

Students' sense of connection and learning predicts their course satisfaction

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Introduction

Students' academic achievement has been shown to be positively associated with their sense of classroom community (Wentzels et al., 2021; Göktas & Kaya, 2023). Students' perceptions of classroom community has been shown to encompass their sense of connectedness and learning (Rovai, 2022). Though our past research suggests that students' sense of connectedness within a course is predictive of their final grade in the course (Carozza et al., in progress), this finding is limited by the use of non-validated measures.

Objective

In this study, we used validated scales to measure students' satisfaction in a course, and their sense of classroom community, which was broken down into their (1) sense of connectedness, and (2) sense of learning. These data were used to test whether students' sense of classroom community is predictive of their satisfaction with the course.

Students' self-reported perceptions of **how connected they are in a course** and **how well they are learning** are predictive of **how satisfied they say they are with a course.**



At a time when social connection and community is being emphasized in education (Göktas & Kaya, 2023; Major, 2022), this study adds to the literature on classroom community with the use of **validated measures** and **predictive modelling**, aligning well with contemporary discussions in **psychology and education**.

The findings of this study provide insight into the **importance of fostering classroom community to enhance students' experience of a course.**



Methodology

Participants

Data were collected anonymously from 78 students who completed a multi-disciplinary, project-based capstone course that spanned multiple faculties at a large Canadian university. Participants completed the course in-person in the 2022-2023 school year.

Procedures

Classroom community scale:

The Classroom Community Scale (Rovai, 2002) measures a sense of community in a learning environment, and has been shown to be a valid and reliable measure of classroom community that yields two interpretable factors: connectedness and learning.

Learning Experience Inventory - Course:

The Learning Experience Inventory-Course (LEI-C) was designed to assess how well students understand what they are required to learn in the course, what they should do to learn the material, and how they are being assessed in the course (Wong, Kwong, Thadani, 2014). The LEI-C has been shown to be both reliable and valid as a psychological measure.

Multiple Regression Analysis:

A regression analysis was conducted to assess if students' sense of classroom community predicted their satisfaction with the course. The two interpretable factors yielded from the Classroom Community Scale (connectedness and learning) were used as predictor variables, and scores on the LEI-C were used as the outcome variable.

Results

When the assumption of collinearity was tested, the results demonstrated that multicollinearity was not a concern (Connectedness, tolerance = .421, VIF = 2.377; Learning, tolerance = .421, VIF = 2.377). The data also met the assumption of independent errors (Durbin-Watson = 2.188). A histogram of standardized residuals showed that the data contained approximately normally distributed errors, as did the normal P-P plot of standardized residuals, which showed points that were close to being on the line. The scatterplot of standardized predicted values indicated that the data met the assumptions of homogeneity of variance and linearity.

A significant regression equation was found ($F(2, 75) = 66.490, p < .001, R \text{ Square} = .639$). **Participants' predicted course satisfaction is equal to $7.355 + .804$ (Connectedness) + $.612$ (Learning).**

References

- Carozza, L., Kim, A. S. N., & Davis, H. E. How important is community in online learning environments? [Manuscript in preparation].
- Göktas, E., & Kaya, M. (2023). The Effects of Teacher Relationships on Student Academic Achievement: A Second Order Meta-Analysis. *Participatory Educational Research*, 10(1), 275-289. <https://doi.org/10.17275/per.23.15.10.1>
- Major, C. (2022). Examining the Ties that Bind: The Importance of Community to Student Success in Online Courses. *Journal of Postsecondary Student Success* 1(4), 20-34.
- Rovai, A. P. (2002b). Development of an instrument to measure classroom community. *The Internet and Higher Education*, 5(3), 197-211. [https://doi.org/10.1016/S1096-7516\(02\)00102-1](https://doi.org/10.1016/S1096-7516(02)00102-1)
- Wentzel, K. R., Jablansky, S., & Scalise, N. R. (2021). Peer Social Acceptance and Academic Achievement: A Meta-Analytic Study. *Journal of Educational Psychology*, 113(1), 157-180. <https://doi.org/10.1037/edu0000468>
- Wong, E., Kwong, T., Thadani, D.R. (2014). The Effects of Students' Perceptions of their Learning Experience on their Approaches to Learning: The Learning Experience Inventory in Courses (LEI-C). *Education Journal*, 3(6), 369-376. Doi: 10.11648/j.edu.20140306.18

Charts

