"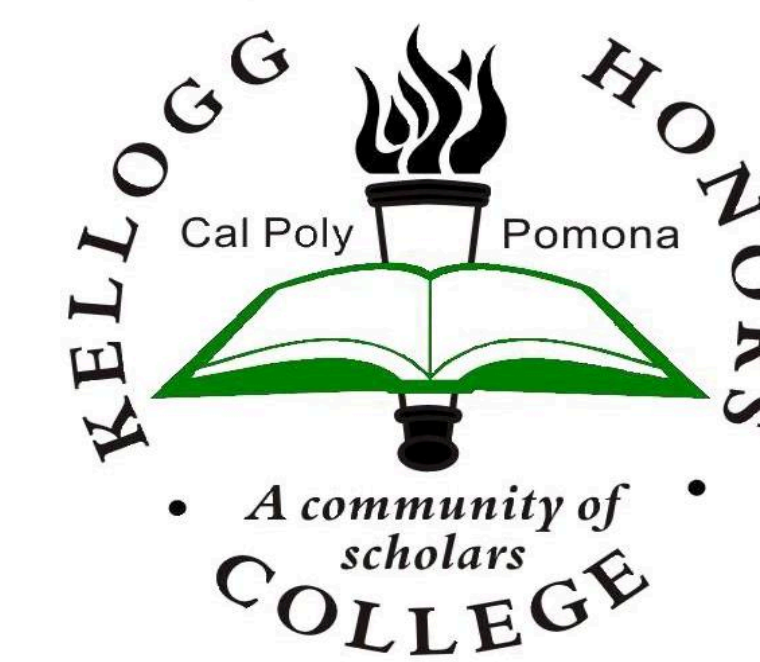Does Funny Make Me Feel Better in the Classroom?": Exploring the Associations between Instructor Humor Orientation, Student Anxiety, and Cognitive Learning

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ABSTRACT

With hopes to further the field of research in instructor and student communication, this study investigated the relationships between instructor humor, student classroom anxiety, and student cognitive learning during online instruction. Students from a variety of grade levels at a large southern California university ($N = 389$) participated in an online survey where they completed measures on instructor humor orientation, student classroom anxiety, and student cognitive learning. Correlation analyses revealed: 1) there is a significant and negative relationship between instructor humor and student classroom anxiety; 2) there is a significant and negative relationship between student classroom anxiety and student cognitive learning; and, 3) there is a significant and positive relationship between instructor humor and student cognitive learning. Findings were discussed in regard to theoretical and practical applications, limitations, and future research directions.

INTRODUCTION

The American College and Health Organization (2019) states 87.4% of college students felt overwhelmed by all they had to do, and 84.7% felt exhausted (not from physical activity) within the last twelve months. Mental obstacles, such as anxiety, impact students' cognitive learning of course content. Given these challenges, many instructors incorporate humor into the classroom.

This study was conducted during a semester when all classes were virtual due to the COVID-19 pandemic. While every student who participated in this study completed their academic material online, instructors were given the option to deliver classroom material in a synchronous, asynchronous, or combination of both instruction styles throughout the semester.

By exploring correlations, this study hopes to further knowledge of student psychology and the impact of instructor humor on classroom anxiety.

VARIABLES

INSTRUCTOR HUMOR

Humor is defined as an act comprehended as funny, though it could have been executed without intent of being humorous (Lynch, 2002). While humor may be established unintentionally, it still serves as a form of communication. Lynch (2002) suggests humor has a variety of functions; it may be used to express feelings of superiority, relief, and incongruity. Instructor humor is likely to be intended to function as a form of relief, as the classroom is a stressful setting for many students.

STUDENT ANXIETY

According to the American Psychological Association (n.d.), anxiety is defined as "an emotion characterized by feelings of tension, worried thoughts, and physical changes" (Anxiety, para. 1). People who have anxiety experience a sense of panic, trouble concentrating, and increased perspiration are symptoms of anxiety (Mayo Clinic, n.d.). While in college, many students experience anxiety. The American College and Health Organization (2019) reports that 65.7% of college students felt "overwhelming anxiety" within a twelve-month period.

STUDENT COGNITIVE LEARNING

Cognitive learning is defined as an interaction with material that results in processing information by utilizing various strategies (Obergressier & Heidrun, 2020). In order to intake, approach, and understand course content, instructors and students must utilize cognitive learning. The study of cognitive learning within the classroom has been previously studied. Scholars have examined the differences between students who take hand-written notes and those who take notes on a laptop, and suggested that switching tasks and experiencing classroom disruptions affected student learning and effectiveness (Wei et al., 2014). Other studies examine how cognitive learning can be optimized for students in college, specifically while attending class.

