

Background

- It is estimated that about 75-80% of the US population needs to be vaccinated for COVID-19 in order to achieve herd immunity.¹
- However, only about 60% of Americans say they would definitely or probably receive a COVID-19 vaccine.²
- In acknowledging these statistics, potential problems arise when campuses such as the University of California plan on returning to in-person instruction in the fall of 2021.³ This means that enough people in the populations must be vaccinated to reach herd immunity for in-person instructions in college campuses to resume.
- College students are exposed to multiple sources of information ranging from health agencies to their personal network. In a survey conducted, high levels of trust in mass media, health agencies, scientists, and pharmaceutical companies was slightly associated with high vaccine acceptance. However, it was also found that vaccine acceptance was positively associated with scientists as an information source, but negatively associated with pharmaceutical companies.⁴
- College students must learn about the COVID-19 vaccine in a way that encourages them to accept and receive the vaccine to increase herd immunity and facilitate the transition to in-person learning.

Objective

- To determine which source between health agencies, scientists, and vaccine manufacturers college students trust the most regarding COVID-19 vaccine information in UC San Diego

Methods

- Platform for Survey
 - A Google Form survey consisted of questions that our group curated was developed for collecting data
 - The survey link was sent to college students via social media (Facebook, Instagram, Twitter) on class pages and email sent by the Department of Family Medicine and Public Health
 - The survey was open for 3 weeks and it was estimated to be completed in less than 5 minutes anonymously

Methods

- Survey Components
 - Our survey consisted of four components: 1. Demographics, 2. Vaccine-related knowledge, 3. Likelihood of college students taking the vaccine based on the recommendations of various health sources, and 4. Perception of the various sources of health information
- Statistical Analysis
 - SPSS software was used for data analysis specifically Chi-Square Tests and Cross Tabulations

Results

- Our survey garnered n=180 participants, 45 are graduate + professional students and 135 are undergraduate students
- Participants believe the most trustworthy source of information about the COVID-19 vaccine are Health Agencies while the least trusted are vaccine manufacturers such as Pfizer & Moderna (Fig. 1)
- 103 (57.2%) of participants believe college students would still receive the vaccine based on the recommendations of Vaccine Manufacturers despite being the least trusted source of information (Fig. 2)

Chi-Square Tests				
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	91.220 ^a	1	.000	
Continuity Correction ^b	88.804	1	.000	
Likelihood Ratio	111.126	1	.000	
Fisher's Exact Test				.000
Linear-by-Linear Association	90.967	1	.000	
N of Valid Cases	360			

Figure 3 : Chi-Square Test of Independence Between Health Information Source and Vaccine Uptake

BasedOnInforSource * RecieveOrNot Crosstabulation					
BasedOnInforSource	Based on HA	Count	RecieveOrNot		Total
			Likely/Very Likely	Unlikely/Very Unlikely	
Based on HA	Count	178	2	180	
	Expected Count	140.5	39.5	180.0	
	% within BasedOnInforSource	98.9%	1.1%	100.0%	
Based on VM	Count	103	77	180	
	Expected Count	140.5	39.5	180.0	
	% within BasedOnInforSource	57.2%	42.8%	100.0%	
Total	Count	281	79	360	
	Expected Count	281.0	79.0	360.0	
	% within BasedOnInforSource	78.1%	21.9%	100.0%	

Figure 4 : Cross Tabulation on Vaccine Uptake Between Health Agencies and Vaccine Manufacturers

