

# The Impact of Instructional Modalities among College Students in San Diego County during COVID-19



Somil Bhushan,<sup>1</sup> Samantha Bland,<sup>1</sup> Natalie Licup,<sup>1</sup> Giovanni K. Parrilla,<sup>1</sup> Cassidy Samovar<sup>1</sup>  
<sup>1</sup>B.S. in Public Health

## Introduction

- An estimated 84% of American college students reported to have some or all their classes moved to online instruction during the spring 2020 quarter, due to the COVID-19 pandemic.<sup>1</sup>
- The limited research indicates that there was a 6.1% decrease in course completion rates for students enrolled in virtual instruction during COVID-19 in comparison to students enrolled in in-person instruction before the pandemic.<sup>2</sup>
- Data is needed on the overall impact of virtual instruction on university students' quality of life (QoL) and overall well-being.

## Objective

To determine if various instructional modalities during the COVID-19 pandemic affected the quality of life for college students in San Diego County.

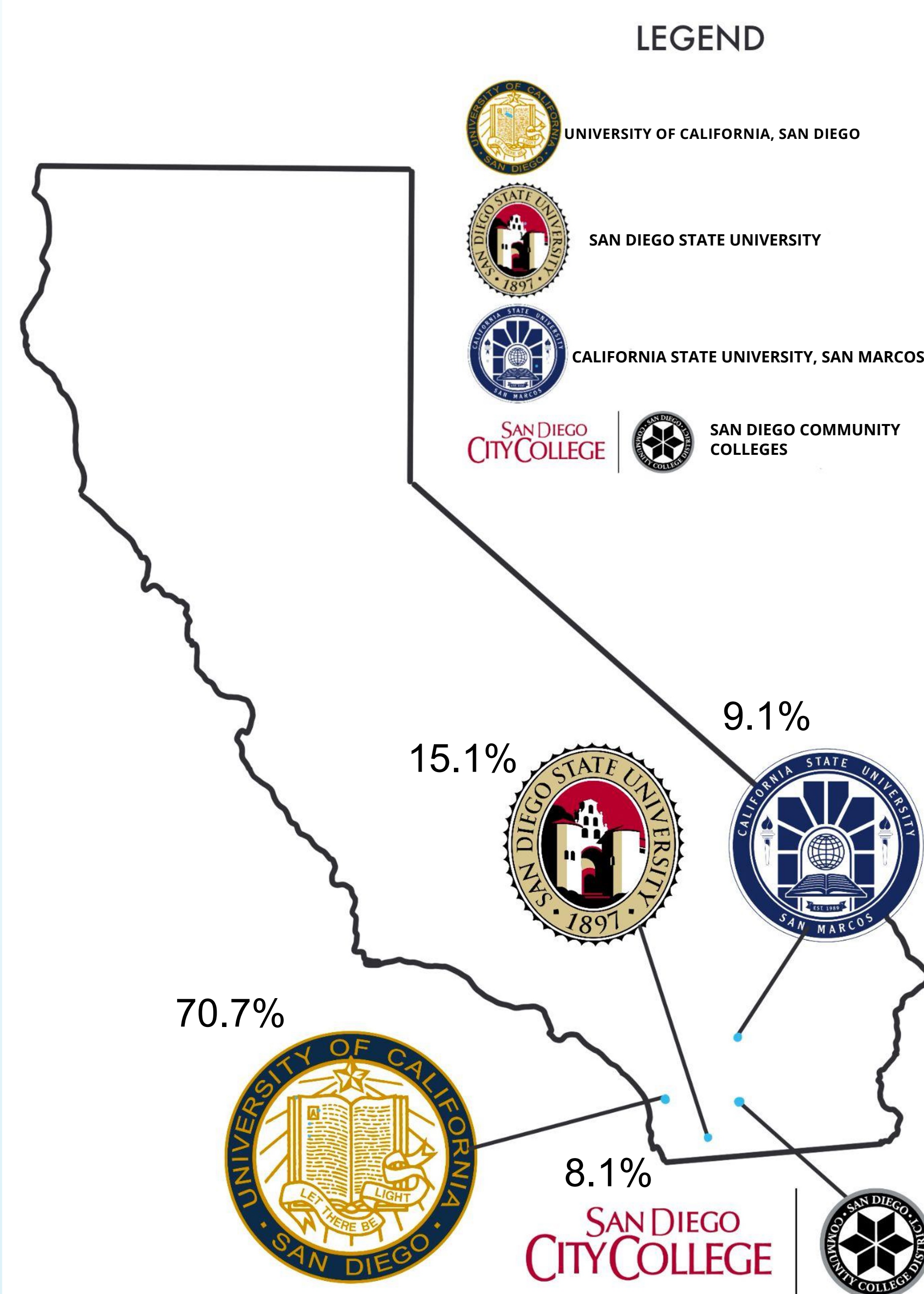
## Methods

- Data Collection:** In April-May 2022, a total of 99 students participated in a cross-sectional study examining the impact of instructional modalities during COVID-19.
- The survey was collected via Google Forms and was shared through Facebook groups and Reddit pages.
- Eligibility criteria included: 1) being 18 years or older; 2) enrolled as an undergraduate student at a public San Diego university or college
