necessary to figure out relationship among learning flow, critical thinking disposition, and communication competency. Thus the aim of this research is to investigate the of learning flow, critical thinking disposition, and communication competency and the relationships of learning flow, critical thinking disposition, and communication competency of nursing college students.

2. METHODS

2.1 Subjects

Subjects of this study were 132 senior nursing college students in Cheonan, Chungnam, South Korea. Data collection was conducted using a self-reported questionnaire from September 2 to 20, 2018. Informed consent was obtained from all study subjects, and give information about anonymity and confidentiality.

2.2 Research design

The exploratory research design was applied to investigate the correlation of the learning flow, critical thinking disposition, and communication competency in this study.

2.3 Analytical methods

Data were analyzed by descriptive statistics for general characteristics. Correlation coefficient was used to explore the relationships among the variables. Data analysis was conducted using SPSS 18.0 program.

2.4 Measures

The questionnaire was composed of general characteristics, and the questions about learning flow, critical thinking disposition, and communication competency.

Flow is a psychological state in which an individual provides an optimal experience while performing a task [13]. Learning flow is a condition in which learners are completely immersed in their learning and are completely unconscious of their senses or surroundings, and involve pleasure and fun, forgetting even self-consciousness [14]. The Korean version of learning flow scale [15] was developed for adult learners based on the Csikszentmihalyi's flow state model [4]. Learning flow scale, which are 29 items of 6 Likert scale. In this study, Cronbach's alpha was .95.

Critical thinking disposition is defined the motivation or desire to think critically for the purpose of eliciting decision-making and problem-solving processes in any problem situation [16]. The critical thinking disposition scale [16] has 35 items of 5 Likert scale, which showed higher means higher level of critical thinking disposition. Cronbach's alpha was .93 in this study.

Interpersonal communication competency is defined as an impression or judgement formed about a person's ability to manage interpersonal relationships in communication environment [17]. Communication competency was measured by Global Interpersonal Communication Competency Scale [18], which are 15 items of 5 Likert scale. In our study, Cronbach's alpha was .88.

3. RESULTS

3.1 Demographics and the mean of study variables

Of the participants, 82% was female. About 29% was extroverted personal characteristics and 23.3% was introversive.

The mean of learning flow, critical thinking disposition, and communication competency were 2.69 ± 0.52 , 96.16 ± 14.13 , 3.36 ± 0.44 , respectively.

Table 1. Demographics and the mean of study variables (N=132)

| Categories | Sub categories | n(%) or $M \pm SD$ |
|------------|----------------|--------------------|
| Gender | Male | 24(18.0) |
| | Female | 109(82.0) |
| Character | Introversive | 31(23.3) |
| | Extroversive | 38(28.6) |
| | Moderate | 64(48.1) |

| | | |
|-------------------------------|--|-------------|
| Learning flow | | 2.69±0.52 |
| Critical thinking disposition | | 96.16±14.13 |
| Communication competency | | 3.36±0.44 |

3.2 Relationships among learning flow, critical thinking disposition, communication competency

The learning flow showed significant correlation with critical thinking disposition($r=-.496$, $p<.001$) and communication competency ($r=.473$, $p<.001$). The critical thinking disposition showed negative relationship with communication competency($r=-.819$, $p<.001$).

Table 2. Relationships among learning flow, critical thinking disposition, communication competency (N=132)

| Variables | Learning flow | Critical thinking disposition | Communication competency |
|-------------------------------|---------------|-------------------------------|--------------------------|
| Learning flow | 1 | -.496 ($<.001$) | .473 ($<.001$) |
| Critical thinking disposition | | 1 | -.819 ($<.001$) |
| Communication competency | | | 1 |

4. CONCLUSION

Learning flow is the new concept that shows the learners' active learning. As previous researches showed relationship with learning flow and learning outcomes. Therefore it is a matter of great importance that figure out the relationships with learning flow and other variables which were showed significant role in teaching-learning methods already.

The purpose of this research was to investigate the mean of learning flow, critical thinking disposition, and communication competency and to figure out the relationships of learning flow, critical thinking disposition, and communication competency of the nursing college students.

Learning flow showed negative relation with critical thinking disposition in this research. And there was statistically significant positive relationship between learning flow and communication competency. But critical thinking disposition showed negative correlation with communication competency.

In previous researches, there were positive relationships in the critical thinking disposition, problem solving capability, and clinical competency, and other researcher reported communication skill had highly related with critical thinking disposition.

In spite of anticipating positive relationship with learning flow and critical thinking disposition, the result was the opposite. Critical thinking disposition showed negative relationships to other variables. But participant who had higher level of learning flow showed higher level of communication competency than others.

Therefore it is necessary to demonstrate the level and the relation between learning flow and critical thinking disposition in the nursing college students repeatedly. And it is needed to figure out other variables related with learning flow.

And furthermore various teaching methods and environment should be considered to enhance learning flow of nursing college students.

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