***\Overview \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

The COVID-19 pandemic has had a devastating effect. Few areas have been untouched, with over 123 million cases and 2.7 million deaths, at this time. There has also been significant economic and social disruption, with millions losing their jobs and livelihood, and major disruptions to domestic and international supply chains including food systems. Despite its first world status, economic strength and world leading scientific researchers, the United States has experienced the greatest number of cases (30 million) and deaths (0.54 million) of any nation.

Recently a number of vaccines have been developed for COVID-19. These have started to be distributed to at-risk groups, and will eventually be provided to the general public. Despite the importance of vaccination, both to ensure personal safety and reduce the risks of community spread, recent studies indicate significant numbers will not voluntarily take the vaccine. This is a major issue for global health systems and requires an understanding of public perceptions of the pandemic, identification and development of appropriate strategies and communications to motivate individuals and groups that are reluctant to participate in the vaccination program.

The setting for your research project is the United States. Amongst first-world nations, the US governmental response to the pandemic has been inconsistent and haphazard. Former POTUS Trump initially downplayed the risks of the pandemic, failed to take a leadership role and support appropriate precautionary behaviour (e.g., mask wearing in public), and also at various times supported unproven treatments. Social media has been plagued by conspiracy theories, and the largest news network (Fox) along with other conservative and right-leaning media outlets have downplayed pandemic risks and at times supported various conspiracy theories. The US population is highly polarised and often individual COVID-19 beliefs are tied to their political orientation. There also is evidence that religious organisations have supported large gatherings and implied GOD and their faith is sufficient protection. A significant percentage of Americans also have limited understanding and confidence in science, with one example being that over a third of Americans still believe in creationism.

This research project requires you to analyse survey data, from a representative national sample of American adults, regarding their perceptions of the COVID-19 pandemic and various general attitudes and beliefs. The data was collected in December 2020 using Qualtrics, with respondents sourced from various US consumer panels, and a random selection of 250 respondents are provided. The objective of the study is to better understand the factors that influence individual intentions to take a COVID-19 vaccine. The data provided will allow you to understand whether there are demographic differences in intentions to be vaccinated; how perceptions of the severity of the pandemic, current personal health and household living status influence intentions; and the role of religiosity, belief in science, trust in government, political orientation and reactance (response to advice and recommendations).

The data for this assignment is titled ‘MKTG2305 Research Project Data.sav’, and can be found on LMS. Values and labels for the variables are provided within the data set.

Note that various scales are used to collect the data (these are indicated in the variable view in the SPSS datafile). Some can be considered interval, whereas others are nominal or ordinal. The measurement scale used to collect the data and the research question will determine the appropriate statistical technique to use to answer the research questions below. All of the research questions below can be addressed using the statistical techniques we cover in this unit.

*Requirements\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

You are to address and answer each of the research questions below. The relevant variables for each question are indicated in parentheses. Your answer should be in the format of a written report detailing the main findings of the three research questions, including technical appendices.

*Research Questions\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

1. Investigate the role of (a) gender (Gender), (b) ethnicity (Ethnicity), (c) age (Age) and (d) education (Education) on intentions to get the vaccine (Vaccine\_Intentions)?
2. Is there a relationship between perceptions of (a) pandemic severity (Pandemic\_Severity), (b) current personal health status (Personal\_Health), and (c) whether the respondent currently lives with anyone over 65 in their household (Living\_with\_Over\_65), and intentions to get the vaccine?

*The measurement scale used for the personal health status can be considered a Likert-type scale. Also, recode the Living\_with\_Over\_65 variable into a dichotomous variable*

1. Does an individual’s religious views (Religiosity), belief in science (Science\_Belief), trust in government (Trust\_in\_Government), general response to advice and recommendations (Reactance) and political orientation (Political\_Affiliation) influence how receptive they are to the COVID-19 vaccination?

*The measurement scale used for political orientation can be considered a Likert-type scale*

**Notes:**

*For research questions one and two, conduct individual tests for each variable. For research question three conduct a joint test of all indicated variables on vaccine intentions.*

*When doing your analysis, if relevant, only include groups that have 20 or more respondents.*

*For an ANOVA analysis, if relevant use the LSD (Least Significant Difference) post-hoc test to examine inter-group differences.*

Note: the above marking guide is based on the assumption that the correct statistical procedure has been used and the SPSS output is correct. Please refer to the grading rubric for additional information.

1. Findings for research question one
2. Findings for research question two
3. Findings for research question three
4. Conclusion

You should include tables or graphs in the main body of the report to demonstrate the findings. These should not be directly cut and pasted from the SPSS statistical output, which is overly technical for the main body of the report.

***Appendices***

Any technical terms and more detailed presentation of results (if required) should be put in the appendices of the report. Your appendices for each research question will need to provide information pertaining to:

1. The statistical procedure used.
2. The null and alternative hypotheses.
3. The test statistic and p-value used to reach a conclusion (test all hypotheses at the 5% significance level (i.e., 95% confidence level)).