

Evaluating Online Learning Engagement of Nursing Students

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Background

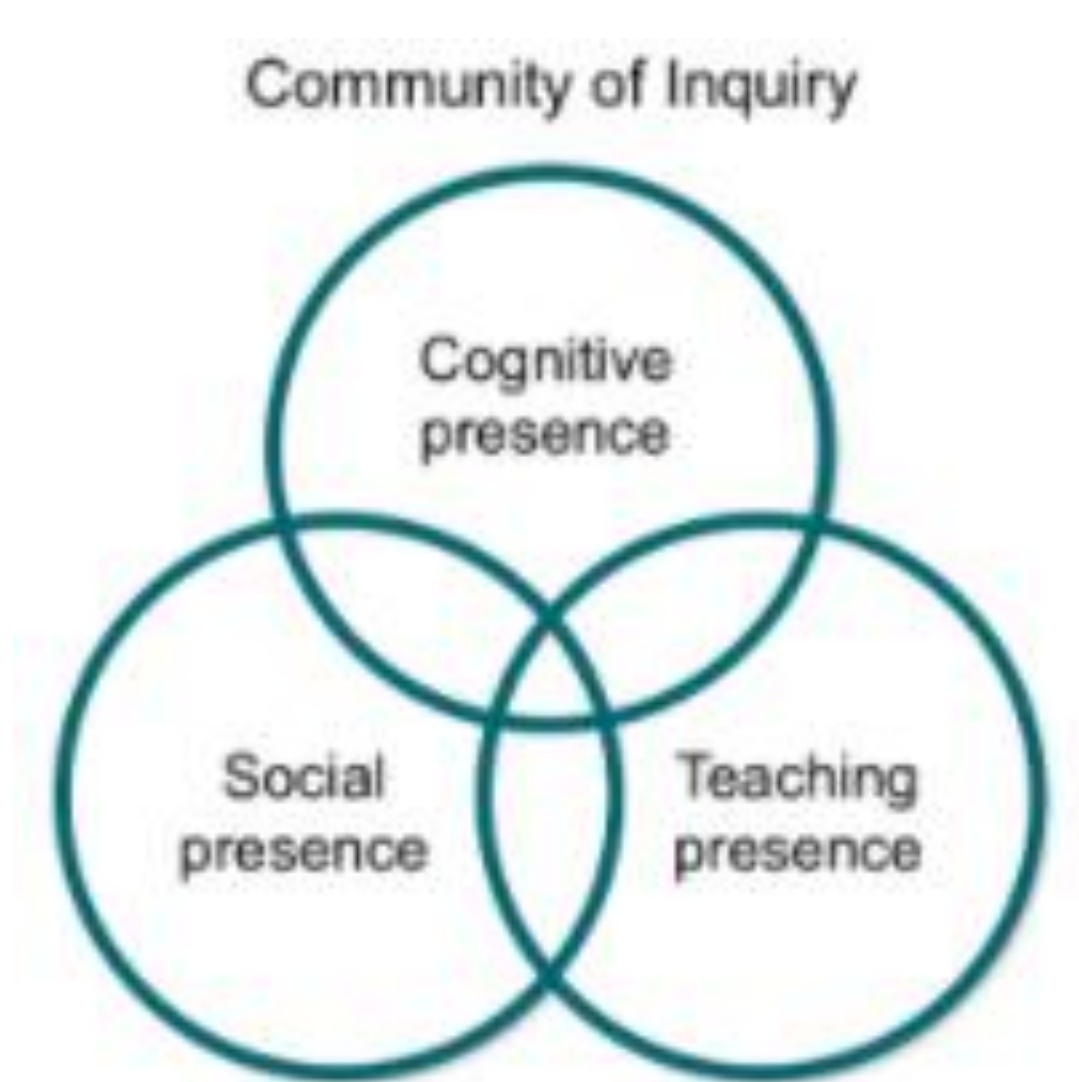
Previous studies suggest heightened learning satisfaction may lead to learning engagement in an online learning environment.

Objectives

To evaluate the level of learning engagement and its relationship with the perceived learning satisfaction of part-time post-registration nursing undergraduates who have enrolled in an elective online clinical course.

Methods

This is a prospective interventional study. A clinical nursing elective course was changed to online due to COVID-19 situation. By adopting Community of Inquiry Framework, the related teaching and learning strategies were deployed in the course. All students who have completed the course were invited to fill in an online survey which included a validated Online Student Engagement (OSE) questionnaire. Association between perceived learning satisfaction and learning engagement were examined using Pearson's correlation. Logistic regression was performed to explore the association of gender, age, working experience and perceived learning satisfaction on the likelihood that students have higher learning engagement.



Results

Fifty six out of 68 students (82%) have filled out the questionnaires. The Pearson's correlation coefficient was .75 ($p < .001$) between perceived learning satisfaction mean score and mean score of OSE. Taking 3.5 or above as the cut off for OSE mean score, there were 25 (45%) highly engaged students. Significant difference ($p < .001$) was shown in the perceived learning satisfaction mean (SD) score for highly engaged students [4.02 (0.49)] and not highly engaged students [3.27 (0.62)] (Table 1). The logistic regression model showed that students with greater perceived learning satisfaction [OR: 17.2 95% C.I. 3.46-86.0, $p = .001$] and who have more than 1 year working experience were associated with an increased likelihood of exhibiting higher learning engagement [OR: 0.11 95% C.I. 0.01-0.89, $p = .0039$ respectively], after controlling for gender and age (Table 2).

Table 1. Comparison of mean perceived satisfaction scores between highly engaged and not highly engaged groups

	Highly engaged group (n=25)	Not highly engaged group (n=31)	p value
Mean perceived satisfaction score	4.03±0.49	3.27±0.62	<.001

Table 2. Logistic regression analysis of working experience and perceived satisfaction for learning engagement

Model	Odds ratio	95% C.I.	p-value
Age	2.134	(0.328, 13.862)	0.427
Gender	0.516	(0.092, 2.891)	0.452
Working experience	0.113	(0.014, 0.893)	0.039
Perceived satisfaction	17.247	(3.461, 85.952)	0.001

C.I., confidence interval

Conclusions

The findings from this study suggested that perceived learning satisfaction and working experience were predictors for learning engagement among nursing students in online learning.

