

Introduction

- SARS-COV-2, the novel virus that causes the Corona Virus Disease (COVID-19), halted the world within three months of its discovery.
- By the fall 2020 academic school year, approximately 93% of US households with school-aged children were learning from home
- Educators were forced to quickly transition their curriculum and teaching methods to accommodate remote learning. In response, some students did not adapt to these changes as quickly as they were implemented.
- Past studies indicate students with high academic achievements tend to have better time management skills. Such skills provide structure necessary for independent focus on academic tasks or personal responsibilities. Good time management skill may help students adapt to the academic challenges of this pandemic.
- Current High school seniors might be one of the most affected group of students. They have to assess how their semesters during the pandemic affected their cumulative GPA, as well as decide whether or not they should postpone their college plans until after the pandemic.
- Among students currently enrolled in K-12 schools, the financial loss from delayed learning and high school dropouts is estimated to be \$110 billion
- It is estimated that the transitioning to remote learning will set back the average student back academically 5-9 month by the end of spring 2021. A racial disparity was evident in these estimates when students of color were compared to white students (12-16 months and 5-9 months, respectively).

Objectives

- (1) Assess changes in parent-reported GPAs before and during the pandemic.
 - Hypothesis: GPA's will fall during the pandemic
- (2) Determine if parents' perception of their child's time management skills is associated with the parent reported GPAs.
 - Hypothesis: Students with higher time management skills will have higher GPAs
- (3) Assess parents' perceptions of high school seniors' college plans before and after the pandemic began.
 - Hypothesis: More students will plan to take a gap year or not attend college during the pandemic

Methods

- Sample Population: 53 parents of Health Science Academy High School seniors were invited to completed a quantitative survey. The survey collected demographic factors, GPA, time management skills, and college plans
- Outcome: Parents were asked to report their child's
 - Science GPA, and Math GPA, and overall GPA (out of 100) for three semesters: Fall 2019 - Fall 2020.
 - Their perception of their child's time management skills
 - Their perception of their child's college enrollment plans before and during the pandemic
- Statistical Analysis: Descriptive statistics such as median, and frequency distribution is used to summarize demographic characteristics and assess the study's outcome of interest.

Results

Table 1: Demographic Characteristics

Descriptive Characteristics	N (%)
Age of parents (years), Median(IQR)	49.00 (45.00, 54.00) (N=23)
Less than 36	1(4.30)
36 – 49	11(47.80)
50+	11(47.80)
Ethnicity (N=23)	
Hispanic	3(13.00)
Non-Hispanic	20(87.00)
Race (N=23)	
White	4(17.40)
Black/African American	17(73.90)
Asian	2(8.60)
Sex (N=23)	
Female	19(82.60)
Male	4(17.40)
Parent's Education (N=23)	
Less than High School	2(8.70)
High School or GED	5(21.70)
Some college	8(34.70)
Bachelor's Degree	6(26.10)
Graduate Degree	2(8.70)
Parent's Employment Status (N=23)	
Full time	16(69.60)
Part time	2(8.70)
Retired	2(8.70)
Unemployed/laid off	3(13.00)
Income 2019 (N=20)	
Less than \$39,999	8(40.00)
\$40,000 - \$79,999	7(35.00)
\$80,000+	5(25.00)
Income 2020 (N=19)	
Less than \$39,999	9(47.40)
\$40,000 - \$79,999	6(31.60)
\$80,000+	4(21.10)
Assisting (N=23)	
Yes	11(47.80)
No	12(52.20)

