

COVID VACCINE

To Trust or Not to Trust?

Communications 510 Final Research Project

December 07, 2021

Abstract

March of 2020, residents of Connecticut were told that the state would be closing due to the Coronavirus outbreak. The goal was to prevent the spread and “flatten the curve”, as they would explain it. Months later, we were still not completely open, and masks became our new norm. Desperation came over like a wave. People needed normalcy. They needed a cure.

Introduction

In December of 2020, the first person in the state of Connecticut received the Moderna vaccine against COVID-19 (*Seal, 2020*). From that point on, the debate took center stage. Could we trust the vaccine? A number of articles came out from both sides of the spectrum. Some stating it would cause infertility, while others explained that the vaccine was being developed for years, we just never needed it, until now. People were pulled in every direction, and some could not tell which way was up.

The conversation escalated when employers were allowed to make it mandatory in order to keep employment statuses. Debates and lawsuits swarmed the country. Was this mandate for the best interest of the people or was it taking away one of our predominant rights as a citizen of the United States? The right to freedom. The hesitation and fear overwhelmed the nation. In the end, is either side wrong for feeling the way they do?

Historical Study/Research

Vaccines have been around since the late 1700's, and have flourished over the years. The first vaccine was created by Edward Jenner, who used cowpox material to create an immunity to small pox, eventually eradicating the disease (*College Physicians of Philadelphia, 2021*). This took many technological changes and adjustments over a 200-year period. The next vaccine was rabies in 1885 (*College Physicians of Philadelphia, 2021*). An abundance of other vaccines followed over the years. The question is, with all of these vaccines in place, why are people hesitant about the COVID vaccine?

Studies have begun to develop concerning people's perception of the COVID-19 vaccine. Polls have been taken across the world, and although confidence is growing, there are distinctions based on socio-economic status and ethnicity (*Reals, 2021*). In different countries, including Germany and Italy, there is a reluctancy based on career, healthcare workers. Data shows that many individuals in healthcare are hesitant to receive the vaccine. In January, research was obtained in Italy. At the time, only 1 in 5 healthcare workers said they would get the vaccine (*Reals, 2021*). This data shows that the United States is not the only country struggling to trust the new vaccine. Will this improve with more administrations and explanations? Only time will tell.

Hypothesis

Do people trust the vaccine? The question entails two different sections, (a) The people that trust the vaccine is correlated to wanting mandates put in place and (b) The people that want

the vaccine mandated feel that the people that do not want to get the vaccine do not care about others well-being.

Method

I conducted a survey through Survey Monkey. Through the social media outlets of Instagram and Facebook, I was able to post the survey and direct message individuals in order to obtain participation. This included a disclosure, explaining the nature of the survey and the security of their information. The only personal information obtained was demographic details including age, race/ethnicity, gender, education, and marital status.

Disclosure reads:

“The COVID vaccine is a popular topic of discussion. This survey explores the public's opinion on the current and future state of the vaccine.

This survey pertains to a study on beliefs pertaining to the COVID vaccine. Participants do not have any conflict of interest and are participating at their own will. All materials will remain confidential. Personal information that will be disclosed consist of: Participant age, gender, marital status, education/employment status, and answers provided.

