

The Relationship Between Student Academic Anxiety, Motivation to Learn, Self-Efficacy, Social Media Self-Presentation, and Camera Usage In A Virtual College Course



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Introduction

Research Question

Are Academic Anxiety, Social Media Self-Presentation, Motivation to Learn, and Self-Efficacy predictors of Camera Usage in online synchronous college classes?

Variables

Camera Usage- roughly 90% of college students have their camera off for at least a segment of their online synchronous class (Castelli & Sarvary, 2021)

Academic Anxiety- feelings of apprehension about an academic task (Hooda & Saini, 2017)

- High levels of anxiety negatively impact academic experiences (Cooper et al., 2018)

Motivation to Learn- degree to which a student is willing to put effort into learning to achieve desired learning outcomes (Saeed & Zyngier, 2012)

- Students with more motivation have higher academic achievement levels (Saeed & Zyngier, 2012)

Self-Efficacy- an individual's belief and confidence regarding their ability to succeed in each task (Prokes & Housel, 2021)

- Self-Efficacy is one of the greatest predictors of grade point average (Robbins et al., 2004)

Social Media Self-Presentation- process in which individuals choose to represent themselves on social media (Yang & Brown, 2015)

- Greater social media self-presentation correlates with a higher likelihood of sharing selfies (Shin et al., 2017).

Hypotheses

- Social Media Self-Presentation, Motivation to Learn, and Self-Efficacy would positively predict Camera Usage
- Academic Anxiety would negatively predict Camera Usage

Method

Demographics of Participants

115 Participants
Mean Age: 21.21
Standard Deviation: 8.21

Females: 76.79%
Males: 23.21%
Non-Binary: 2.69%

Ethnicity
Non-Hispanic: 93.80%
Hispanic: 6.20%

Race	Participants	Class	Participants
Black	4.42%	Freshman	22.60%
White	88.55%	Sophomore	17.39%
Asian	6.20%	Junior	31.30%
Pacific Islander	0%	Senior	25.22%
Native American	0.88%	Other	3.50%

Materials/Procedures

Qualtrics Survey

Camera Usage Scenario

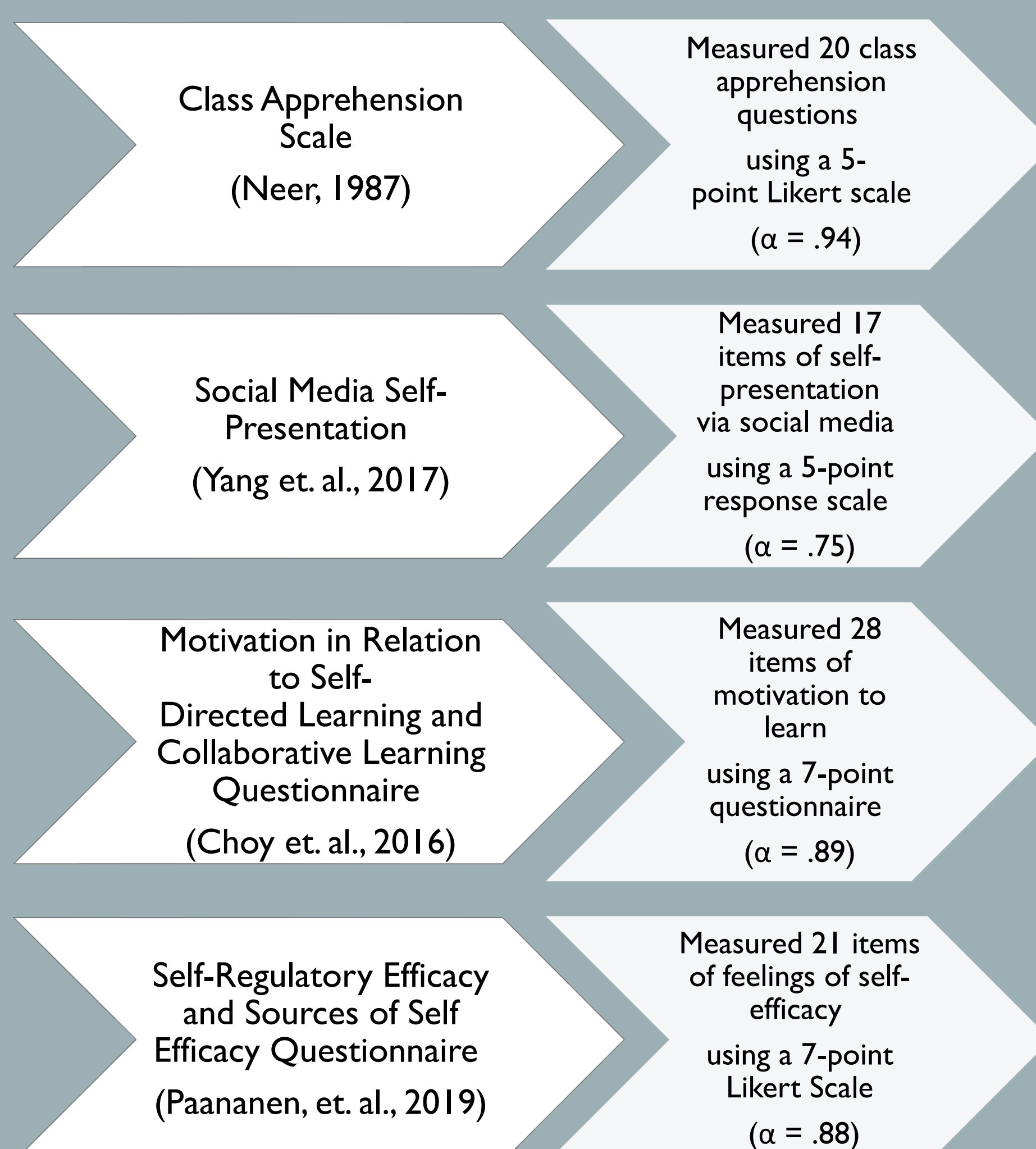
Answer the following question based on this scenario.

