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### Creative Learning During the COVID-19 Pandemic

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# Creative Learning: During the COVID-19 Pandemic

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## Introduction and Background

**Creativity** is the ability to produce or develop original work or ideas (APA Dictionary of Psychology, n.d.).

- Since creativity is a highly prized quality in virtually all aspects of life in the United States (Spencer, 2019), from the professional setting and social circles to leisure activities and daily chores, it is important to foster creative learning environments for children and young adults.
- The COVID-19 pandemic and subsequent lockdown transformed many students' lifestyles.
- Most of the current social science literature base targets emotional responses to the pandemic, while the effects on creativity remains a mystery (Mercier et al., 2021).

## Study Aim and Research Questions

The purpose of this study is to examine how Binghamton University students **perceive creativity levels** in various types of learning environments during the COVID-19 pandemic.

1. How do undergraduate students at Binghamton University **gauge creativity** in various types of learning environments during the COVID-19 pandemic?
2. Does a **significant difference** in perceived creativity exist between students enrolled in all-online courses, only in-person courses, and hybrid courses?

## Methodology

Our participants were 108 students that range from the ages of 17 - 22 at Binghamton University. We administered a Qualtrics survey containing demographic prompts and abridged items from the questionnaire, "**KEYS: Assessing the Climate for Creativity.**"

- a. Our sampling approach was snowball convenience to find initial participants who then distributed it to other people.
- b. Likert Scale – (Strongly agree, agree, neither agree nor disagree, disagree, strongly disagree)
- c. KEYS: Assessing the Climate for Creativity
  - i. Organizational Encouragement
  - ii. Sufficient Resources
  - iii. Freedom
  - iv. Challenging Work
  - v. Peer Support
  - vi. Realistic Workload Pressures
- d. Only surveys that were **completely filled out** and had participant consent were included in the results.

## Research Question 1

Table 1

*Means and Standard Deviations for Each Subscale*

Subscale	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
Organizational Encouragement	2.80	0.61	.851
Sufficient Resources	2.09	0.80	.860
Freedom	n/a	n/a	.374
Challenging Work	3.02	0.67	.604
Peer Support	2.25	0.63	.899
Realistic Workload Pressures	2.35	0.88	.859

The mean scores for each subscale suggest that Binghamton University students **generally agreed** that the campus climate during the COVID-19 pandemic has not stunted their creativity

## Research Question 2

Table 2

*Means and Standard Deviations for Each Subscale in Relation to Hybrid and All-Online Learning Environments*

Subscale	Hybrid Learning		All-Online Learning		<i>t-test</i>	<i>P Value**</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Organizational Encouragement	2.84	0.55	2.80	0.64	0.666	0.416
Sufficient Resources	2.02	0.80	2.22	0.83	0.015	0.902
Challenging Work	3.12	0.60	2.92	0.75	1.343	0.249
Peer Support	2.23	0.69	2.34	0.51	0.356	0.552
Realistic Workload Pressures	2.28	0.89	2.41	0.86	0.367	0.546

\*\*Equal variance is assumed for all subscales.

## We fail to reject the null hypothesis.

Since the p-value is less than 0.05, there is **no significant difference** in perceived creativity between students enrolled in all-online courses and hybrid courses. We excluded the data for only in-person courses due to the low number (3 individuals) of participants who chose this response.  
 $t(107) = \dots, p > 0.05$

## Discussion

- Students at Binghamton University, regardless of their learning environment, agree that the COVID - 19 pandemic **has not stunted** the way they perceive creativity.
- The data has **low variation** ( $SD < 1$ ), which indicates that students at Binghamton University generally agree with each other
- In lieu of the pandemic, students believe that there is an organizational culture that encourages creativity through the fair constructive judgment of ideas, access to appropriate resources, including materials, facilities, and information, absence of extreme time pressures, unrealistic expectations for productivity and distractions from creative work.
- However, our results also suggest that on average, students **neither agree nor disagree** over the sense of having to work hard on challenging tasks and important projects at Binghamton University.

## Implications

- Since no significant difference in perceived creativity levels was found between the hybrid learning environment and the all-online learning environment, schools may want to **consider continuing online and hybrid programs** established during the COVID-19 pandemic.
- Educators should bear in mind the influence of **individual differences** in perceiving levels of creativity and features of the learning environment.
- While the campus climate during COVID-19 has not stunted creativity, Binghamton University may want to **consider the impacts campus life** has had on other aspects of a student's life.

## References

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