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THE EFFECTS OF COVID-19 ON THE UNDERPRIVILEGED IN EGYPT AND THE UNITED STATES

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THE EFFECTS OF COVID-19 ON THE UNDERPRIVILEGED IN EGYPT AND THE
UNITED STATES

By

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A capstone project submitted for Graduation with University Honors

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University Honors

University of California, Riverside

APPROVED

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Abstract

The COVID-19 pandemic has impacted the livelihood, financial situations, and coping methods of many people worldwide, especially those of the lowest socioeconomic class. By comparing and contrasting the effects of COVID-19 among the low-income population in Egypt along with the United States, we hope to raise awareness and increase assistance to those whose lives were affected financially. Because Egypt is a developing country, it is hypothesized that the pandemic will have more drastic effects on its underprivileged than that of the United States, a developed country. By having adults over the age of 18, living in the United States, Egypt, and other countries, fill out an 8-10 minute survey in English, we collected and analyzed data through computer programming. We conducted a secondary analysis that compares survey data from lower-socio demographic populations in Egypt and the United States regarding financial losses, lifestyle alterations, and coping mechanisms. Our results led us to conclude that the effects of the COVID-19 pandemic similarly affected the United States and Egypt, with the United States sample data being slightly more influenced. However, because Egypt has fewer resources, their population illustrated fewer who utilized coping methods during this time.

Introduction

      Due to the COVID-19 pandemic, many have lost their jobs and sources of income, leading household consumption to decrease. In addition, with the global lockdown, people had to drastically change their lives in order to adapt to working from home or finding employment when there was none. Many of those who were able to keep their jobs were required to leave their houses for work, risking their lives and those who live with them. Contrastingly, those who were rich enough were able to stay in the comfort and safety of their homes. Unemployment rates have increased in the United States, causing those who were living dollar-to-dollar to support their families, to look for work, and apply for unemployment. In Egypt, poverty levels have increased, leading to more begging on the streets or living with additional people, and expanding their potential exposure to the disease. The purpose of this study is to raise awareness on the effects of Covid-19 on the low socioeconomic classes, especially those in third world countries. Furthermore, we hope to encourage assistance to those in need in these difficult times. This study will be focused on comparing and contrasting the effects of the COVID-19 pandemic among low-income populations in Egypt and the United States, concentrating more specifically on its impact on finance, lifestyle, and coping. If people belong to a low socioeconomic class in Egypt, then the COVID-19 pandemic will have more drastic effects on their finance, lifestyle, and coping than those in a lower socioeconomic class in the United States because it is a third world country with higher poverty statistics and fewer resources to support them.

Literature Review

      The COVID-19 pandemic has caused national lockdowns across the globe, forcing people to alter their daily lives. Many individuals worldwide were living in fear and panic, along

with the uncertainty of educational challenges and job security. Countries have imposed curfews and closed down businesses, leading them to go out of business, and causing people to lose their sources of income (7). Those who are at the bottom of the socioeconomic status have suffered the most because of: their childrens' lack of technology to participate in online education and their decreased or loss of income. They are also forced to expose themselves by finding any work they can, which in most cases is in-person, and many have to spend money on masks, face shields, and hand sanitizers for protection.

Studies have shown that "counties with more diverse demographics, higher population, education, income levels, and lower disability rates were at a higher risk of COVID-19 infection. However, counties with higher proportions with disability and poverty rates had a higher death rate" (1). This is because counties with higher poverty rates lack the money, education, or resources to treat patients. In regions with lower rates of poverty, more can access better healthcare and more experience working with the increased amount of patients. "Studies have [also] shown that there are significant differences in the overall healthcare assessment of rural populations as compared with urban populations" (1). This is because individuals in cities still need to shop at stores for groceries, causing them to come into contact with more people, whether it is at the bank, gas station, or buying shampoo. Those in the countryside have fewer people around them and can socially distance themselves more effectively.

