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## Predicting COVID-19 Health Behaviors Using the Health Belief Model [Poster]

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# Predicting COVID-19 Health Behaviors Using the Health Belief Model

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## 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.

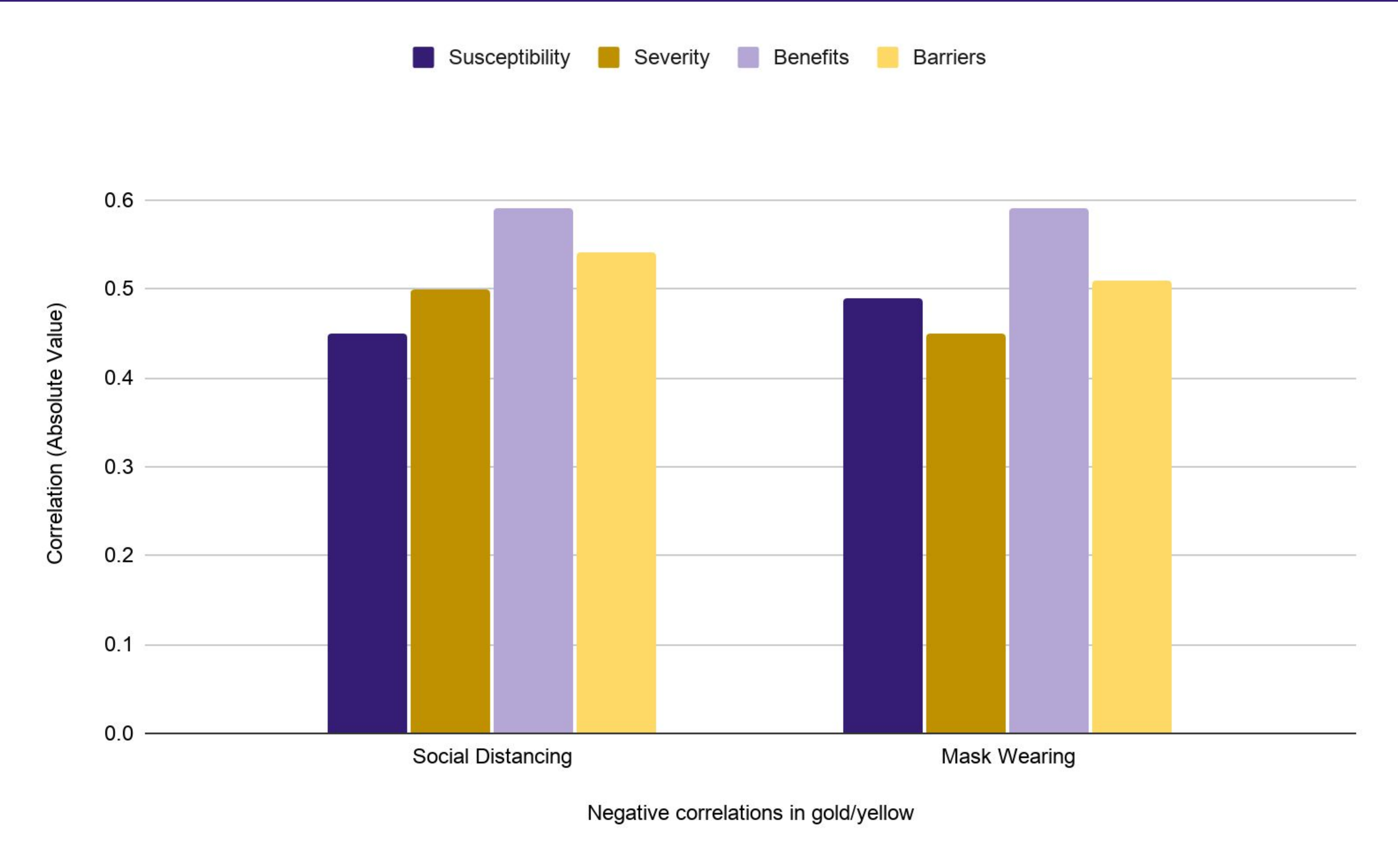
## REGRESSION RESULTS

- 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						
			95% Confidence Interval	95% Confidence Interval		
Predictor	Estimate	SE	Lower	Upper	t	p
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						
			95% Confidence Interval	95% Confidence Interval		
Predictor	Estimate	SE	Lower	Upper	t	p
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>

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