

11-2020

Predicting COVID-19 Health Behaviors Using the Health Belief Model

Kristyn Pellymonter
University of Northern Iowa

Adam Butler
University of Northern Iowa

See next page for additional authors

Let us know how access to this document benefits you

Copyright ©2020 Kristyn Pellymonter, Adam Butler, and Theresa Dethlefs

Follow this and additional works at: <https://scholarworks.uni.edu/ugswork>



Part of the [Psychology Commons](#), and the [Public Health Commons](#)

Recommended Citation

Pellymonter, Kristyn; Butler, Adam; and Dethlefs, Theresa, "Predicting COVID-19 Health Behaviors Using the Health Belief Model" (2020). *Undergraduate Student Work*. 22.

<https://scholarworks.uni.edu/ugswork/22>

This Open Access Undergraduate Student Work is brought to you for free and open access by UNI ScholarWorks. It has been accepted for inclusion in Undergraduate Student Work by an authorized administrator of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.

Authors

Kristyn Pellymonter, Adam Butler, and Theresa Dethlefs

Predicting COVID-19 Health Behaviors Using the Health Belief Model

Kristyn Pellymonter, Adam Butler, & Theresa Dethlefs

INTRODUCTION

- Coronavirus is a disease that has caused a global pandemic in 2020.
- Health behaviors such as social distancing and mask wearing help prevent or slow the transmission of COVID-19.
- The Health Belief Model is widely used to predict health behaviors.
- Hypothesis: Perceptions of susceptibility and severity of COVID, and perceived benefits and barriers of health practices will predict social distancing and mask wearing.

METHODS

1. N = 154 college students
2. Students received a formal email with an attached link to participate in a survey which contained questions about overall health, health beliefs, and frequency of health behaviors.