Due to social distancing and loss of income, household consumption has decreased. The global statistics claim that by 2021, the poverty rate would increase with: those " living on less than $5.50 a day would increase by 231 million people, of which nearly 107.8 million people would be pushed into extreme poverty living on less than $1.90 per day" (7). Therefore, in

third-world countries, the poverty rate would increase tremendously compared to that of first-world countries.

In Egypt, a third-world country, there have been similar regulations placed on the population; however, they may be stricter than that of the United States, leading to the reduced number of COVID-19 cases. Schools and universities have been suspended, along with a curfew being implemented where all shops and markets are closed. In addition, there is a complete shutdown on Fridays and Saturdays to minimize exposure and improve social distancing. All means of transportation have been cut off during curfew, all flights into or out of Egypt have been suspended, and all sports and activities are banned. To minimize contamination among patients, Egypt has secured hospitals in each governorate as quarantine hospitals for COVID-19 patients (10). Whereas, hospitals in the United States accept COVID-19 patients to specified floors.

Egypt has a limited amount of money and resources compared to that of the United States. With 1.7% of the population living below the poverty line, Egypt continues to offer basic healthcare as a human right. Its physician density is 0.79 physicians per 1,000 individuals and the hospital bed density is 1.6 beds per 1,000 individuals (11). Contrastingly, the United States has 10.5% of its population living below the poverty line (3), yet has 2.9 beds per 1,000 individuals and 2.59 physicians per 1,000 individuals (4). As a third-world country, Egypt is expected to be able to treat fewer patients, causing an increase in mortality among the population, affecting the livelihood of those who were dependent on them.

However, there may be another reason why a third-world country, although with limited resources, has fewer cases than a first-world country. The Egyptian population may also be a protective factor against the spread of the pandemic. Because the disease has a more serious

effect on the elderly, it is more prevalent in the United States population than that in Egypt. "Egypt announced the first case of COVID-19 in Africa and needed about three months to record 10,000 cases, which was almost double the time that Italy and the USA took to reach the same number of cases" (10). This is because its population has a median age of 24.6 years old with 4.23% of Egyptians being older than 65 (11). Contrastingly, the United States has a median age of 38.4 (5) with 16.9% of individuals over the age of 65 years old (6). Therefore, a higher number of cases in the United States could be a result of the increased percentage of immuno-compromised individuals.

Method

We will be collecting data through an already-completed survey filled out by people living in the United States, Egypt, and other countries around the globe (see Appendix A). The survey includes 63 questions and should take approximately 8-10 minutes to complete. The questions are in the English language and should only be filled out by adults 18+ in age. The areas covered in the survey include socio-demographic profile (11 questions), medical health status (3 questions), pandemic stress index (6 questions), finance and lifestyle (14 questions), psychosocial support (6 questions), post-traumatic stress disorder (1 question), coping (1 question), self-care (3 questions), and people living with HIV (9 questions). In addition, questions were in the yes/no format, check all that apply, degree of agreement (most to least), short-answer, and multiple choice. Most of the questions were closed-ended, and the responses were recorded according to the mentioned instructions. The answers were registered by receiving the filled-in survey and transferring it into an excel sheet. Consent was acquired through the first 10 questions of the survey. In addition, we received IRB-SB approval, since this survey was

completed beforehand. The results will be statistically analyzed as a number and percentage in Stata. I will be using statistical tests and $p<0.05$ will be counted as significant.

For our study, we will be taking into consideration socio-demographic profile, narrowing it down to the questions in Section 1 of the study:

13. What is the highest level of education you completed?

14. What is your current work status?

15. Do you have medical insurance?

We will also focus on finance and lifestyle, and how the pandemic affects those who are already struggling by narrowing it down to Section 4 questions:

32. What financial losses have you experienced because of the COVID-19 pandemic? (Check all that apply)

       Job loss or laid off

       Lost or reduced wages

       Investment/retirement loss

       Travel-related cancellations that were not refunded

       Other (Please specify)

33. Has COVID-19 led to any of the following?

       Loss of other sources of financial support by you or a member of your household

       Loss of your housing, or becoming homeless

       Difficulty paying for basic needs, including food, clothing, shelter, electricity, utilities, etc

       Did you worry about whether food would run out before getting money to buy more?

