



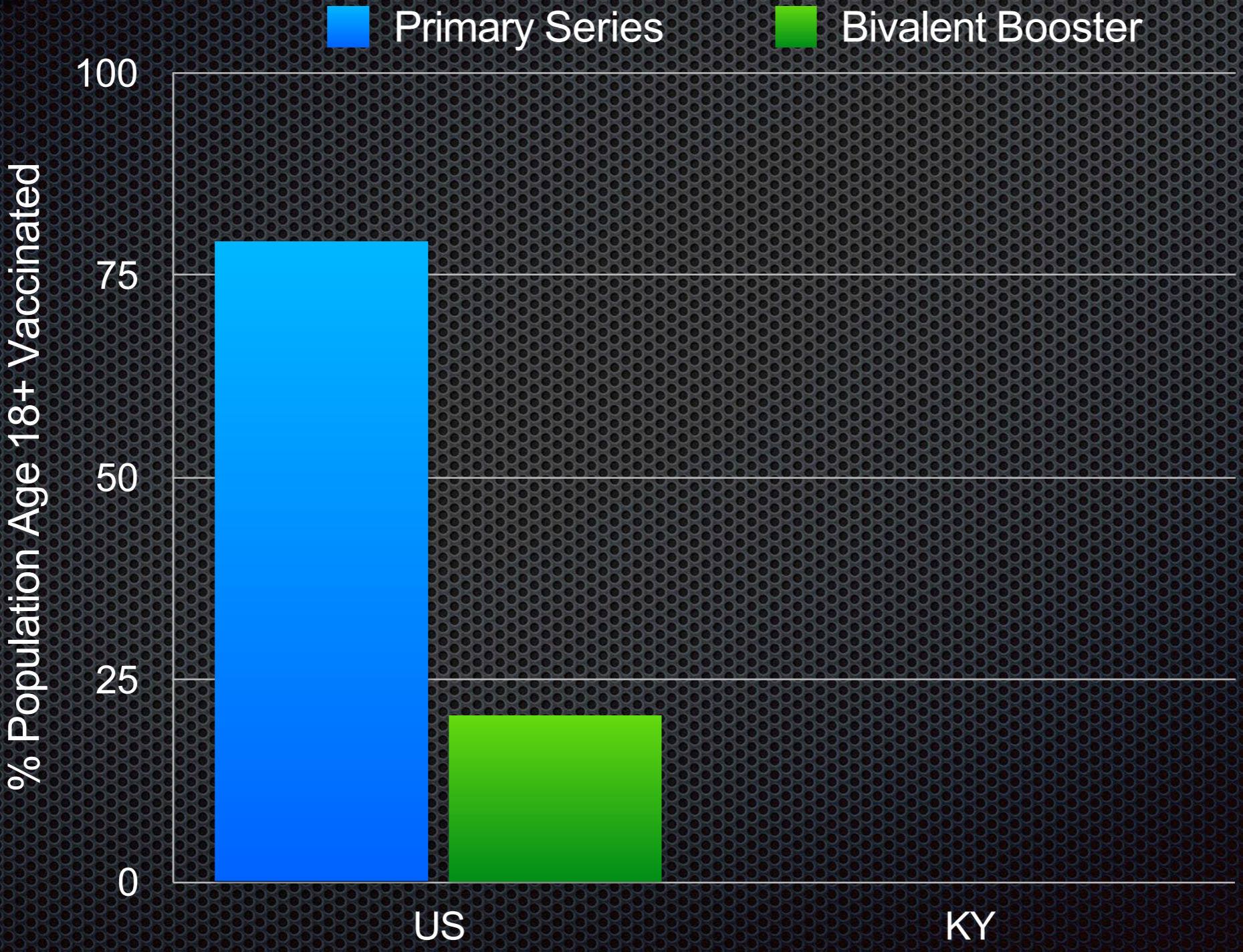
What drives Getting the Shot?

Understanding Individual and Community Predictors of COVID-19 Vaccination Uptake

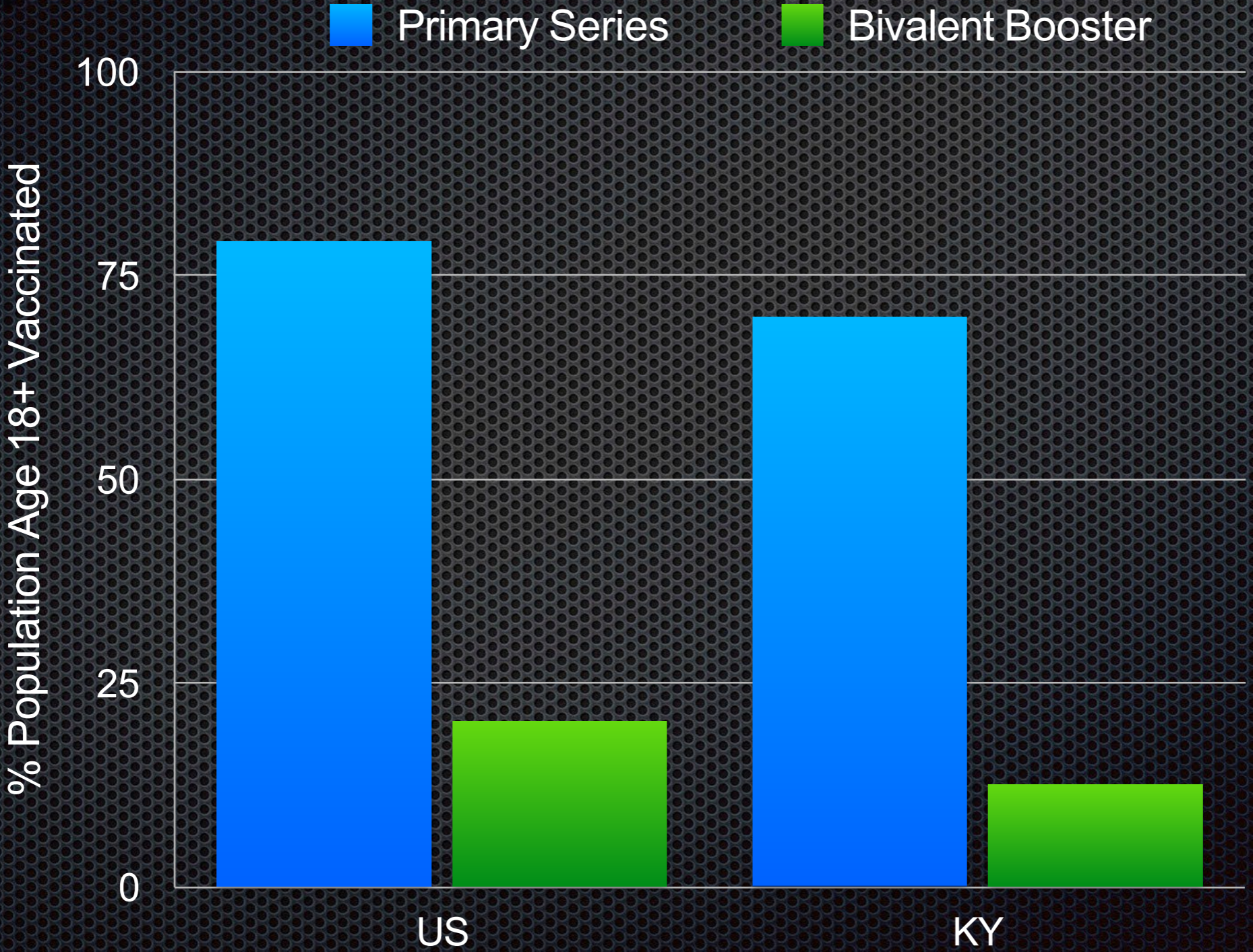
Marc T. Kiviniemi, PhD, CPH, FASBM
University of Kentucky College of Public Health