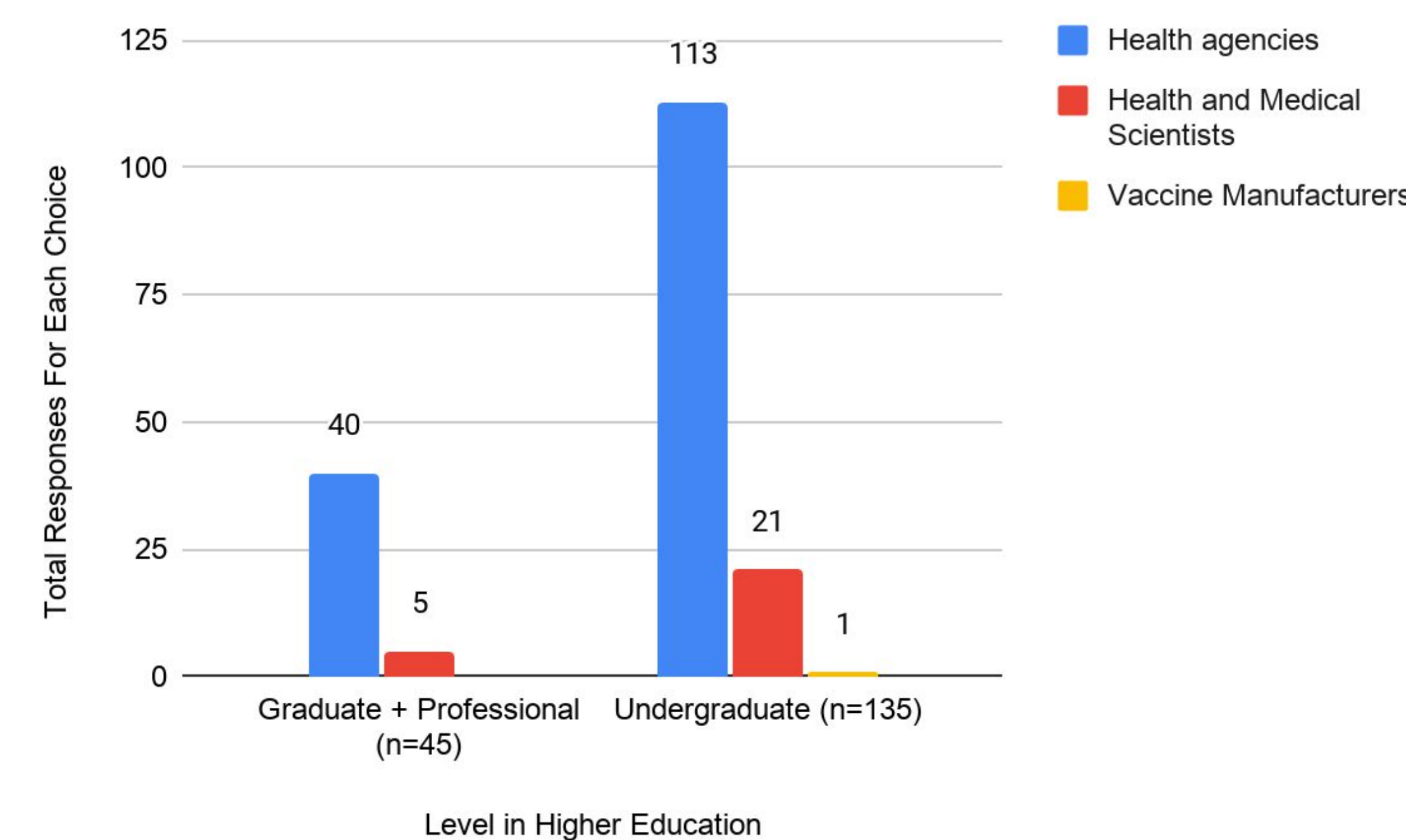


Figure 1 : Distribution of Perception of Which Source of Information is Most Trusted