       Did you ever cut the size of your meals or skip meals because there wasn't enough money for food?

       Were you ever hungry but didn't eat because there wasn't enough money for food?

Unable to afford medical care

We will also be concentrating on the effects of COVID-19 on individuals based on their utilization of coping mechanisms in their responses in Section 7 of the survey:

51. These items deal with ways you have been coping with the stress in your life since the onset of the COVID-19 pandemic. Consider how well the following statements describe your behavior and actions.

I look for creative ways to alter difficult situations.

Regardless of what happens to me, I believe I can control my reaction to it.

I believe I can grow in positive ways by dealing with difficult situations.

Data

A) Question 32: Job Loss or Laid Off

Country	Job Loss	No Job Loss	Total
Egypt	5.145%	94.85%	100%
	39 people	719 people	758 people
United States	19.12%	80.88%	100%
	144 people	609 people	753 people
Overall	14.44%	85.56%	100%
	183 people	1328 people	1511 people

Chi2=53.2103   p=0.6326

A) *5.145% of our sample in Egypt experienced job loss, while 19.12% of our sample in the U.S. experienced job loss due to the pandemic. Since p= 0.6326, it is greater than 0.05, which means that there is no statistical difference between the two groups.*

B) Question 32: Lost or Reduced Wages

Country	Lost/Reduced Wages	No Lost/ Reduced Wages	Total
Egypt	19.66% 149 people	80.34% 609 people	100% 758 people
United States	29.22% 220 people	70.78% 533 people	100% 753 people
Overall	26.02% 369 people	73.98% 1142 people	100% 1511 people

Chi2=15.9771   p=0.0067

B) *19.66% of our sample in Egypt have experienced lost/reduced wages, while 29.22% of our sample in the U.S. experienced lost/reduced wages during the pandemic. Since p= 0.0067, it is less than 0.05, which means that there is a statistical difference between the two groups.*

C) Question 32: Investment/ Retirement Loss

Country	Loss	No Loss	Total
Egypt	4.881%	95.12%	100%
	37 people	721 people	758 people
United States	12.08%	87.92%	100%
	91 people	662 people	753 people
Overall	9.673%	90.33%	100%
	128 people	1383 people	1511 people

Chi2= 19.9865   p=0.1078

C) *4.881% of our sample in Egypt have experienced investment or retirement loss, while 12.08% of our sample in the U.S. experienced investment or retirement loss due to the pandemic. Since p= 0.1078, it is greater than 0.05, which means that there is no statistical difference between the two groups.*

D) Question 32: Travel-related cancellations that were not refunded

Country	Travel Cancellation	No Travel Cancellation	Total
Egypt	5.013% 38 people	94.99% 720 people	100% 758 people
United States	7.968% 60 people	92.03% 693 people	100% 753 people
Overall	6.979% 98 people	6.979% 98 people	100% 1511 people

Chi2=4.5263   p=0.3030

D) *5.013% of our sample in Egypt have experienced non-refunded travel-related cancellations, while 7.968% in the U.S. experienced non-refunded travel-related cancellations due to the pandemic. Since p= 0.3030, it is greater than 0.05, which means that there is no statistical difference between the two groups.*

E) Question 32: Other financial losses

Country	Job Loss	No Job Loss	Total
Egypt	5.145% 39 people	94.85% 719 people	100% 758 people
United States	19.12% 144 people	80.88% 609 people	100% 753 people
Overall	14.44% 183 people	85.56% 1328 people	100% 1511 people

Chi2= 0.0158   p=0.6554

E) *2.902% of our sample in Egypt have experienced other types of financial losses due to the*

pandemic, while our sample in the U.S. experienced 2.789% of other types of financial

losses. Since p= 0.6554, it is greater than 0.05, which means that there is no statistical

difference between the two groups.