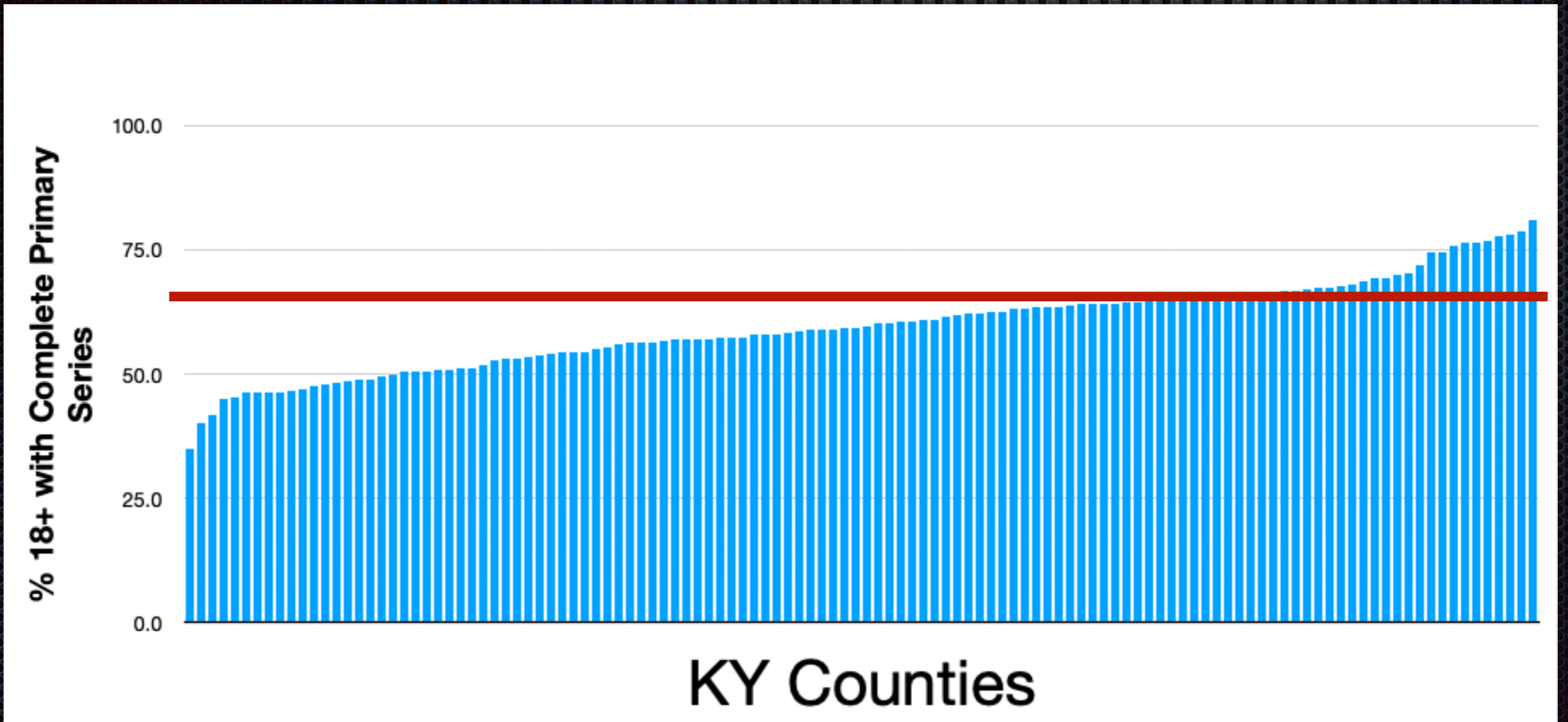
COVID-19 Vaccination Uptake



COVID-19 Vaccination Uptake

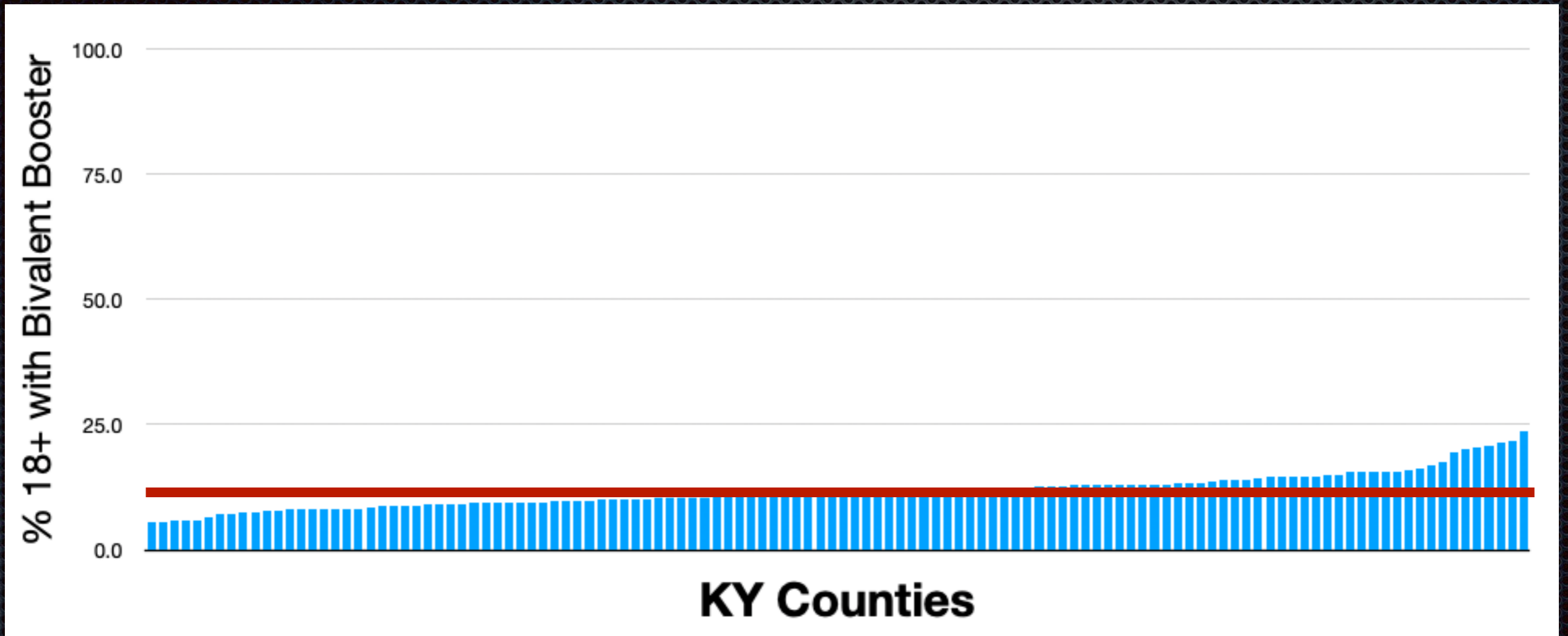


County by County.....



County	Rate	County	Rate
Spencer	34.9	Campbell	76.6
Edmonson	40.2	Boone	77.6
Elliott	41.7	Fayette	78.1
Hickman	44.8	Woodford	78.6
Owen	45.3	Hardin	81.0

County by County.....



County	Rate	County	Rate
Clay	5.6	Jefferson	20.4
Edmonson	5.7	Franklin	20.8
Knox	5.8	Campbell	21.3
Clinton	5.9	Fayette	21.9
McCreary	6.0	Woodford	23.8

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- VINCENNES
- FONTENAY
- OOE'ff
- JOO.MUJE
- SJ.IMII/CH-El
- ! J . £
- CHAMACHY
- LA VARENNE
- SUCY BONNEUIL
- BOISSY ST-LÉGER