Figure 3: High School Seniors College plans Before and During the Pandemic

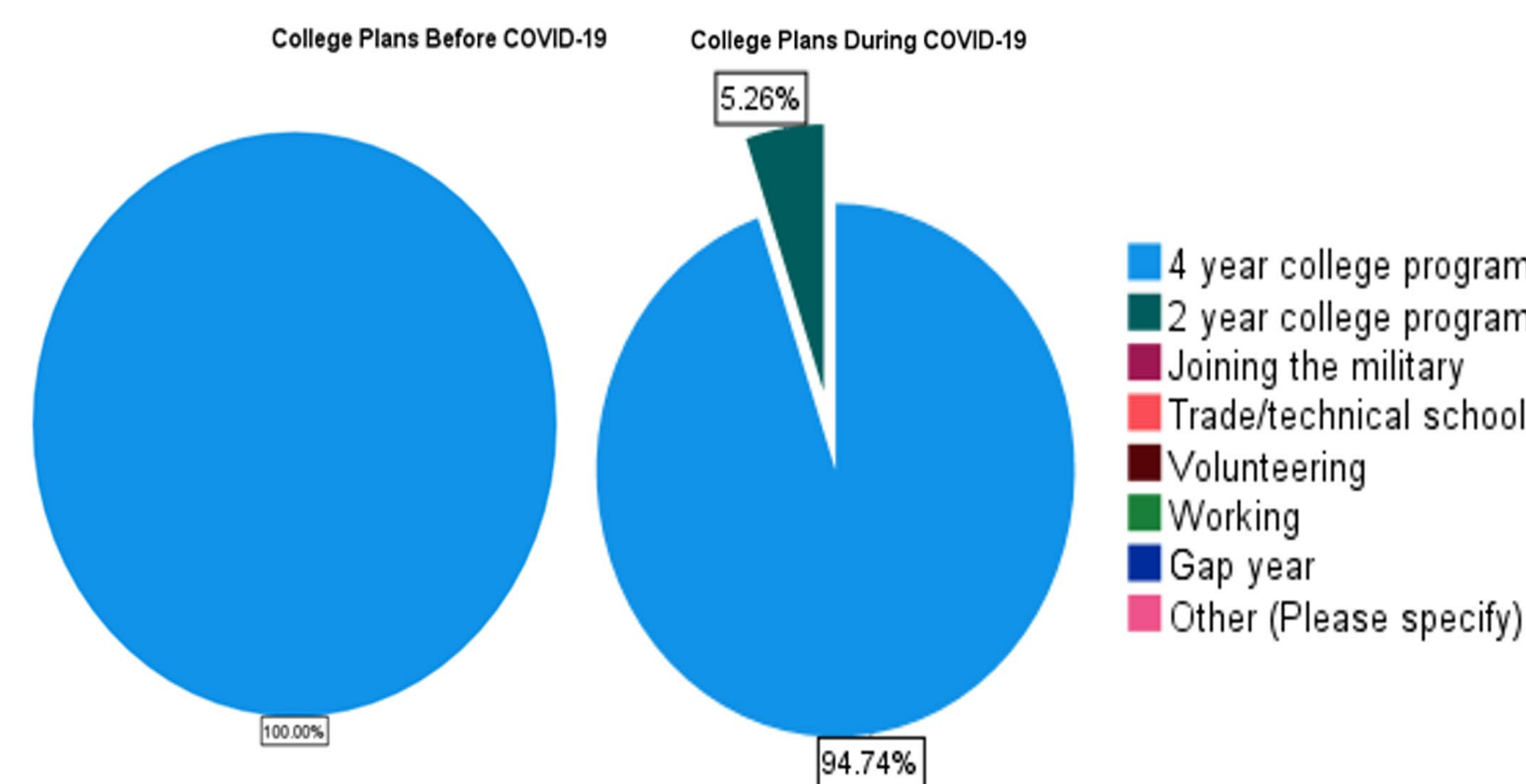


Figure 1: High School Seniors GPAs from Fall 2019 – Fall 2020

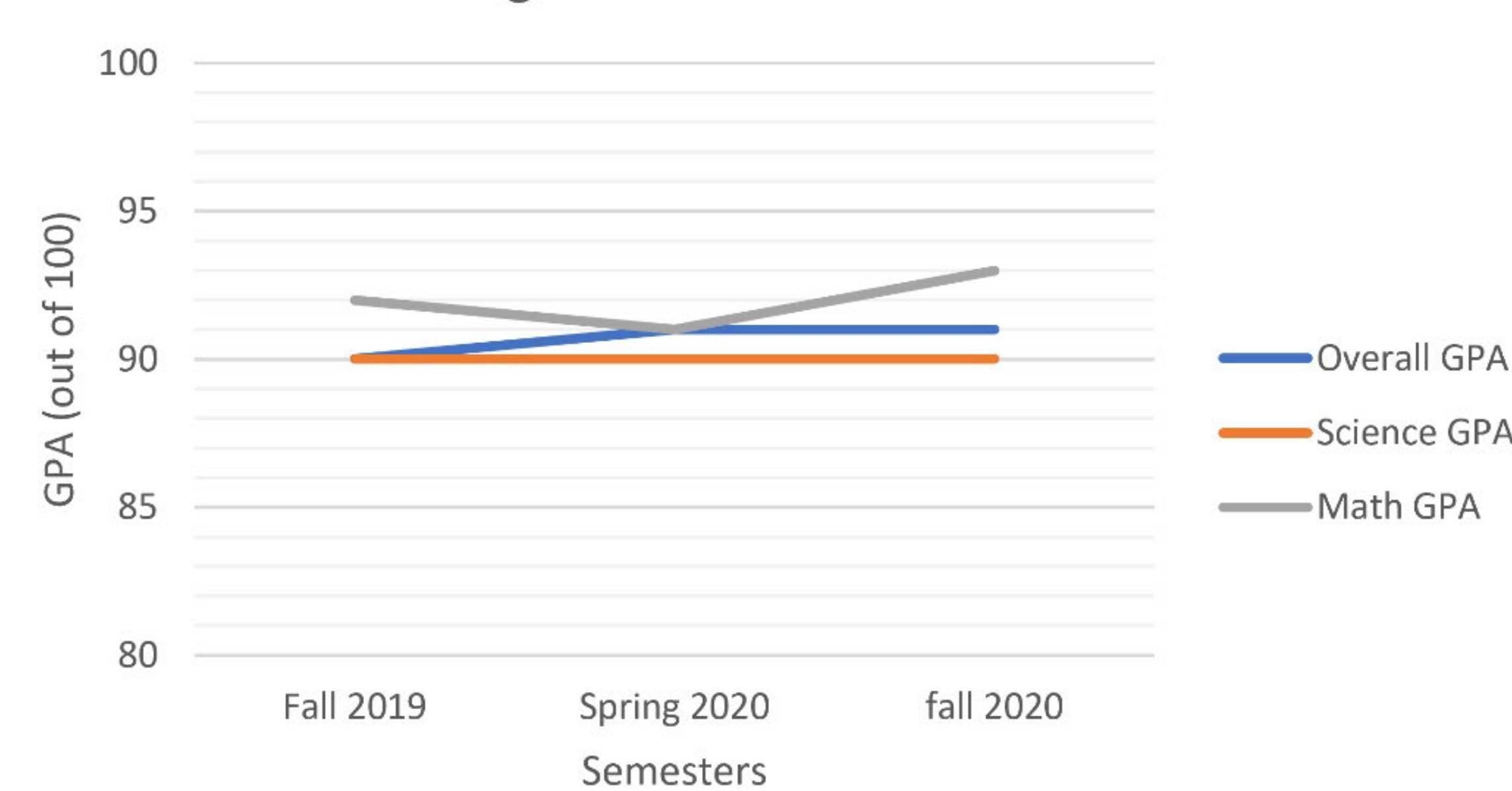


Table 3: Time Management Scales

Time management Scale (12-60), Median(IQR)	40.00 (31.50, 51.00) (N=16)
Short Term Planning Scale (4-20), Median(IQR)	16.00 (11.25, 20.00) (N=18)
Long Term Planning Scale (4-20), Median(IQR)	13.00 (9.00, 15.50) (N=17)
TM Attitude (4-20), Median(IQR)	14.00 (11.00, 16.00) (N=19)

Table 4: Time Management Skill of HSA High School Seniors

Points (12-60)	N(%)	Level
39.7 or higher	9(56.3)	High
31.7-39.6	3(18.8)	Moderate
31.6 or lower	4(25)	Low
TOTAL	16(100)	