F) Question 33: Loss of other sources of financial support by you or a member of your household

Country	Yes	No	Didn't Respond	Total
Egypt	22.30%	8.443%	69.26%	100%
	169 people	64 people	525 people	758 people
United States	35.06%	14.21%%	50.73%	100%
	264 people	107 people	382 people	753 people
Overall	30.79%	12.28%	56.93%	100%
	433 people	171 people	907 people	1511 people

Chi2= 47.2185   p=0.4171

F) *22.3% of our sample in Egypt have experienced loss of financial support, while 35.06% of our sample in the U.S. experienced loss of financial support due to the pandemic. Since p= 0.4171, it is greater than 0.05, which means that there is no statistical difference between the two groups.*

G) Question 33: Loss of your housing, or becoming homeless

Country	Yes	No	Didn't Respond	Total
Egypt	0.1319% 1 person	30.34% 230 people	69.53% 527 people	100% 758 people
United States	18.59% 140 people	30.28% 228 people	51.13% 385 people	100% 753 people
Overall	12.41% 141 people	30.30% 458 people	57.29% 912 people	100% 1511 people

Chi2= 112.2765   p=0.1785

G) *0.1319% of our sample in Egypt have experienced homelessness, while 18.59% of our sample in the U.S. experienced homelessness due to the pandemic. Since p= 0.1785, it is greater than 0.05, which means that there is no statistical difference between the two groups.*

H) Question 33: Difficulty paying for basic needs, including food, clothing, shelter, electricity, utilities, etc

Country	Yes	No	Didn't Respond	Total
Egypt	7.256%	23.22%	69.53%	100%
	55 people	176 people	527 people	758 people
United States	27.09%	22.44%	50.46%	100%
	204 people	169 people	385 people	753 people
Overall	20.45%	22.70%	56.85%	100%
	259 people	345 people	907 people	1511 people

Chi2= 86.3387   p= 0.2763

H) *7.256% of our sample in Egypt have experienced difficulty paying for basic needs, while 27.09% of our sample in the U.S. experienced difficulty paying for basic needs due to the pandemic. Since p= 0.2763, it is greater than 0.05, which means that there is no statistical difference between the two groups.*

I) Question 33: Did you worry about whether food would run out before getting money to buy more?

Country	Yes	No	Didn't Respond	Total
Egypt	6.596% 50 people	24.01% 182 people	69.39% 526 people	100% 758 people
United States	27.62% 208 people	21.78% 164 people	50.60% 381 people	100% 753 people
Overall	20.58% 258 people	22.53% 346 people	56.89% 907 people	100% 1511 people

Chi2= 93.9224   p= 0.2656

I) *6.596% of our sample in Egypt have experienced worries about food running out, while 27.62% of our sample in the U.S. experienced worries about food running out due to the pandemic. Since p= 0.2656, it is greater than 0.05, which means that there is no statistical difference between the two groups.*

J) Question 33: Did you ever cut the size of your meals or skip meals because there wasn't enough money for food?

Country	Yes	No	Didn't Respond	Total
Egypt	2.902%	27.31%	69.79%	100%
	22 people	207 people	529 people	758 people
United States	23.51%	25.90%	50.60%	100%
	177 people	195 people	381 people	753 people
Overall	16.61%	26.37%	57.02%	100%
	199 people	402 people	910 people	1511 people

Chi2= 108.0061   p=0.2282

J) *2.902% of our sample in Egypt have had to cut the size of their meals or skipped meals, while 23.51% of our sample in the U.S. had to cut the size of their meals or skipped meals due to the pandemic. Since p= 0.2282, it is greater than 0.05, which means that there is no statistical difference between the two groups.*

K) Question 33: Were you ever hungry but didn't eat because there wasn't enough money for food?

