

# A CASE STUDY OF FACTORS THAT INFLUENCE PROTECTIVE BEHAVIORS TOWARDS COVID-19

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## 1. Introduction

COVID-19 is a dangerous infectious disease that can easily spread from one person to another, and it also can affect everybody's lives' such as causing death. COVID-19 has caused epidemic outbreaks and ruckus to all the countries in the world and the confirmed cases of this disease had become worrisome alert. This research is carried out to test the relationship between the demographic profiles, knowledge, and risks towards protective behaviors of COVID-19. Protective behavior is a vital thing for every inch of society. The pandemic can be controlled if people are willing to change their lifestyles, take preventive measures, being aware of this outbreak and having knowledge and awareness of the risk to fight this disease.

Honarvar et al. (2020) stated that the protective behaviors towards COVID-19 among elders are approximately appropriate with more than 80% of them washed hands more than five times daily and more than 60% used face masks then discarded into dustbin after using. This statement was also supported by Alahdal, Basingab, and Alotaibi (2020) where almost all respondents agreed on the value of washing hands and wearing face masks when going out, able to prevent from COVID-19.

This study employs cross-sectional research design and the total sample selected is 685 by using Krejcie Morgan calculator. The data were collected from the respondents which are the residents of Section 17, Shah Alam, Selangor and Kampung Setek, Kok Lanas, Kelantan through Google Form. The researchers applied binary logistic regression to determine factors that influence protective behavior towards COVID-19.

## 2. Methodology

This research used primary data which is quantitative data consisting of a well-structured questionnaire. The data collection was conducted on 15th October 2020 until 30th October 2020 and analyzed using IBM SPSS Statistics 20. The questionnaires were distributed to the residents in selected areas by using Google Form. Binary logistic regression was employed to examine the relationships between protective behavior towards COVID-19 and its factors. There are 533 respondents participating in this research.

Figure 1 shows that the independent variables in this study which are age, sex, education level, region, knowledge and risks about COVID-19. The response variable is the protective behaviors towards COVID-19 (1= Good, 0=Poor). This research aim is to determine whether age, sex, education level, region, knowledge and risks about COVID-19 can affect the protective behaviors towards COVID-19. The instrument in this research framework is adopted from Mya et al. (2020).

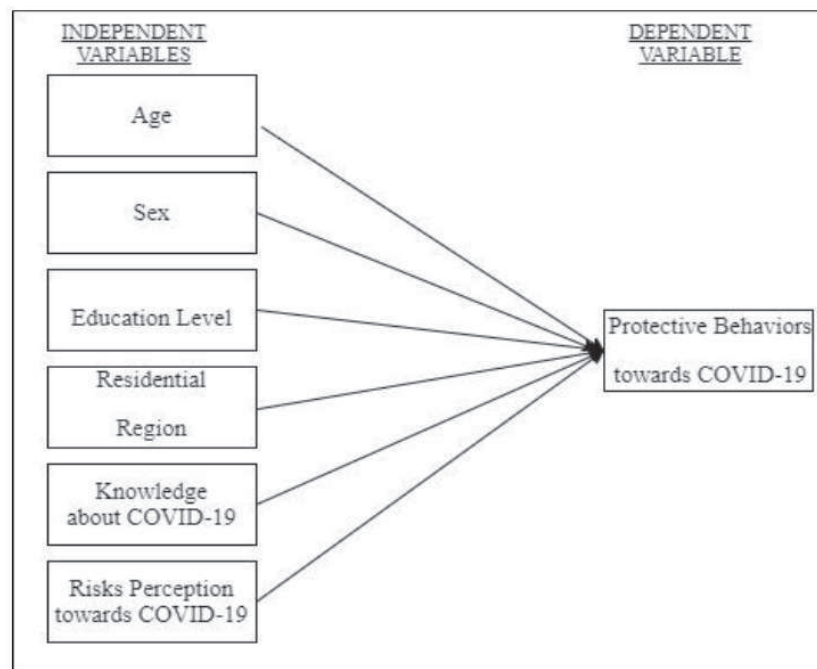


Figure 1. Theoretical Framework

## 3. Results and Discussions

Table 1 shows the analysis of maximum likelihood estimates. It indicates that only one out of ten variables have a significant effect on protective behavior towards COVID-19 since the p-value was less than 0.05 which is risks towards COVID-19. As a conclusion, the protective behaviors of individuals do not depend on peoples' background and their knowledge except for their own risks. For variable risks, the odds of risks are significant to the protective behaviours which is

1.082 and hence can be concluded that the variable risks have a significant influence towards protective behavior.

**Table 1.** Analysis of Maximum Likelihood Estimates

Variables	Estimates	Wald Chi-Square, $W_T$	P-Value	Odd Ratio
Age	0.021	2.248	0.134	1.021
Sex	-0.523	2.619	0.106	0.593
Residential region	0.487	2.121	0.145	1.627
Primary school	-1.045	0.469	0.494	0.352
Secondary school	0.479	0.178	0.673	1.614
Diploma/Matriculation/ Foundation	0.119	0.012	0.914	1.126
Bachelor degree	0.256	0.054	0.816	1.291
Master/PhD	-0.679	0.327	0.567	0.507
Knowledge	0.026	0.279	0.598	1.026
Risks	0.079	15.17	0.000	1.082

#### 4. Conclusion

The variable that is significant to the protective behaviors towards COVID-19 is risk perception towards COVID-19. The protective behaviors towards COVID-19 for everyone does not depend on their demographic background such as age, gender, educational level, or residential region which are either from rural or urban areas, but it said to be either good or poor protective behavior depends on the risks itself. People who have more risk towards COVID-19 can be said to have good protective behaviours towards COVID-19. The findings are similar to the statement claims by Glanz, Rimer, and Viswanath (2008) that risk perceptions can influence health-related behaviors and change protective behaviors towards COVID-19.

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