

The Correlation Between Student Bonding and Environmental Elements in the College Classroom

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Abstract

Prior research has looked at physical environmental elements and their correlation on interaction among individuals. However, these environmental elements have not been studied in relationship to interaction in the classroom. This study investigated the correlation between physical classroom environmental elements and student bonding. College students throughout the Midwest were asked to participate in a survey sent out via the social media site Facebook. The survey used repeated measures in which students were asked to think of classrooms in which they felt high and low bonding with fellow classmates. Students were then asked to rate on a scale of 0-100 how highly or lowly bonded they felt. Student bonding was significantly correlated with three elements of the classroom environment: temperature, time of day and seating arrangement. These results can be used by educators in order to create a classroom environment which welcomes bonding between students.

Introduction

- ❖ **Research Question:** What environmental elements of a classroom are associated with personal bonding among students at the university level?
- ❖ **Variable 1:** Environmental elements: time of day, room arrangement, lighting, temperature, windows and class size
- ❖ **Variable 2:** Personal bonding: freedom to express ideas, helping others, engaging in small talk, and laughing in class
- ❖ **Importance of this study:** College educators potentially have the ability to strengthen student bonding in classrooms by manipulating environmental elements.

Method

- ❖ **Participants**
 - ❖ 114 undergraduate students at the collegiate level.
 - ❖ The response rate of the study was 51%.
 - ❖ **Demographics**
 - ❖ The average age--20.4 years old
 - ❖ Female--77 participants, Male--34 participants, Declined to answer--3 participants
- ❖ **Procedure**
 - ❖ Convenience sampling technique using the social media site Facebook.
 - ❖ A total of 229 individuals were asked to take the online survey.
- ❖ **Measures**
 - ❖ The researchers of this study developed their own survey.
 - ❖ The first variable was measured using repeated measures.
 - ❖ Participants were asked about the six environmental elements of two classrooms in which they experienced high and low personal bonding.
 - ❖ The second variable was measured by asking students to reflect on previous experiences.
 - ❖ Students were asked to think of classrooms in which they felt high and low bonding with fellow classmates.



Results

- ❖ A series of chi-square tests were calculated to test the data in light of the research question.
- ❖ According to the research findings, college classes that encourage high bonding include:
 - ❖ Warm temperatures (42% low bonding, 75% high bonding),
 - ❖ Table and chair seating arrangements (8% low bonding, 38% high bonding)
 - ❖ Takes place in the afternoon (34% low bonding, 56% high bonding).

Discussion

- ❖ The research findings indicated a series of environmental elements that are associated with high personal bonding and low personal bonding among students at the university level.
- ❖ **High personal bonding:** table and chair seating, warm temperature that would be suitable for a tee-shirt, and takes place in the afternoon.
- ❖ **Low personal bonding:** lecture style seating, cool temperature, and takes place in the evenings
- ❖ **Limitations:** convenience sampling and survey technique
- ❖ **Suggestions for future research:** survey students from all areas of the United States