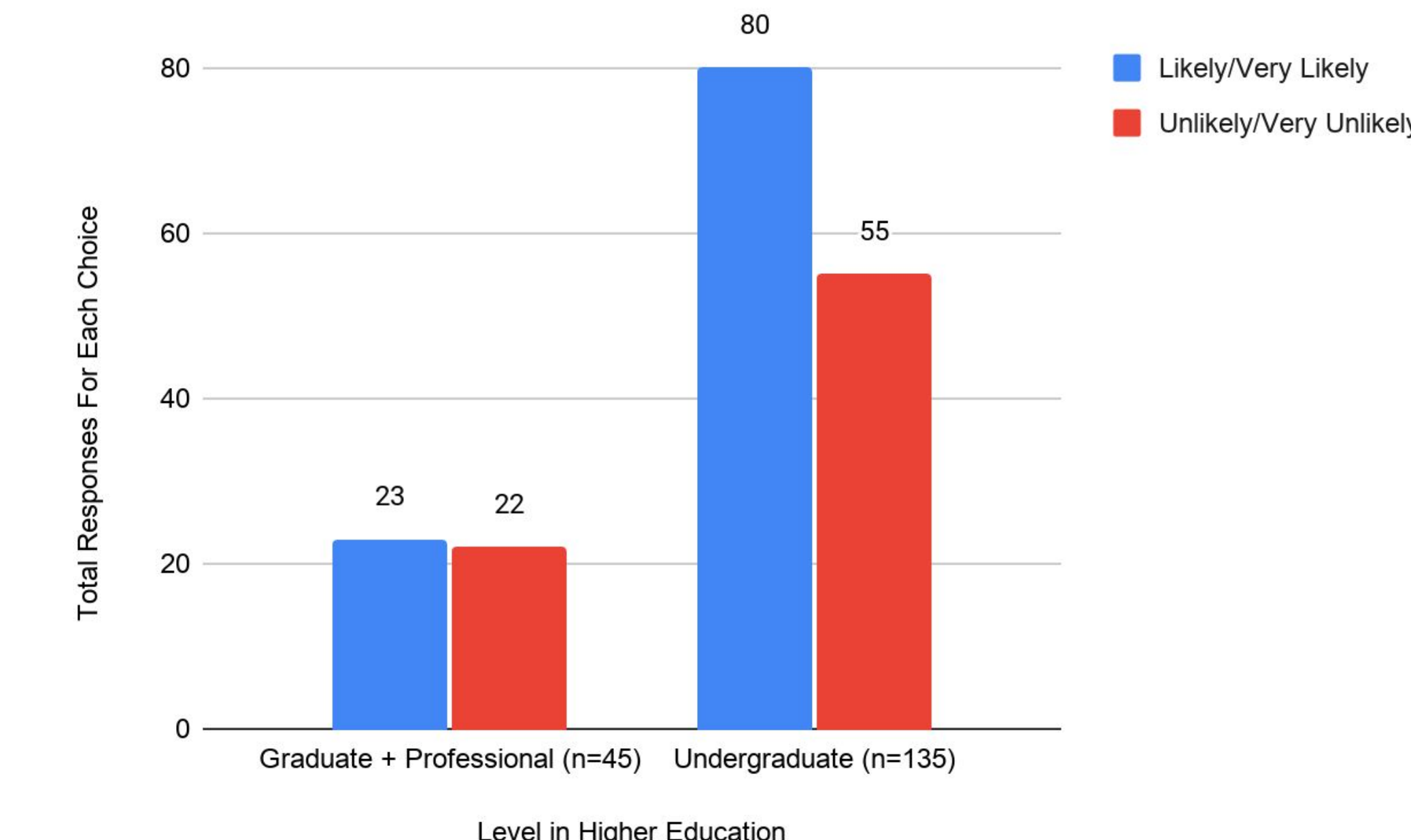


Figure 2 : Perception of Receiving the COVID-19 Vaccine Based on Vaccine Manufacturers

- Chi-Square test of independence shows that vaccine uptake is dependent on information source (Fig. 3)
- Participants believe college students are likely/very likely to receive the COVID-19 vaccine based on HA more than expected amount of times than based on VM (Fig. 4)

Conclusion

- Health Agencies are believed the most trusted source of information about the COVID-19 vaccine, while vaccine manufacturers are the least trusted.
- With $P < 0.5$, there is a significant relationship between health information source and vaccine acceptance (Fig. 3)
- Vaccine acceptance is higher with the recommendations of health agencies than vaccine manufacturers.(Fig. 4)

Policy Implications

- UC San Diego should utilize and cite information from health agencies in regards to COVID-19 vaccinations to better promote vaccine uptake
- Better promotion of health agencies' information will in turn lead to a better rate of vaccine acceptance and possible vaccination rates amongst college students at UC San Diego

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