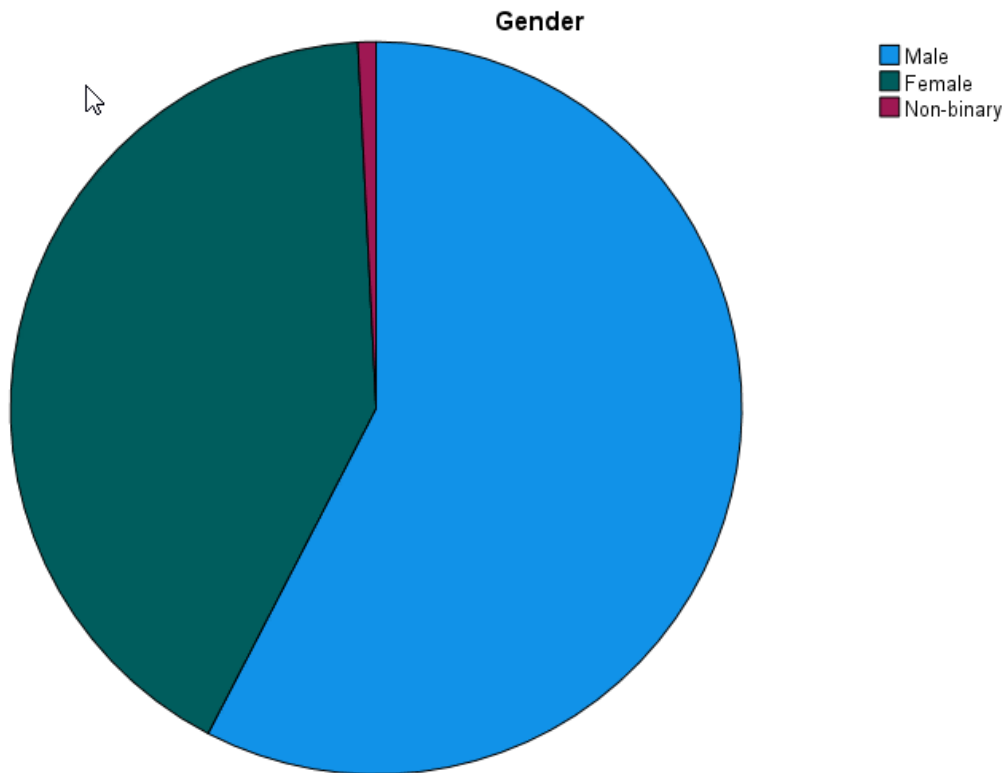
By participating, you are acknowledging and agree to the terms provided.”

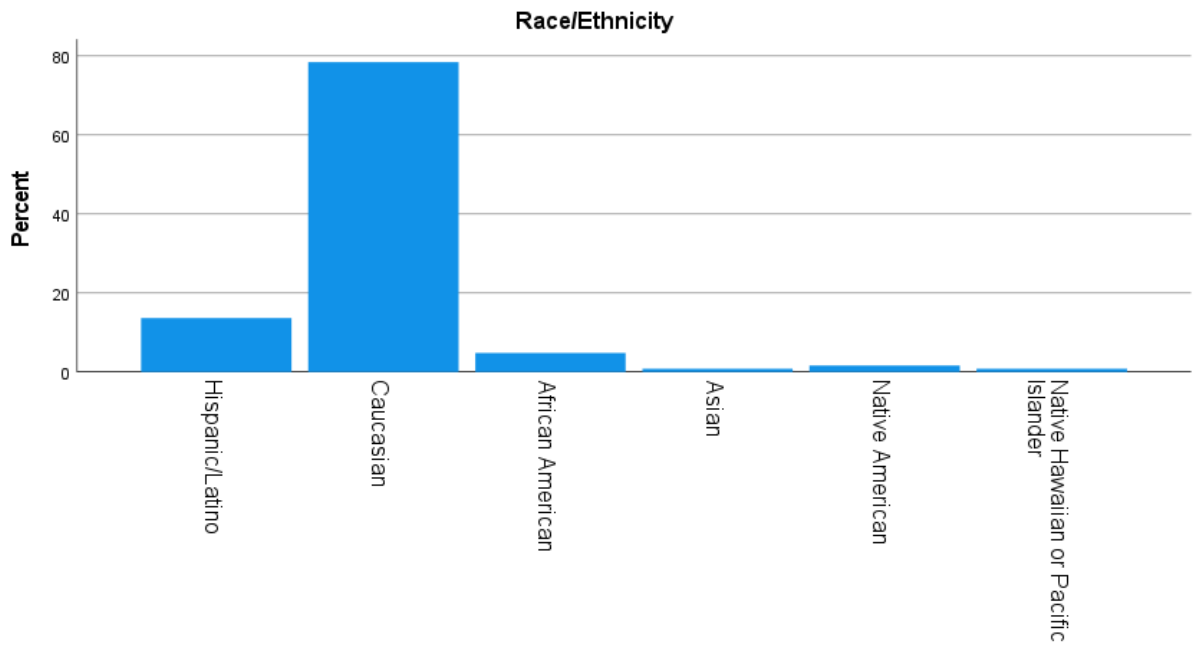
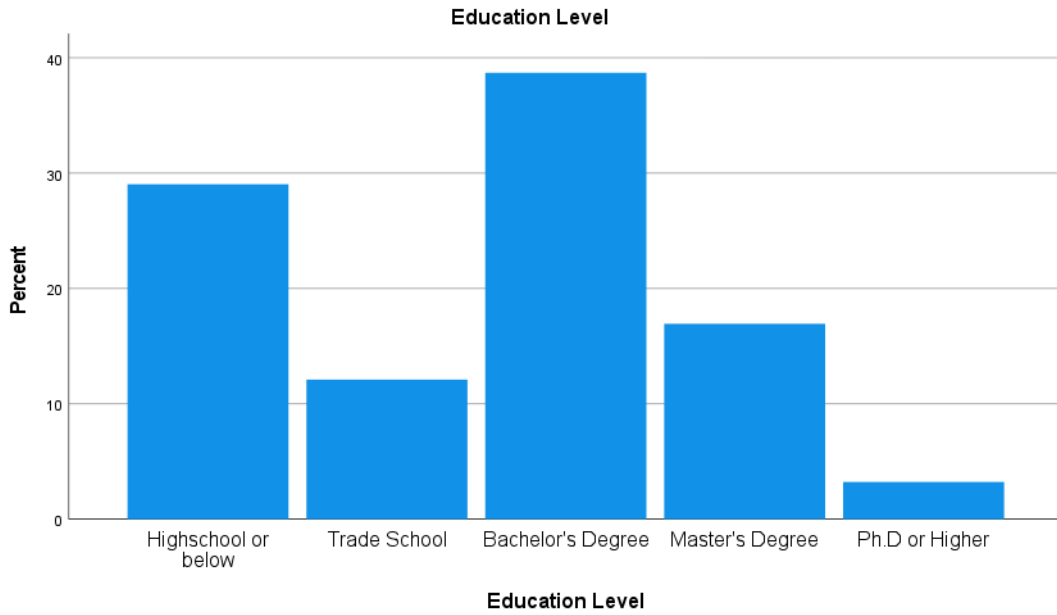
The survey consisted of a total of 14 questions, 7 were specific to the COVID vaccine formatted as a likert scale for the individual to identify their beliefs and the rest were demographic and social media usage questions.