Country	Yes	No	Didn't Respond	Total
Egypt	1.847% 14 people	28.36% 215 people	69.79% 529 people	100% 758 people
United States	22.84% 172 people	26.56% 200 people	50.60% 381 people	100% 753 people
Overall	15.81% 186 people	27.16% 415 people	57.02% 910 people	100% 1511 people

Chi2= 115.9444   p=0.2034

K) *1.847% of our sample in Egypt have experienced hunger, while 22.84% of our sample in the U.S. experienced hunger due to the pandemic. Since p= 0.2034, it is greater than 0.05, which means that there is no statistical difference between the two groups.*

L) Unable to afford medical care

Country	Yes	No	Didn't Respond	Total
Egypt	5.277% 40 people	24.93% 189 people	69.79% 529 people	100% 758 people
United States	23.24% 175 people	26.16% 197 people	50.60% 381 people	100% 753 people
Overall	17.23% 215 people	25.75% 386 people	57.02% 910 people	100% 1511 people

Chi2= 84.9687   p=0.2873

L) *5.227% of our sample in Egypt were unable to afford medical care, while 23.24% of our sample in the U.S. were unable to afford medical care due to the pandemic. Since p= 0.2873, it is greater than 0.05, which means that there is no statistical difference between the two groups.*

M) Question 51: I look for creative ways to alter difficult situations.

Country	Describes Me	Does Not Describe Me	Neutral	Didn't Respond	Total
Egypt	32.589%	13.72%	32.59%	21.11%	100%
	247 people	104 people	247 people	160 people	758 people
United States	50.33%	12.085%	27.76%	9.827%	100%
	379 people	91 people	209 people	74 people	753 people
Overall	44.387%	12.363%	29.37%	13.60%	100%
	626 people	195 people	456 people	234 people	1511 people

Chi2= 60.0506   p=0.0612

M) 32.589% of our sample in Egypt claimed they look for creative ways to alter difficult situations, while 50.33% of our sample in the U.S. claimed they look for creative ways to alter difficult situations during the pandemic. Since p= 0.0612, it is greater than 0.05, which means that there is no statistical difference between the two groups.

N) Question 51: Regardless of what happens to me, I believe I can control my reaction to it.

Country	Describes Me	Does Not Describe Me	Neutral	Didn't Respond	Total
Egypt	33.242% 252 people	16.495% 125 people	29.16% 221 people	21.11% 160 people	100% 758 people
United States	48.48% 365 people	11.554% 87 people	30.15% 227 people	9.827% 74 people	100% 753 people
Overall	44.377% 617 people	13.206% 212 people	29.81% 448 people	13.60% 234 people	100% 1511 people

Chi2=64.2429   p=0.0513

N) *33.242% of our sample in Egypt claimed they could control their reaction regardless of what happens to them, while 48.48% of our sample in the U.S. claimed they could control their reaction regardless of what happens to them during the pandemic. Since p= 0.0513, it is greater than 0.05, which means that there is no statistical difference between the two groups.*

O) Question 51: I believe I can grow in positive ways by dealing with difficult situations.

Country	Describes Me	Does Not Describe Me	Neutral	Didn't Respond	Total
Egypt	42.617% 323 people	8.311% 63 people	27.97% 212 people	21.11% 160 people	100% 758 people
United States	60.56% 456 people	7.436% 56 people	22.18% 167 people	9.827% 74 people	100% 753 people
Overall	54.55% 779 people	7.73% 119 people	24.12% 279 people	13.60% 234 people	100% 1511 people

Chi2= 67.0982   p=0.0797

O) *42.617% of our sample in Egypt claimed they could grow in positive ways by dealing with difficult situations, while 60.56% of our sample in the U.S. claimed they could grow in positive ways by dealing with difficult situations during the pandemic. Since p= 0.0797, it is greater than 0.05, which means that there is no statistical difference between the two groups.*

P) Question 13: What is the highest level of education you completed?

Country	No Formal Education	Post-graduate	Primary	Secondary	University	Total
Egypt	0.1319% 1 person	34.17% 259 people	0% 0 people	5.409% 41 people	60.29% 457 people	100% 758 people
United States	0.2656% 2 people	46.48% 350 people	2.125% 16 people	6.507% 49 people	44.62% 336 people	100% 753 people
Total	0.2208% 3 people	42.36% 609 people	1.413% 16 people	6.14% 90 people	49.87% 793 people	100% 1511 people

Chi2= 40.2927 $\qquad\qquad\qquad\qquad$ p=0.4322

P) *0.1319% of our sample in Egypt had no formal education, while 94.46% of our sample finished university or higher education. 0.2656% of our sample in the U.S. had no formal education, while 91.1% of our sample finished university or higher education. Since p= 0.4322, it is greater than 0.05, which means that there is no statistical difference between the two groups.*

Q: Question 14: What is your current work status?