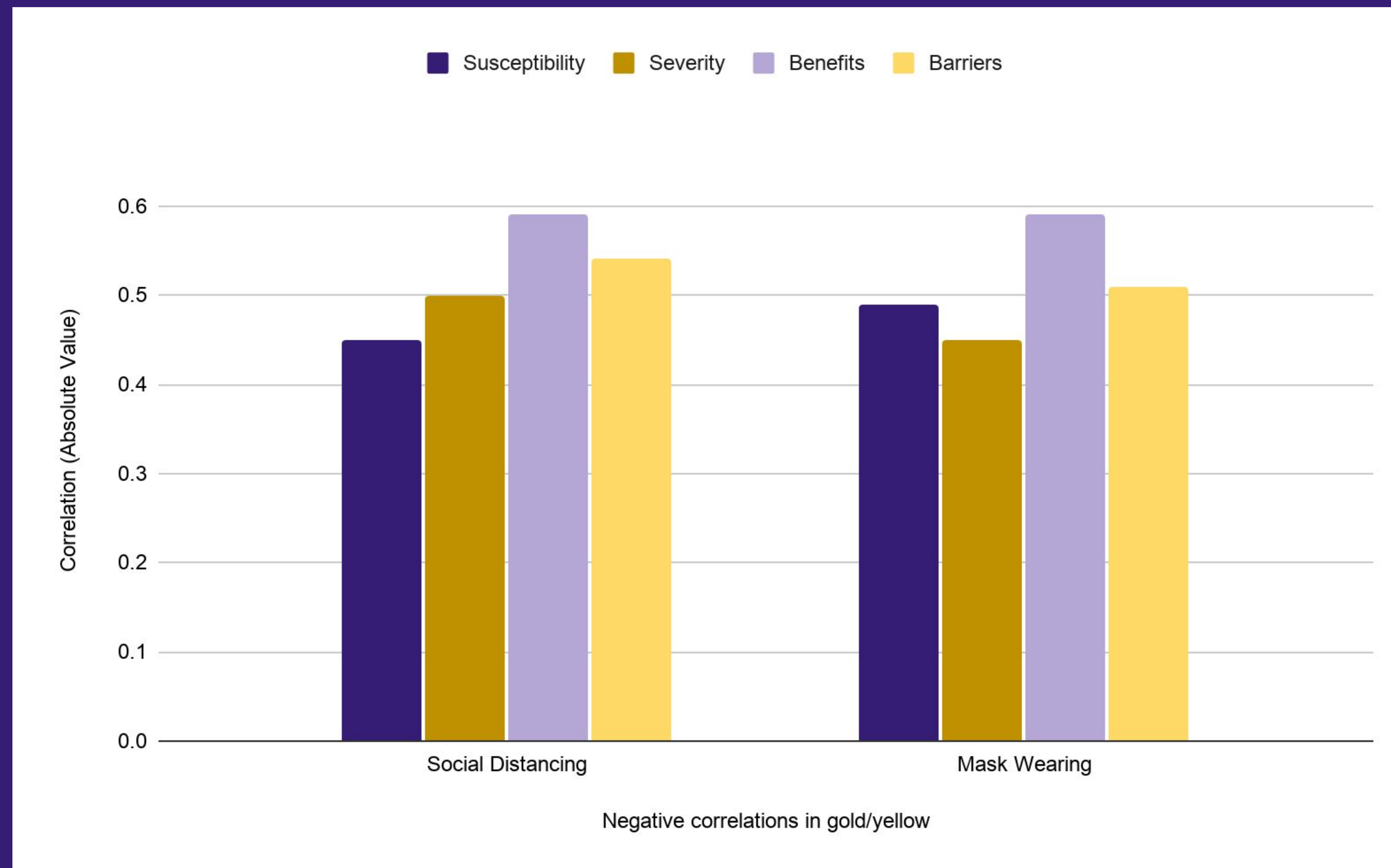
REGRESSION RESULTS

- Controlling for overall health, perceived susceptibility to COVID and perceived benefits of mask wearing were both positively related to the frequency of mask wearing.
- Controlling for overall health, perceived susceptibility to COVID and perceived benefits of social distancing were positively related and perceived barriers were negatively related to social distancing.

DISCUSSION

- Promoting the benefits of health behaviors and highlighting susceptibility to COVID can increase mask wearing and social distancing.
- Helping people socialize safely may reduce the perception of barriers to social distancing.

Health beliefs are moderately to strongly related to social distancing and mask wearing. Highlighting the benefits of these behaviors may be a particularly useful public health intervention strategy.



Health Belief Model Sample Items

- **Susceptibility:** "It is unlikely I will contract COVID-19," & "COVID-19 is highly contagious."
- **Severity:** "COVID-19 is a dangerous disease," & "I believe the severity of COVID-19 is over exaggerated."
- **Benefits:** "Social distancing helps prevent the transmission of COVID-19," & "By taking proper precautions, we can stop the spread of COVID-19."
- **Barriers:** "It is difficult to follow all of the instructions to prevent COVID-19," & "I can't have any fun if I follow the recommendations to prevent COVID-19."

Response Scale:
Strongly Disagree (1) - Strongly Agree (5)

Mask Wearing

Predictor	Estimate	SE	95% Confidence Interval		t	p
			Lower	Upper		
Intercept	4.66	0.05	4.56	4.76	88.74	<.01
Health	0.05	0.05	-0.06	0.15	0.89	.37
Susceptibility	0.22	0.08	0.07	0.37	2.94	<.01
Severity	-0.02	0.09	-0.19	0.16	-0.18	.86
Benefit	0.30	0.08	0.14	0.46	3.78	<.01
Barrier	-0.06	0.07	-0.20	0.07	-0.95	.34

Social Distancing

Predictor	Estimate	SE	95% Confidence Interval		t	p
			Lower	Upper		
Intercept	3.96	0.08	3.81	4.11	51.66	<.01
Health	0.06	0.08	-0.09	0.21	0.75	.46
Susceptibility	0.26	0.11	0.04	0.48	2.32	.02
Severity	-0.14	0.13	-0.40	0.12	-1.06	.29
Benefit	0.30	0.12	0.07	0.53	2.55	.01
Barrier	-0.27	0.10	-0.46	-0.08	-2.74	<.01

References

- Maiman, L. A., & Becker, M. H. (1974). *The Health Belief Model: Origins and Correlates in Psychological Theory*. *Health Education Monographs*, 2(4), 336-353. <https://doi.org/10.1177/109019817400200404>

Address correspondence to adam.butler@uni.edu