Imagine you are in a general education class of 25 students that meets online via Zoom synchronously at 2PM. The teacher has expressed a desire for students to keep their cameras on, but it is not mandatory. Approximately half of the class has their cameras on at least half of the class period.

I would never have my camera on in this class I would have my camera on half the time in this class I would have my camera on the entire time in this class

0 10 20 30 40 50 60 70 80 90 100

How likely would you be to use your camera during this class?



Results

Table 1
Descriptive Statistics and Correlations for Camera Usage, Academic Anxiety, Self-Efficacy, Motivation to Learn, and Self Presentation

	1.	2.	3.	4.	5.	β	p
1. Camera Usage	-	-	-	-	-		
2. Academic Anxiety	-.46**	-	-	-	-	11.957	.001
3. Self-Efficacy	.332**	-.31**	-	-	-	4.706	.238
4. Motivation to Learn	.326**	-.223*	.513**	-	-	.169	.154
5. Self Presentation	.322**	-.222*	.216*	.295**	-	10.646	.037
Mean	68.69	3.19	4.25	122.11	3.22		
SD	28.94	0.86	0.69	23.31	0.49		

* $p < .05$
** $p < .01$

Significant Results

$$R^2 = .303, F(4, 110) = 11.94, p < .001$$

Discussion

Implications

- Both hypotheses were supported
- Self-efficacy, motivation to learn, and social media self-presentation **positively correlated** meaning higher scores on each of these scales are correlated with a **higher likelihood** of having camera turned on
- Academic anxiety **negatively correlated** to camera usage meaning higher scores on this scale are correlated to **lower likelihood** of using camera
- Academic anxiety was the most significant predictor of student camera usage
- Self-presentation was another significant predictor of student camera usage
- Impacts how teachers plan their lessons in online synchronous class settings

Limitations and Future Research

- External Validity/ Generalization:
 - Self-selection bias
 - WEIRD Generalization
- Look for potential moderating variables
 - Type of class (ex., math, social science, etc.)
 - Teachers' presence/role
- Control for variables such as home life and student's mental health (Castelli & Sarvary, 2021; Prokes & Housel, 2021)

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