Country	Employed	Retired	Self-employed	Student	Unemployed	Total
Egypt	59.11%	1.319%	9.235%	20.84%	9.1026%	100%
	448 people	10 people	70 people	158 people	63 people	758 people
United States	73.71%	4.25%	8.499%	5.976%	5.448%	100%
	555 people	32 people	64 people	45 people	35 people	753 people
Total	68.82%	3.269%	8.746%	10.95%	5.874%	100%
	1,003 people	42 people	134 people	203 people	98 people	1511 people

Chi2= 108.7225   p= 0.0437

Q) *59.11% of our sample in Egypt were employed, 1.319% were retired, 9.235% were self-employed, 20.84% were students, and 9.1026% were unemployed. 73.71% of our sample in the U.S. were employed, 1.992% were retired, 8.499% were self-employed, 5.976% were students, and 5.448% were unemployed. Since p= 0.0437, it is less than 0.05, which means that there is a statistical difference between the two groups.*

R) Question 15: Do you have medical insurance?

Country	Yes, private	Yes, public	No	Total
Egypt	18.12%	46.70%	35.09%	100%
	138 people	354 people	266 people	758 people
United States	54.98%	36.12%	8.898%	100%
	414 people	272 people	67 people	753 people
Overall	42.67%	39.66%	17.67%	100%
	552 people	626 people	333 people	1511 people

Chi2= 246.8453 p=0.0194

R) *35.09% of our sample in Egypt did not have medical insurance, 18.21% had private insurance, and 46.7% had public insurance. 8.898% of our sample in the U.S. did not have medical insurance, 54.98% had private insurance, and 36.12% had public insurance. Since p= 0.0194, it is less than 0.05, which means that there is a statistical difference between the two groups.*

Discussion

Our data suggest that the only significant difference between the effects of COVID-19 on our sample from Egypt and the United States is that individuals in the United States have experienced more frequent loss or reduced wages (figure B). This may be because U.S. citizens are significantly more likely to be employed than Egyptian citizens, according to figure Q. However, the rest of our data indicates that the United States is slightly more affected by the effects of COVID-19. This contradicts our hypothesis as well as past findings because according to source 1, developing countries have fewer resources to offer citizens, which should result in

more financial losses by individuals in Egypt. The lack of resources is also proven in figure R because it demonstrates that there are significantly more Egyptians than Americans that do not have medical insurance. This also verifies our findings that death rates are higher in developing countries due to COVID-19 than in developed countries because they are less capable of treating patients once they catch the disease.

According to figures M, N, and O, coping mechanisms are practiced slightly more often in the United States than in Egypt during the pandemic, which was initially predicted. This is because source 1 claims that developed countries have fewer resources to support their citizens, so they are less able to find assistance. Due to several factors like lack of technology or the family atmosphere, coping mechanisms were practiced less in Egypt. Since Egypt is a collectivist country, individuals work together for the benefit of their families, which means most individuals live with their families until they start a family of their own. Therefore, they are less likely to become lonely and revert to coping methods. However, the United States is a more individualistic country, which means that many individuals are independent, and most move out of their parents' houses sooner. This indicates that they are more likely to be lonely, during the quarantine period, and to utilize coping methods.

My null hypothesis was that the COVID-19 pandemic will have more drastic effects on finance, lifestyle, and coping of those who belong to a low socioeconomic class in Egypt than those in the United States because it is a developing country with higher poverty statistics and fewer resources to support them. However, our data indicates that this hypothesis is incorrect. My improved hypothesis is that the COVID-19 pandemic had similar effects on finance, lifestyle, and coping mechanisms of those who belong to a low socioeconomic population in

Egypt and those in the United States because it was a universally new pandemic and was unexpected in both countries, rendering citizens of both having to adjust to the new normal.