RESEARCH QUESTIONS

RQ1: Is instructor humor associated with students' reports of anxiety in the classroom?

RQ2: Are students' reports of anxiety in the classroom associated with student cognitive learning?

RQ3: Is student cognitive learning associated with instructor humor in the classroom?

METHOD

PARTICIPANTS

This study is composed of data from three-hundred and eighty-nine individuals ($N = 389$; men, $n = 104$; women, $n = 266$; not indicated, $n = 19$) that identify as university students. Participants varied in age from 18-52 ($M = 22.57$, $SD = 5.39$). Participants were asked to report how the classroom was set up online since the semester was virtual. 67.6% of participants identified as having a synchronous course ($n = 263$), 22.6% of participants reported having a hybrid of synchronous and asynchronous course ($n = 88$), 9.3% of participants reported having an asynchronous course ($n = 36$), and 0.5% of participants reported having Other ($n = 2$).

MEASURES

Instructor humor orientation. Instructor humor was operationalized using the Booth-Butterfield and Booth-Butterfield (1991) Humor Orientation scale. Sample items include: "My instructor regularly tells jokes and funny stories", "People often ask my instructor to tell jokes or stories," and "My instructor uses humor to communicate in a variety of situations."
Student anxiety in the classroom. Student anxiety was operationalized using Spitzer et al.'s (2006) measure of generalized anxiety; in particular, the items were adapted to reflect anxiety in the classroom. This operationalization included statements such as, "Feeling anxious, nervous, or on edge," "Not being able to stop or control worrying," and "Worrying too much about different things."
Student cognitive learning indicators. Cognitive learning was operationalized using Frymier and Houser's (1999) Revised Learning Indicators Scale (RLIS). It included statements including: "I see connections between the course and my career goals," "I feel I have learned a lot in this class," and "I think about the course content outside of class."

RESULTS

Consult Table One for correlations on all continuous variables for the entire sample. Research Question 1 questioned the association between instructor humor with students' reports of anxiety in the classroom. Correlation analysis revealed instructor humor was significantly and negatively associated with students' reports of anxiety in the classroom for the entire sample: $r(367) = -.24$, $p < .001$. The critical alpha was 0.05. This finding indicates a significant, negative relationship between the two variables; as instructor humor increases, students' reports of anxiety in the classroom decreases.

Research Question 2 asked the correlation between students' reports of anxiety in the classroom with students' cognitive learning. The variables were found to be significantly and negatively associated: $r(367) = -.175$, $p = 001$. The critical alpha was 0.05. According to the data, there is a significant, negative relationship between reports of anxiety in the classroom and students' cognitive learning. As students' reports of anxiety in the classroom decreases, students' cognitive learning increases.

Research Question 3 wanted to know the relationship between instructor humor and student cognitive learning. Correlation analysis was conducted to reveal the relationship between the two variables. The data was significant and had a positive relationship: $r(370) = .383$, $p < .001$. The critical alpha was 0.05. Therefore, if instructor humor goes up, student cognitive learning goes up.

TABLE ONE

Correlations between All Continuous Variables for Entire Sample
($N = 389$)

VARIABLE	2	3
1. Instructor humor	-.236**	.383**
2. Student anxiety	--	-.175**
3. Student cognitive learning	--	--

** Correlation is significant at the 0.01 level (2-tailed)

DISCUSSION

The results of Research Question 1, which tested the relationship between instructor humor with students' reports of anxiety in the classroom, indicated a significant, negative association. Instructor humor may relay to students a shorter power-distance than originally perceived prior by the student.

Research Question 2 questioned the association between students' reports of anxiety in the classroom with students' cognitive learning; these results showed a significant, negative association. By having doubts of their cognitive potential, students do not feel confident in their ability to achieve high educational goals set by instructors. Therefore, students with low anxiety feel more positive about succeeding than their peers that report high anxiety. By not experiencing high levels of anxiety in the classroom, students may be able to focus on course content rather than questioning their capabilities.

The last question regarding these findings, Research Question 3, asked about the correlation between instructor humor and student cognitive learning; this information revealed a significant, positive relationship. Instructor humor may serve as motivation for students; they potentially feel more engaged in conversations with their instructor and sense a connection between instructor humor and classroom content.

INSTRUCTION MODE REPORTED BY PARTICIPANTS

Legend: Synchronous, Asynchronous, Hybrid, Other
-1%, 23%, 9%, 68%