ANDRÉ LECONTE
EDITEUR
38, R. S^t CROIX DE LA
BRETONNERIE, PARIS

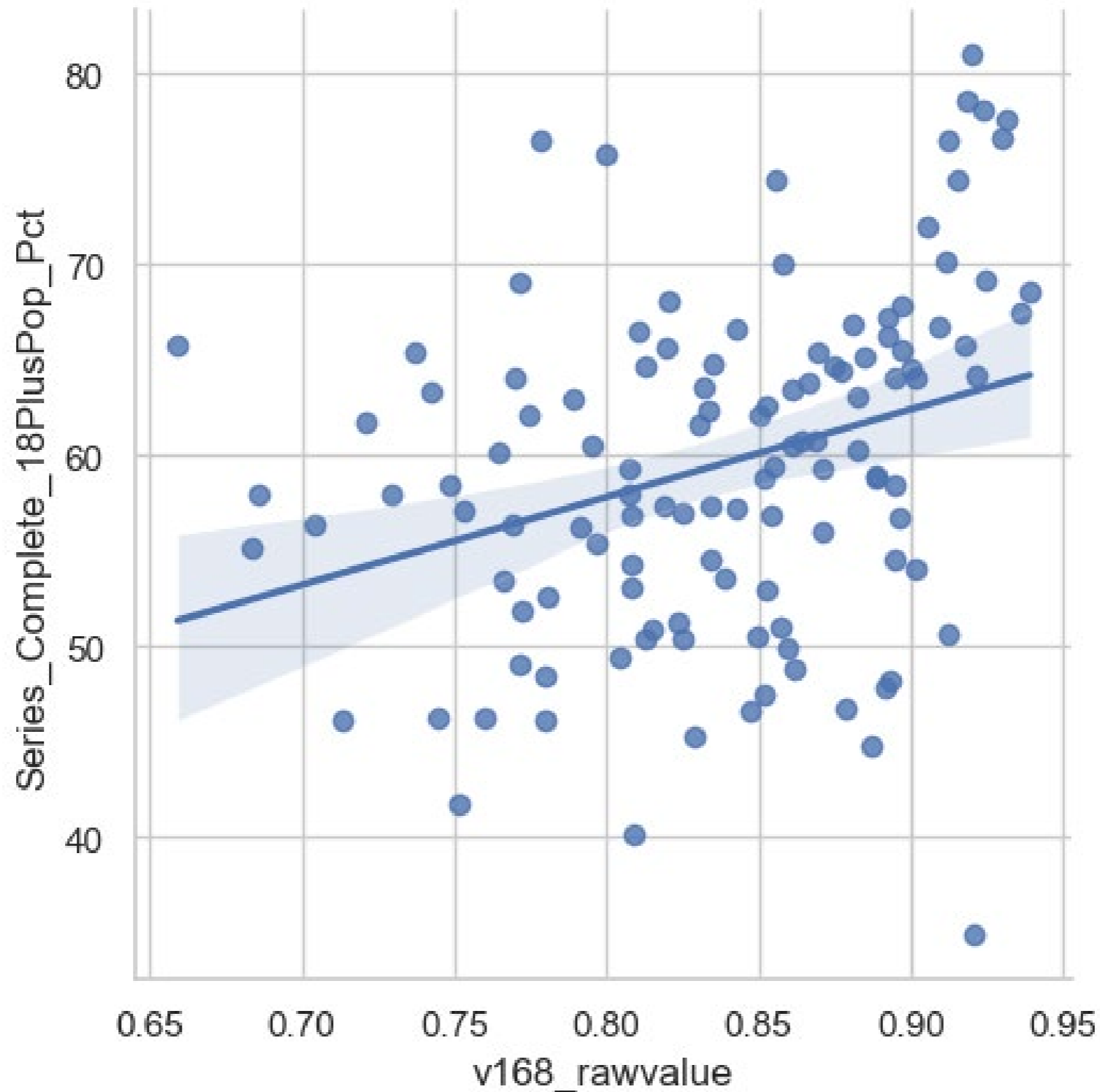
1) Community Level Influences

- ✦ CDC Vaccination Rates By County — May 3, 2023
- ✦ RWJF National Health Rankings Data Sources

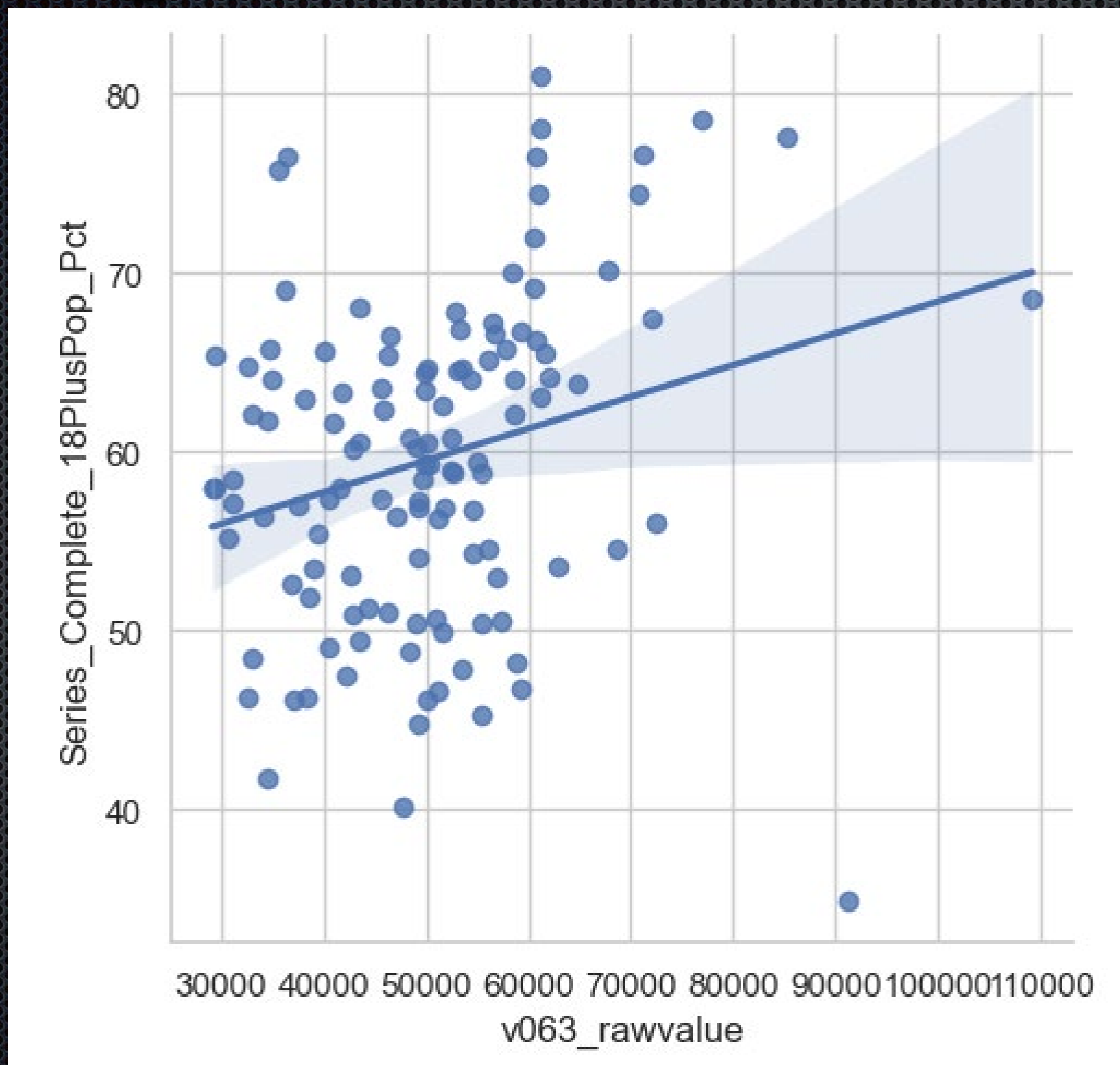
1) Community Level Influences

- CDC Vaccination Rates By County — May 3, 2023
- RWJF County Health Rankings Data Sources
 - 1) Social Determinants: education, unemployment, ave income
 - 2) Health Care System: PCP/population, % uninsured, preventable hospital stays
 - 3) Other Health Factors: BRFSS poor/fair health, adult obesity
 - 4) Other: % Rural, % Voting Republican