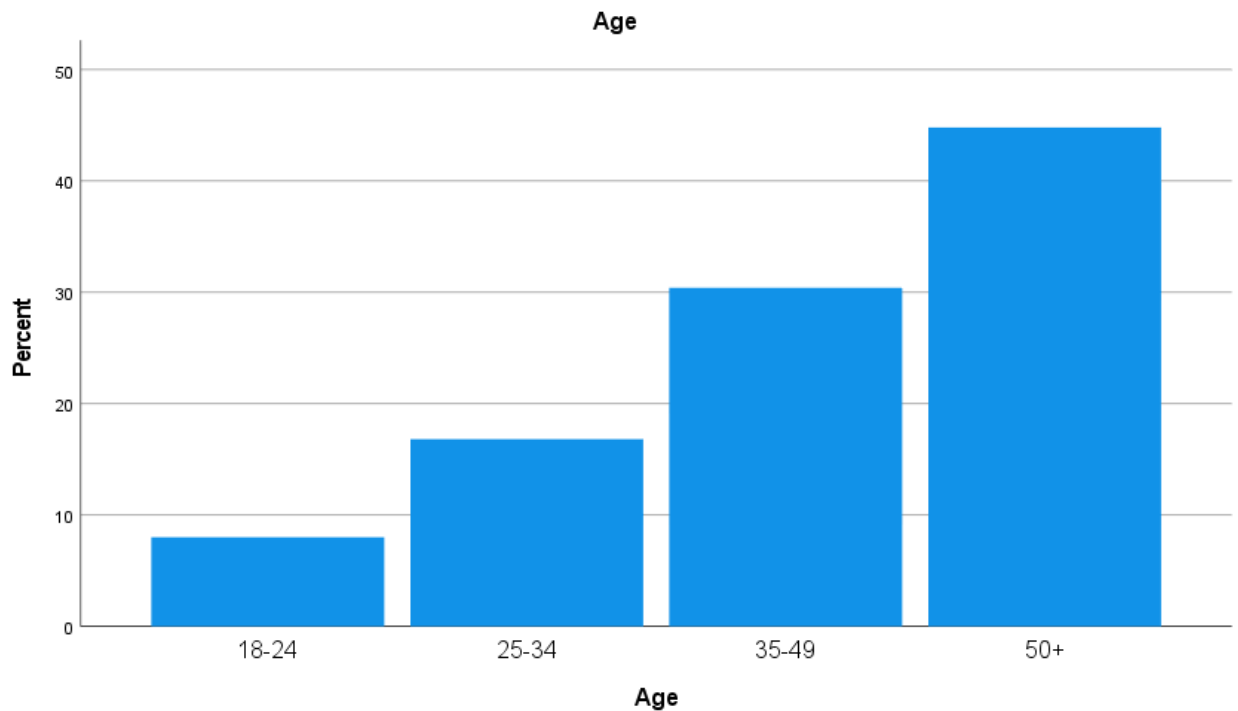
I then utilized SPSS by inputting the data in order to analyze the specifics and correlations between questions.