- Measures:** Data were collected on sociodemographic characteristics. Students were surveyed on their quality of life and class modality experiences. The PATH Study Wave 1 questions on QoL survey were used as well.
- Analysis:** Chi-Squared tests were used to analyze the correlation between quality of life and class modality, and student school year and overall satisfaction with virtual instruction.

## Results

- Majority of participants were from from UC San Diego and San Diego State University (Figure 1).
- 67% identified as female, 29% as male, and 91.9% (n=91) were between the ages of 18-22.
- There was data representation for students in all school years (Table 1).
- Most students reported their quality of life as not overly good or bad, (Figure 2).
- There was indifference or slight satisfaction with virtual learning (Figure 3).
- Students' quality of life was dependent on the induced instructional modalities ( $p = .366$ ) (Table 2).
- Students' individual school year was dependent on their overall satisfaction with the instructional modalities ( $p = .032$ ) (Table 3).

Figure 1. Map of participating institutions in San Diego County



## Results

Table 1. Participant Characteristics (n=99)

| Variable        | N=99 (100%) |
|-----------------|-------------|
| <b>Age</b>      |             |
| 18-22           | 91 (91.9%)  |
| 23-25           | 8 (8.1%)    |
| <b>Year</b>     |             |
| First           | 13 (13.1%)  |
| Second          | 21 (21.2%)  |
| Third           | 28 (28.3%)  |
| Fourth          | 31 (31.3%)  |
| Fifth or higher | 6 (6.1%)    |

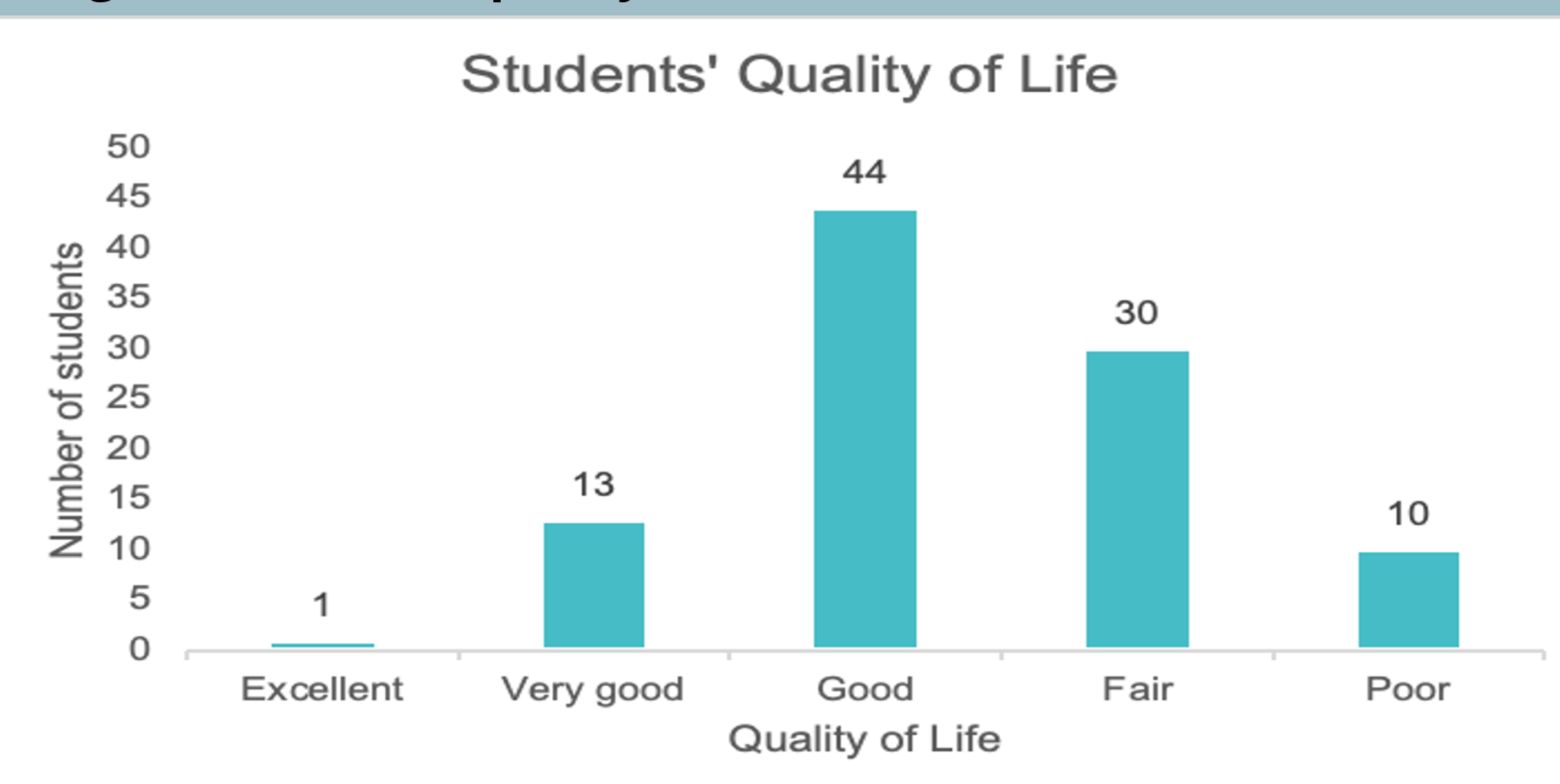
Table 2. Quality of Life and Instructional Modality Preference