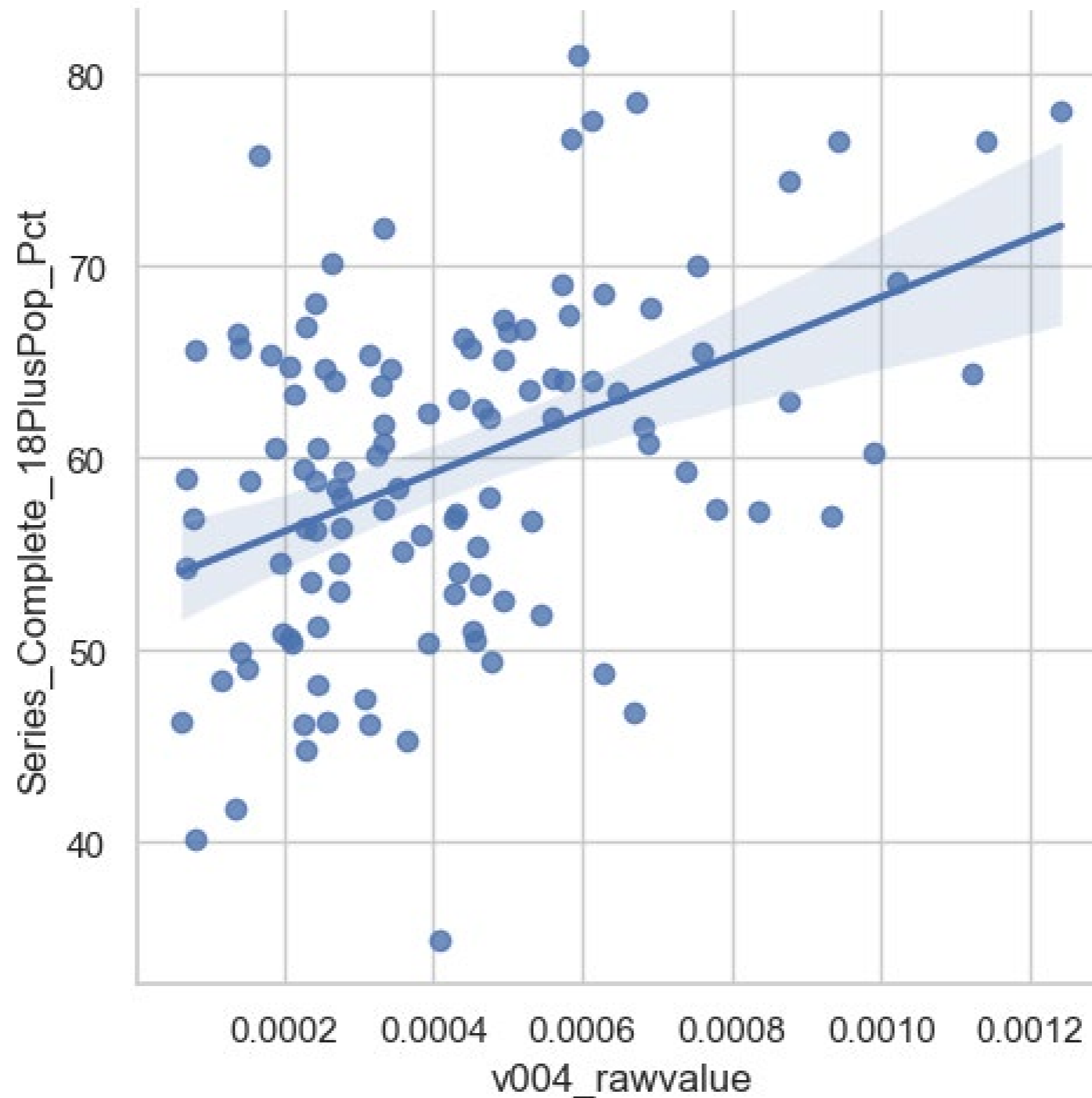
Education — HS Graduation



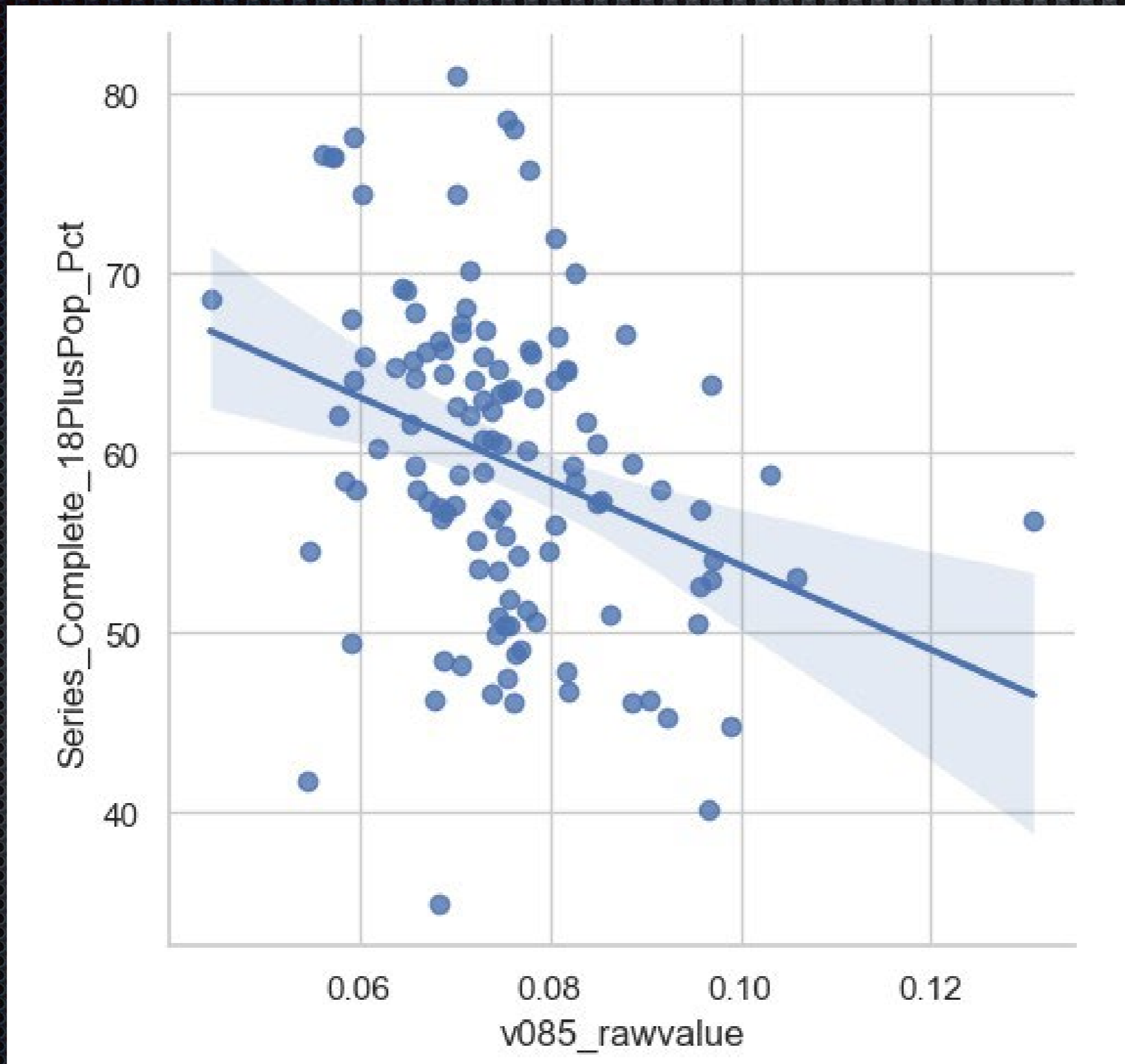
Average Household Income



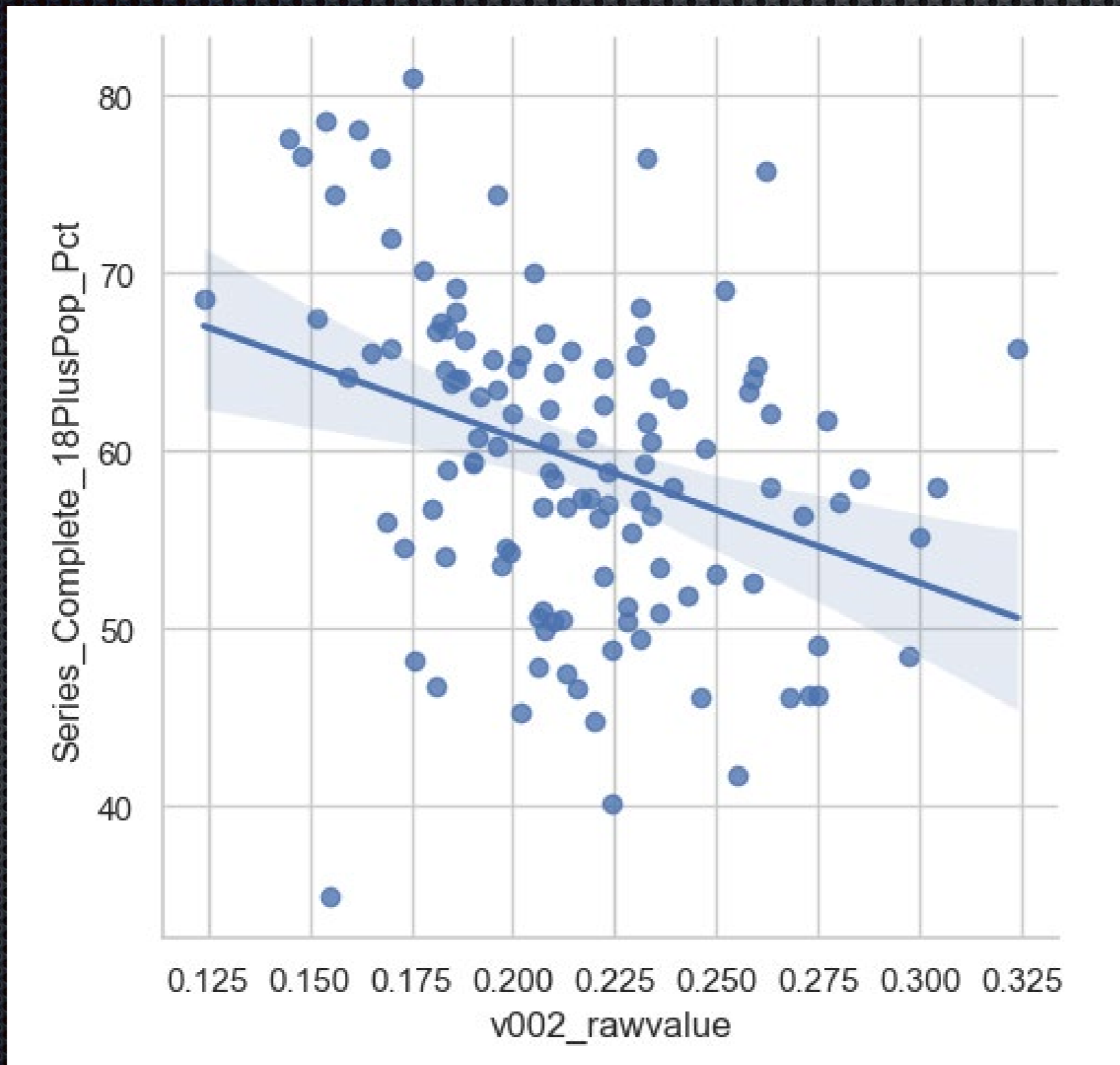
Primary Care / 100 population



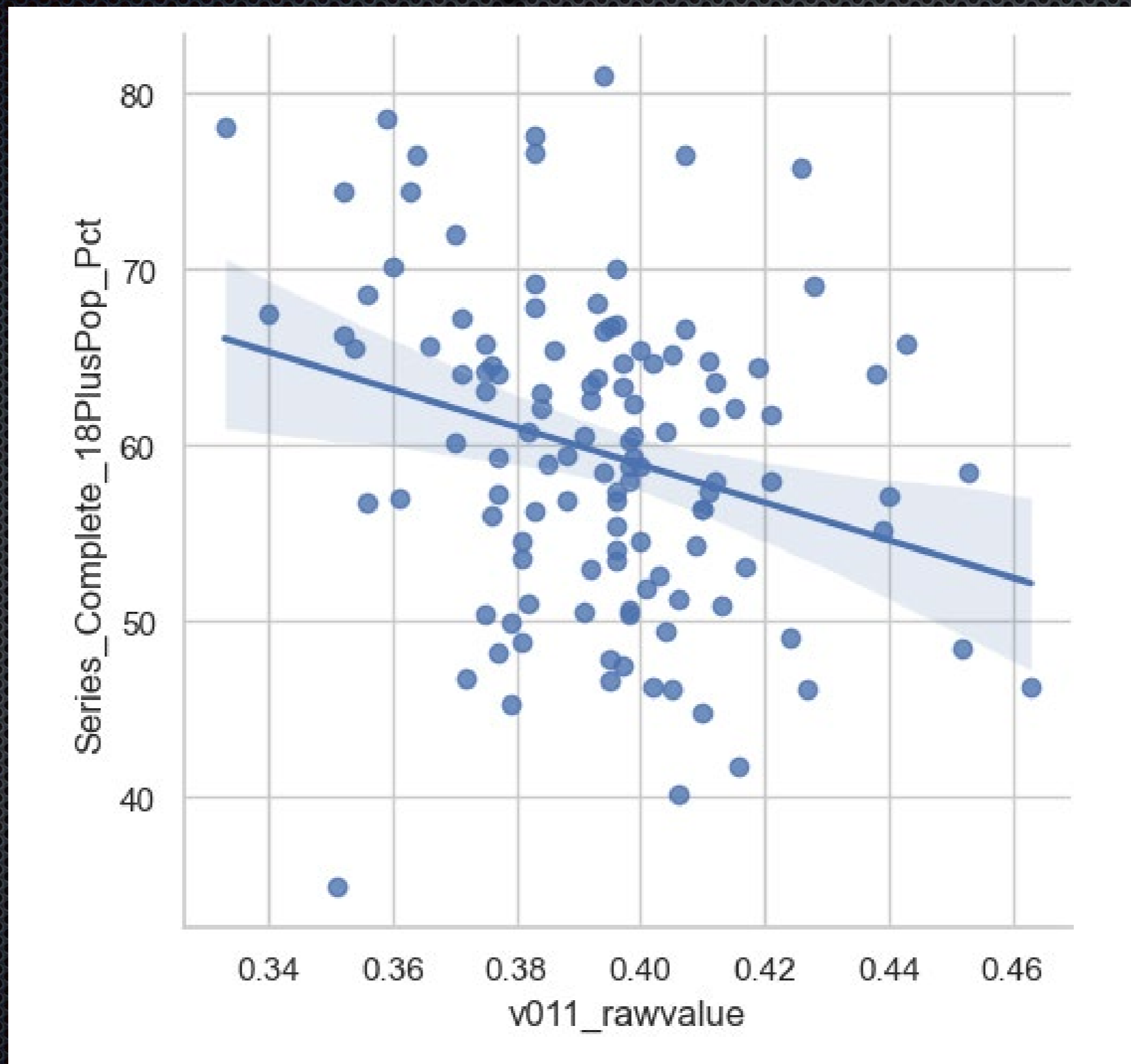
% Uninsured



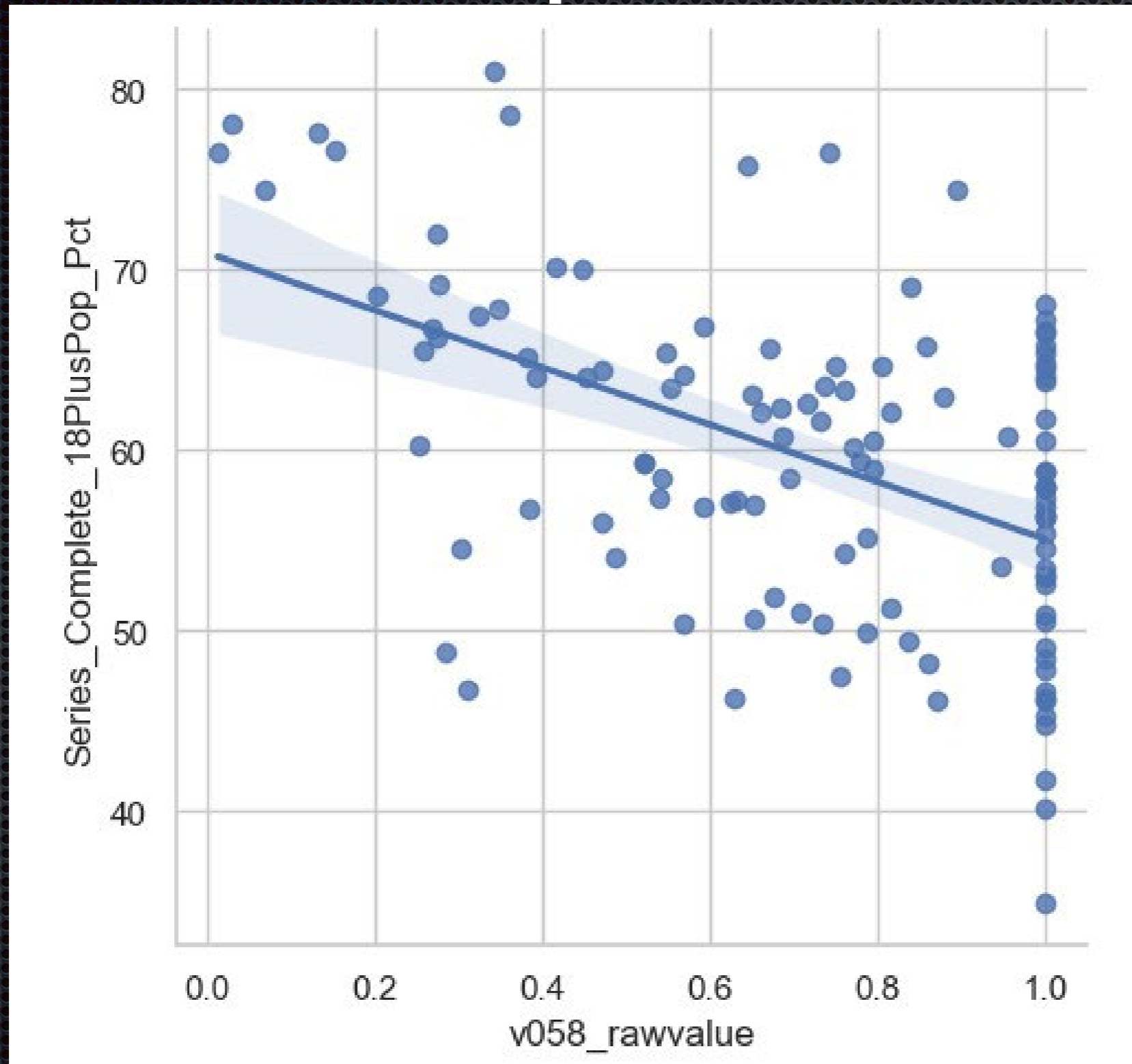
Poor/Fair Health



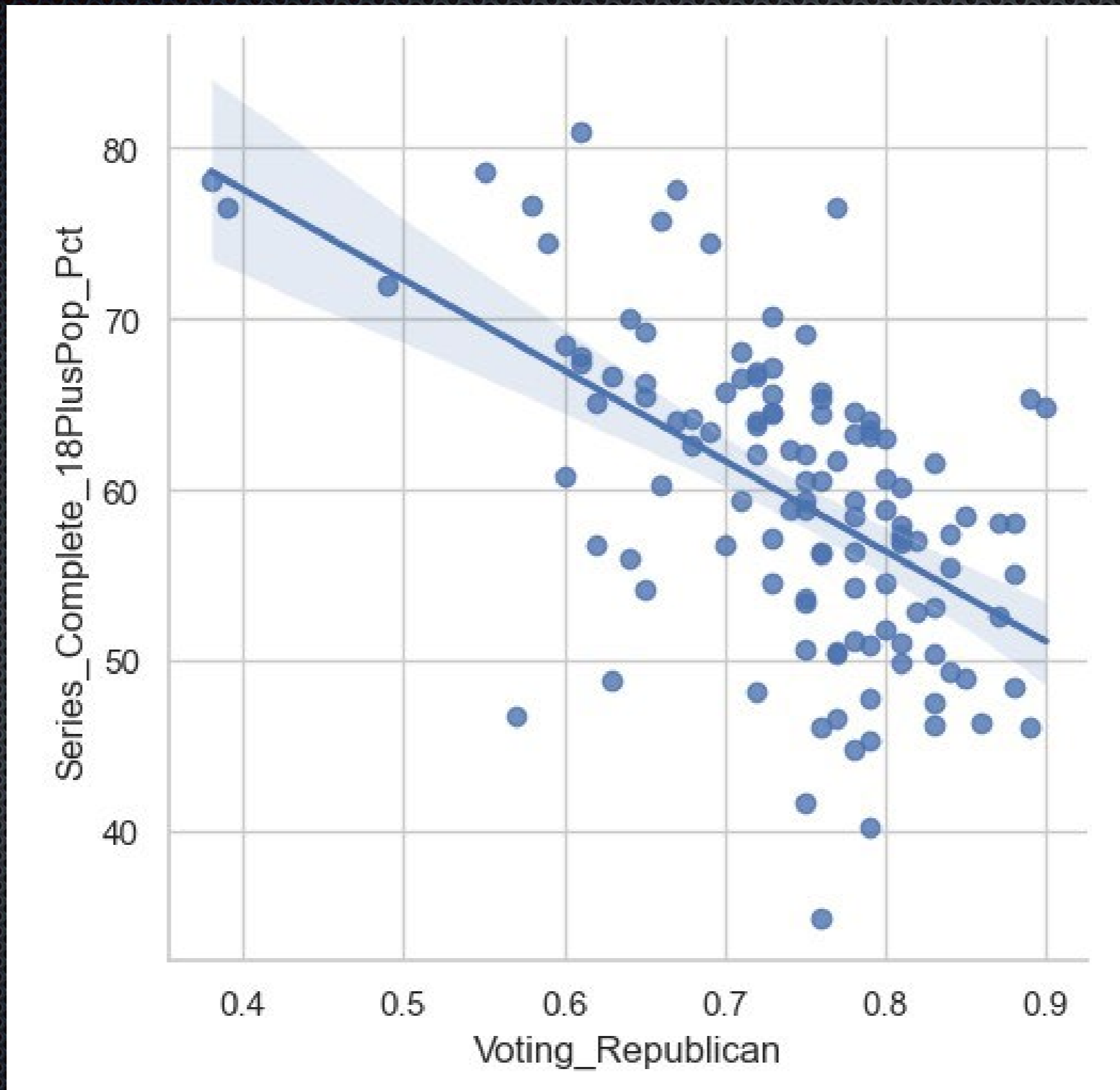
Adult Obesity



% Rural Population



% Voting Republican 2020



2) Statewide Vaccination Intentions Survey