Results

With analyzing my research and survey data, I began by looking at the demographic information provided. Through this study, though there were slight variances, I was able to obtain an array of individuals from different ethnicities, genders, and backgrounds. This helps to distribute the beliefs and discovers trends.







My hypothesis is a focus on trust and how people perceive individuals that do not want the vaccine. I began by looking at trending data. This required an analysis of correlations between questions. I started with looking at the different things asked to see if there were any correlations identified by responses.

The first line shows a correlation between trust and whether the vaccine should be required. The more a person trusts it, the more they believe it should be mandated. There is also correlation identified between the employer mandate, and federal mandate. It also slightly correlated with the safety of children. People who believe it is safe for children, specifically,

believe it should be mandated. There was also a slight correlation between agreeing with a mandate and believing that people who do not get the vaccine do not care about others.

		Correlations					
		Trust	Safe for Children	Government Mandate	Employer Mandate	Unvaccinated Don't Care About Others	Should not be required
Trust	Pearson Correlation	1	-.683**	-.660**	-.640**	-.372**	.612**
	Sig. (2-tailed)		<.001	<.001	<.001	<.001	<.001
	N	125	125	125	125	125	125
Safe for Children	Pearson Correlation	-.683**	1	.690**	.692**	.476**	-.646**
	Sig. (2-tailed)	<.001		<.001	<.001	<.001	<.001
	N	125	125	125	125	125	125
Government Mandate	Pearson Correlation	-.660**	.690**	1	.878**	.583**	-.713**
	Sig. (2-tailed)	<.001	<.001		<.001	<.001	<.001
	N	125	125	125	125	125	125
Employer Mandate	Pearson Correlation	-.640**	.692**	.878**	1	.561**	-.683**
	Sig. (2-tailed)	<.001	<.001	<.001		<.001	<.001
	N	125	125	125	125	125	125
Unvaccinated Don't Care About Others	Pearson Correlation	-.372**	.476**	.583**	.561**	1	-.551**
	Sig. (2-tailed)	<.001	<.001	<.001	<.001		<.001
	N	125	125	125	125	125	125
Should not be required	Pearson Correlation	.612**	-.646**	-.713**	-.683**	-.551**	1
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001	
	N	125	125	125	125	125	125

** . Correlation is significant at the 0.01 level (2-tailed).

Correlations

		Safe for Children	Government Mandate
Safe for Children	Pearson Correlation	1	.690**
	Sig. (2-tailed)		<.001
	N	125	125
Government Mandate	Pearson Correlation	.690**	1
	Sig. (2-tailed)	<.001	
	N	125	125

** . Correlation is significant at the 0.01 level (2-tailed).

Correlations

		Government Mandate	Trust
Government Mandate	Pearson Correlation	1	-.660**
	Sig. (2-tailed)		<.001
	N	125	125
Trust	Pearson Correlation	-.660**	1
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Unvaccinated Don't Care About Others	Pearson Correlation	.583**	1
	Sig. (2-tailed)	<.001	
	N	125	125

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I then started to look at the specificity of the responses in terms of trust and whether people who do not want to get vaccinated do not care for others. When the statement, “I do not

trust the COVID vaccine,” was posed, I saw trending based on a few key demographic distinguishers.

More participants that identify as Male trust the vaccine, while women remained neutral. This can be affected by the amount of people that participated in the survey. 56.7% of the participants are male, while 40.9% are female, and .8% are non-binary.

Gender * Trust Crosstabulation

		Trust					Total	
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree		
Gender	Male	Count	15	22	14	10	11	72
		Expected Count	15.0	17.9	15.6	11.5	12.1	72.0
		% within Gender	20.8%	30.6%	19.4%	13.9%	15.3%	100.0%
	Female	Count	10	9	13	10	10	52
		Expected Count	10.8	12.9	11.2	8.3	8.7	52.0
		% within Gender	19.2%	17.3%	25.0%	19.2%	19.2%	100.0%
	Non-binary	Count	1	0	0	0	0	1
		Expected Count	.2	.2	.2	.2	.2	1.0
		% within Gender	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Total	Count	26	31	27	20	21	125	
	Expected Count	26.0	31.0	27.0	20.0	21.0	125.0	
	% within Gender	20.8%	24.8%	21.6%	16.0%	16.8%	100.0%	

The highest rate of trusting the vaccine is held with individuals who have a Ph.D or higher at 75% “strongly agreeing”, and the other 25% “agreeing”. Individuals whose highest level of education is high school or below has 47% that do not trust the vaccine. While the Bachelor’s degree individuals are at a combine rate of 52% for trusting the vaccine.