|                 | Instructional Modalities Preferences, n (%) |        |           |               |
|-----------------|---|--------|-----------|---------------|
|                 | 100% Remote                                 | Hybrid | In-Person | No Preference |
| Quality of Life | $\chi^2 = 125.047, P = 0.366$               |        |           |               |
| Excellent       | 1   | 0      | 0         | 0             |
| Very Good       | 2   | 9      | 2         | 0             |
| Good            | 4   | 24     | 16        | 0             |
| Fair            | 1   | 15     | 13        | 0             |
| Poor            | 1   | 6      | 3         | 0             |

Table 3. Student' School Year and Satisfaction

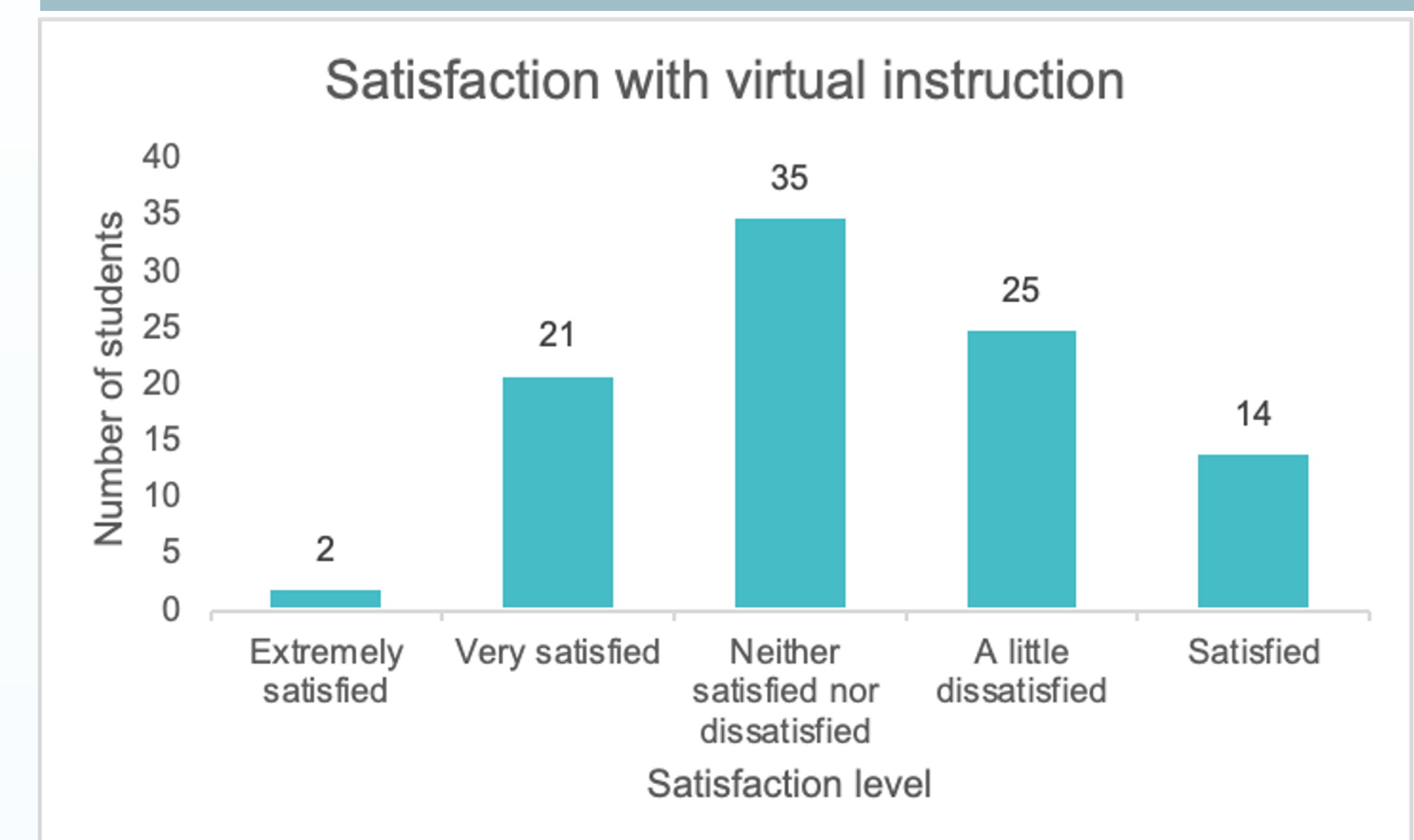
| Student School Year | Instructional Modalities Satisfaction, n (%) |                |                                    |                       |              |
|---------------------|--|----------------|------------------------------------|-----------------------|--------------|
|                     | Extremely Satisfied                          | Very Satisfied | Neither satisfied nor dissatisfied | A little dissatisfied | Dissatisfied |
| Student School Year | $\chi^2 = 35.955, P = 0.032$                 |                |                                    |                       |              |
| 1st                 | 0 (0)  | 1 (7.7)        | 7 (53.9)                           | 4 (30.8)              | 0 (0)        |
| 2nd                 | 0 (0)  | 3 (14.3)       | 4 (19.1)                           | 8 (38.1)              | 6 (28.6)     |
| 3rd                 | 0 (0)  | 9 (42.9)       | 10 (35.7)                          | 7 (25)                | 3 (10.7)     |
