

Understanding protective behaviors and intention to vaccinate in the COVID-19 pandemic

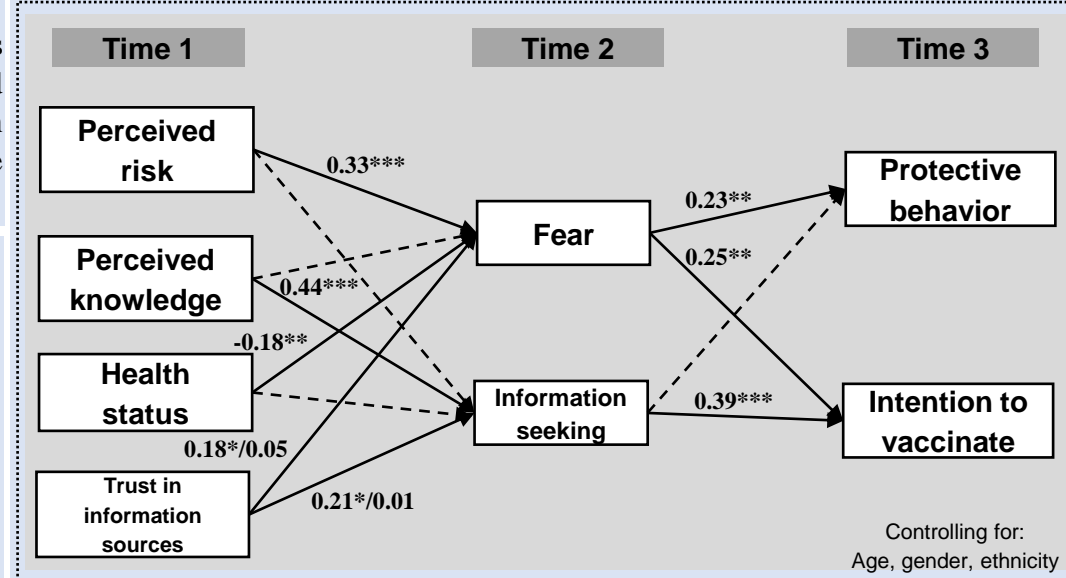
Malgorzata Kolotylo-Kulkarni, George M. Marakas, Weidong Xia

<https://drake-edu.zoom.us/j/86021001714>

Abstract

Our longitudinal survey study shows that a person's perceived risk, knowledge of COVID-19, health status, and trust in information sources predict fear and information seeking which in turn predict intention to vaccinate, while fear predicts protective behavior.

Results



R square and R square adjusted for the model		
	R Square	R Square Adjusted
Fear T2	0.2	0.18
Information seeking T2	0.34	0.33
Protective behavior T3	0.09	0.07
Intention to vaccinate T3	0.27	0.25

Model fit		
	Saturated Model	Estimated Model
Chi-Square	197	281.37
NFI	0.89	0.85

Introduction

- We examine individuals' responses to three surveys to the COVID-19 outbreak during the initial months of the pandemic in the US
- Research question: What are the main factors that affect individual **adoption of protective measures** (washing hands, obtaining medication, using disinfectants, social distancing, wearing face mask, and others) and **intention to vaccinate**?
- We examine possible predictive effects month to month

Methods

- Data were collected using a longitudinal natural experiment in the period from March 25th to June 9th, 2020
- Data collected from the same participants at three time points; the surveys were four to six weeks apart
- Matched sample across three surveys included 206 US respondents from Amazon Mechanical Turk (MTurk)
- Data were analyzed using structural equation modeling

Posthoc analysis of trust in information sources		
	Original Sample (O)	p value
Trust in WHO T1 -> Fear T2	0.23	p < .01
Trust in WHO T1 -> Information seeking T2	-0.06	p > .05
Trust in President T1 -> Fear T2	-0.00	p > .05
Trust in President T1 -> Information seeking T2	-0.13	p < .05
Trust in CDC T1 -> Fear T2	-0.01	p > .05
Trust in CDC T1 -> Information seeking T2	0.05	p > .05
Trust in NIAID director T1 -> Fear T2	-0.00	p > .05
Trust in NIAID director T1 -> Information seeking T2	0.24	p < .01

Conclusion

- Adoption of protective measures at T3 is mainly caused by Fear at T2
- Fear and information seeking at T2 both affect one's intention to vaccinate at T3
- Fear at T2 is mainly caused by perceived risk, health status and trust in information sources at T1
- Information seeking at T2 is mainly driven by perceived knowledge and trust in information sources at T1