Education Level * Trust Crosstabulation

Count		Trust					Total
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Education Level	Highschool or below	4	7	8	10	7	36
	Trade School	0	5	5	0	5	15
	Bachelor's Degree	15	10	10	8	5	48
	Master's Degree	4	7	4	2	4	21
	Ph.D or Higher	3	1	0	0	0	4
Total		26	30	27	20	21	124

When reviewing Race/Ethnicity, it was found that 47% of Hispanic/Latinos do not trust the vaccine. This is the highest rating among the different races/ethnicities. Both Caucasians and African Americans were at 47% for trusting the vaccine.

Race/Ethnicity * Trust Crosstabulation

Count		Trust					Total
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Race/Ethnicity	Hispanic/Latino	2	7	0	4	4	17
	Caucasian	20	22	25	15	16	98
	African American	3	1	1	1	0	6
	Asian	0	0	1	0	0	1
	Native American	1	0	0	0	1	2
	Native Hawaiian or Pacific Islander	0	1	0	0	0	1
Total		26	31	27	20	21	125

I then carved out the ultimate question, do people believe that the unvaccinated do not care for others. It was identified that most people do not believe this to be true. The High School

and below group were the largest percentage to think this is false at 72 %. The largest age group to find this idea to be false is ages 35-49 at 55%.

Education Level * Unvaccinated Don't Care About Others Crosstabulation

Count

		Unvaccinated Don't Care About Others					Total
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Education Level	Highschool or below	26	4	2	3	1	36
	Trade School	9	3	2	1	0	15
	Bachelor's Degree	21	16	7	2	2	48
	Master's Degree	8	7	4	2	0	21
	Ph.D or Higher	0	1	0	1	2	4
Total		64	31	15	9	5	124

Age * Unvaccinated Don't Care About Others Crosstabulation

Count

		Unvaccinated Don't Care About Others					Total
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Age	18-24	5	2	1	2	0	10
	25-34	9	5	4	3	0	21
	35-49	21	11	3	2	1	38
	50+	29	14	7	2	4	56
Total		64	32	15	9	5	125

Implications

Due to the nature of the material and the fact that this information is new over the course of a year, there is not much research in this specific area. This worked to my advantage when conducting a survey. There was not much to compare to.

As COVID continues to dominant our lives, more studies will take place on the nature of people's beliefs. This survey will establish a baseline of thinking when looking a specific demographics in an area (Connecticut, Northeast, New England).

This information will continue to be detrimental to understanding the American people and how to increase support in the desired direction.

Limitations

The limitations of this survey are that it is looking at a small portion of the state and their beliefs. There could be more value in expanding, not only in Connecticut, but the rest of the country. This would provide a clearer understanding of where the trending lies.

Through the utilization of social media, I obtained an array of responses, but they also all in some way have a connection to me. Though I attempted to divulge in different areas and receive information from different people, it can still hold some limitations to my research.

Conclusion

After reviewing all of the information, although it shows a slight correlation between trust and believing that individuals who do not receive the vaccine do not care about others, most people did not agree with the statement. My hypothesis may be supported with a larger group, but in this study, it did not show a predominant correlation between vaccine trust and individual trust.

There is a positive message that lies within. As more people begin to have trust in the medicine, it does not necessarily mean that they are losing faith in others due to a contrary belief or opinion. If only it can remain this way, the world will be a better place for it.

Resources

Online Survey:

<https://www.surveymonkey.com/r/PCF67HM>

Citations

- Seal, Rajashree (2020) “Connecticut Nurse Becomes First Person to get Moderna Vaccine Shot Against COVID-19 in US”, *India.com*, [Connecticut Nurse Becomes First Person to get Moderna Vaccine Shot Against COVID-19 in US | India.com](#)
- Reals, Tucker (2021) “How Much do People Around the World Trust the COVID-19 Vaccines?”, *CBS News*, [How much do people around the world trust the COVID-19 vaccines? - CBS News](#)
- The College of Physicians of Philadelphia (2021) “The History of Vaccines”, <https://www.historyofvaccines.org/timeline/all>