Figure 2: High School Seniors fall 2020 GPA by Time management groups

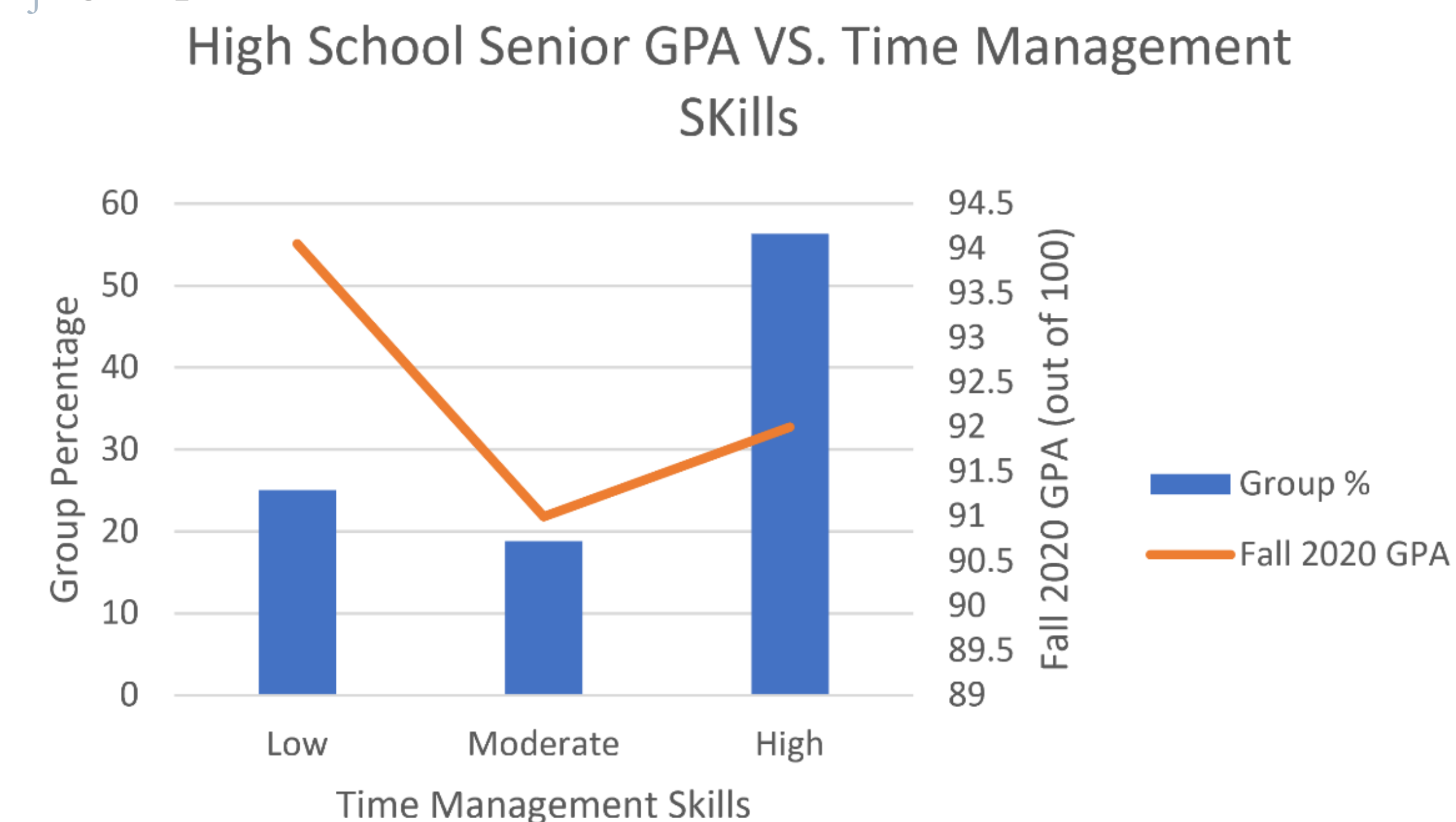
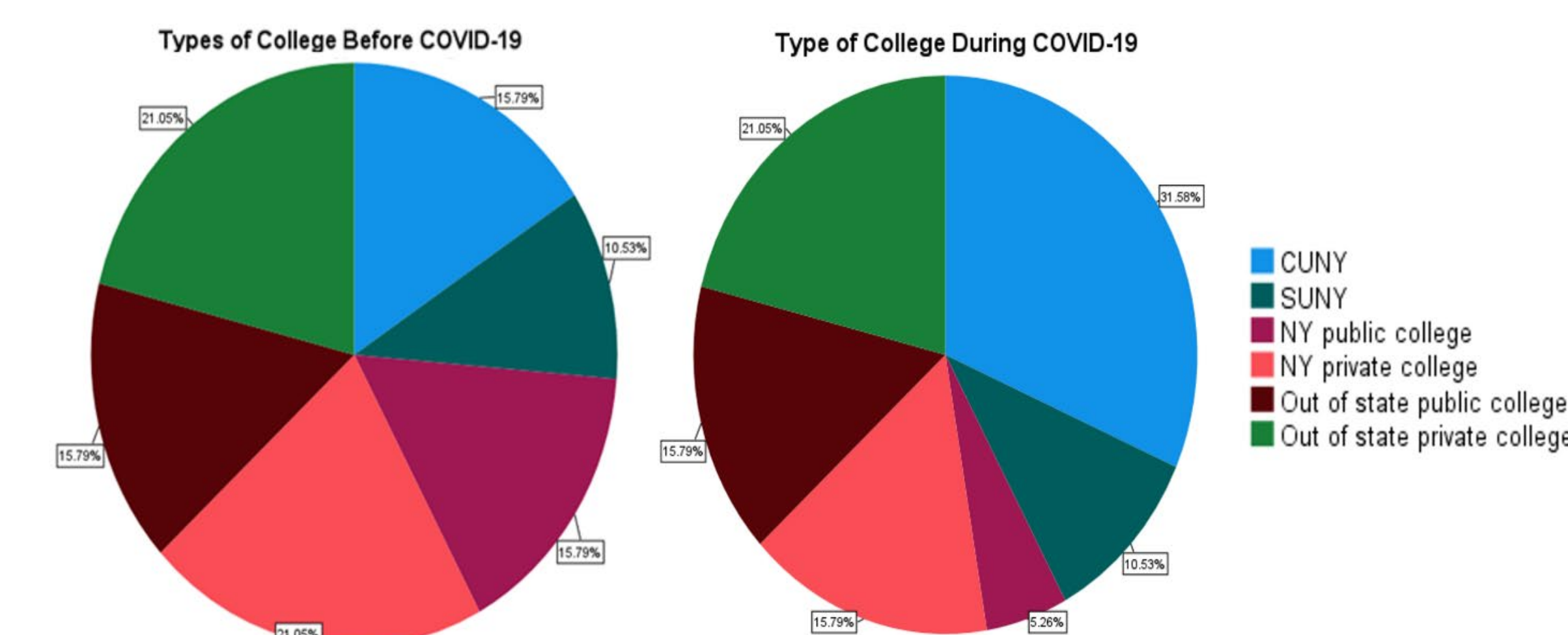