| 4th                 | 2 (6.5)                                      | 4 (12.9)       | 14 (45.2)                          | 6 (19.4)              | 5 (16.1)     |
| 5th+                | 0 (0)  | 5 (83.3)       | 1 (16.7)                           | 1 (16.7)              | 0 (0)        |

Figure 2. Student quality of life since the COVID-19 Pandemic



## Results

Figure 3. Student satisfaction with virtual instruction



## Conclusion

- There was a significant difference between quality of life and class modality instruction.
- Ultimately, the quality of life and class modalities were determined to be dependent on one another.
- Students who reported having a "good" quality of life coincided with the hybrid instructional modality learning based on flexibility in attending class.

## Policy Implications

- University administrators should consider adopting student-centered resources and methods of hybrid instruction in order to promote both student satisfaction and quality of life.
- Professors could provide supplemental video sessions to support student learning

## References

- National Center for Education Statistics (2021). *84% of All Undergraduates Experienced Some Or All Their Classes Moved to Online-only Instruction Due to the Pandemic*. Retrieved from [https://nces.ed.gov/whatsnew/p1ress\\_releases/06\\_16\\_2021.asp](https://nces.ed.gov/whatsnew/p1ress_releases/06_16_2021.asp)
- Bird, K. A., Castleman, B. L., & Lohner, G. (2022). *Negative Impacts From the Shift to Online Learning During the COVID-19 Crisis: Evidence From a Statewide Community College System*. AERA Open. <https://doi.org/10.1177/23328584221081220>