Complications

Possible complications that may cause uncertainty with the results are the online-based survey and the language it is written in. Having an online-based survey causes difficulty because those who are below the poverty line and in the lower socioeconomic class may not have access to a computer or technological device to be able to take the survey. In addition, those who are less fortunate in Egypt may lack the education to complete the survey, since it is in English. However, there should still be accurate results given these complications. Since this survey consists of primarily highly educated individuals, it is more likely that the higher socioeconomic class is overrepresented in our sample, while the lower socioeconomic class is underrepresented.

Conclusion

Due to Egypt's lack of money and resources, the lower socioeconomic class is expected to be impacted the most in terms of finance, lifestyle, and coping stresses, compared to the lower socioeconomic class present in the United States. However, according to the observed data from our survey, I have discovered that the effects of COVID-19 on the lower socioeconomic class in terms of finance, lifestyle, and coping stresses in Egypt are similar to those of the United States, with the United States being a little more affected. This study's purpose is to raise awareness on the effects of Covid-19 on the low socioeconomic classes, especially those in third world countries. A future experiment that can be conducted is a similar survey focusing on the effects of COVID-19 on the lower socioeconomic class in Egypt and the United States through the government, similar to the census. Therefore, there would be a more accurate representation of

the population in the sample, as well as ensuring that uneducated individuals would be able to

complete it in their language, and technology would not be required since it is written.

Appendix A:

This is the survey instrument utilized for this study:
https://www.surveymonkey.com/r/ZH5WXPC

Works Cited

1. Abedi, V., Olulana, O., Avula, V., Chaudhary, D., Khan, A., Shahjouei, S., … Zand, R. (2020, September 1). *Racial, Economic, and Health Inequality and COVID-19 Infection in the United States*. Journal of racial and ethnic health disparities. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7462354/.

2. Ammar, Achraf, et al. "Effects of COVID-19 Home Confinement on Eating Behaviour and Physical Activity: Results of the ECLB-COVID19 International Online Survey." *Nutrients*, MDPI, 28 May 2020, www.ncbi.nlm.nih.gov/pmc/articles/PMC7352706/.

3. Bureau, U. S. C. (2020, September 15). *Income and Poverty in the United States: 2019*. The United States Census Bureau. https://www.census.gov/library/publications/2020/demo/p60-270.html.

4. *Country Comparison > Population*. Population - Country Comparison. https://www.indexmundi.com/g/r.aspx?t=0.

5. Duffin, P. by E., & 20, J. (2020, July 20). *Median age of the U.S. population 2019*. Statista. https://www.statista.com/statistics/241494/median-age-of-the-us-population/.

6. Duffin, P. by E., & 28, S. (2020, September 28). *U.S. - seniors as a percentage of the population 2050*. Statista. https://www.statista.com/statistics/457822/share-of-old-age-population-in-the-total-us-population/.

7. Gutierrez-Romero, R., & Ahamed, M. (2020, October 22). *COVID-19 response needs to broaden financial inclusion to curb the rise in poverty*. NCBI. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7580698/.

8. Khalatbari-Soltani, Saman, et al. "Importance of Collecting Data on Socioeconomic Determinants from the Early Stage of the COVID-19 Outbreak Onwards." *Journal of Epidemiology and Community Health*, U.S. National Library of Medicine, www.ncbi.nlm.nih.gov/pmc/articles/PMC7298202/.

9. Mamelund, Svenn-Erik, et al. "The Association between Socioeconomic Status and Pandemic Influenza: Protocol for a Systematic Review and Meta-Analysis." *Systematic Reviews*, BioMed Central, 4 Jan. 2019, www.ncbi.nlm.nih.gov/pmc/articles/PMC6318944/.

10. Medhat, M. A., & El Kassas, M. (2020, June). *COVID-19 in Egypt: Uncovered figures or a different situation?* https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7303805/.

11. Saba, A. I., & Elsheikh, A. H. (2020, September). *Forecasting the prevalence of COVID-19 outbreak in Egypt using nonlinear autoregressive artificial neural networks*. Process safety and environmental protection : transactions of the Institution of Chemical Engineers, Part B. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7237379/.