Figure 4: Type of College of Interest Before and during the Pandemic



Discussion/Conclusion

- Given the small number of respondents and the insufficient power to detect meaningful differences, the results need to be interpreted with caution.
- The first aim of this study is to compare students GPAs before and during the pandemic.
 - HSA high school senior maintained a relatively high median GPA from before and throughout the pandemic.
- The second aim of the study was to investigate the influence of time management skills on students' GPAs within a pandemic.
 - More than half of the parents indicated that their child has good time management skills. Only a few parents noted that their child had moderate or poor time management skills.
 - Time management skills does not appear to influence high school senior academic performance.
- The third aim of the study is to assess differences in high school seniors' college plans before and after the pandemic began. In both time points, all of the parents indicated that their child intend be going to college after graduation.
- HSA is rigorous enrichment after school program for students in 9-12th grade. They also require their students to maintain a 3.5 (i.e., 90 percent) in order to remain in the program.
- Based on the parents' demographic profile, a social and financial component may also justify HSA students' academic success

Limitations:

- Small sample size
- Some participants did not report the semester GPA correctly
- The study's findings are based on survey data answered by the parent on behalf of the student

Future directions:

- Replicate the study on a larger scale
- Try to incorporate different types of supplemental learning programs (e.g., after-school programs, tutoring programs, enrichment programs)
- Compare and contrast minority students with or without a supplemental learning program

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