Key survey Features

- Developed by UK — input from KDOH, Governor's Office
- Fielded by IQS Research, partnership with Doe Anderson
- Survey administration dates Jan 26-March 20, 2021

Methodology

- ✦ 1459 respondents
- ✦ Oversamples of African American/Black and Latino respondents
 - ✦ AA/Black = 315
 - ✦ Latino = 263
- ✦ For Latino, both English and Spanish surveys (94 completed in Spanish)
- ✦ IQS created survey weights for population representativeness on age, gender, and race/ethnicity

VACCINATION STATUS

- ✦ 11% report receiving at least one vaccine dose
 - ✦ Vaccine more likely: higher education, black/AA and Latino (vs White), have health insurance

VACCINATION STATUS

- ✦ Of those who received 1st dose, 85% definitely intend to receive the 2nd dose
 - ✦ 8% probably or not sure
 - ✦ 7% probably not or definitely not
- ✦ No real demographic predictors of 2nd dose intent (maybe student/homemaker/retired....)

What are Vaccination Intentions for the 89% unvaccinated?

- ✦ Vaccination intentions: SPECIFIC to COVID-19 vaccine
 - ✦ When a vaccine that protects against COVID-19 infection becomes available for you, will you take it?
 - ✦ 5 pt scale — definitely no to definitely yes
 - ✦ How likely is it that you will get the COVID-19 vaccine when it becomes available for you?
 - ✦ 5 pt scale — very unlikely to very likely

What are Vaccination Intentions for the 89% unvaccinated?

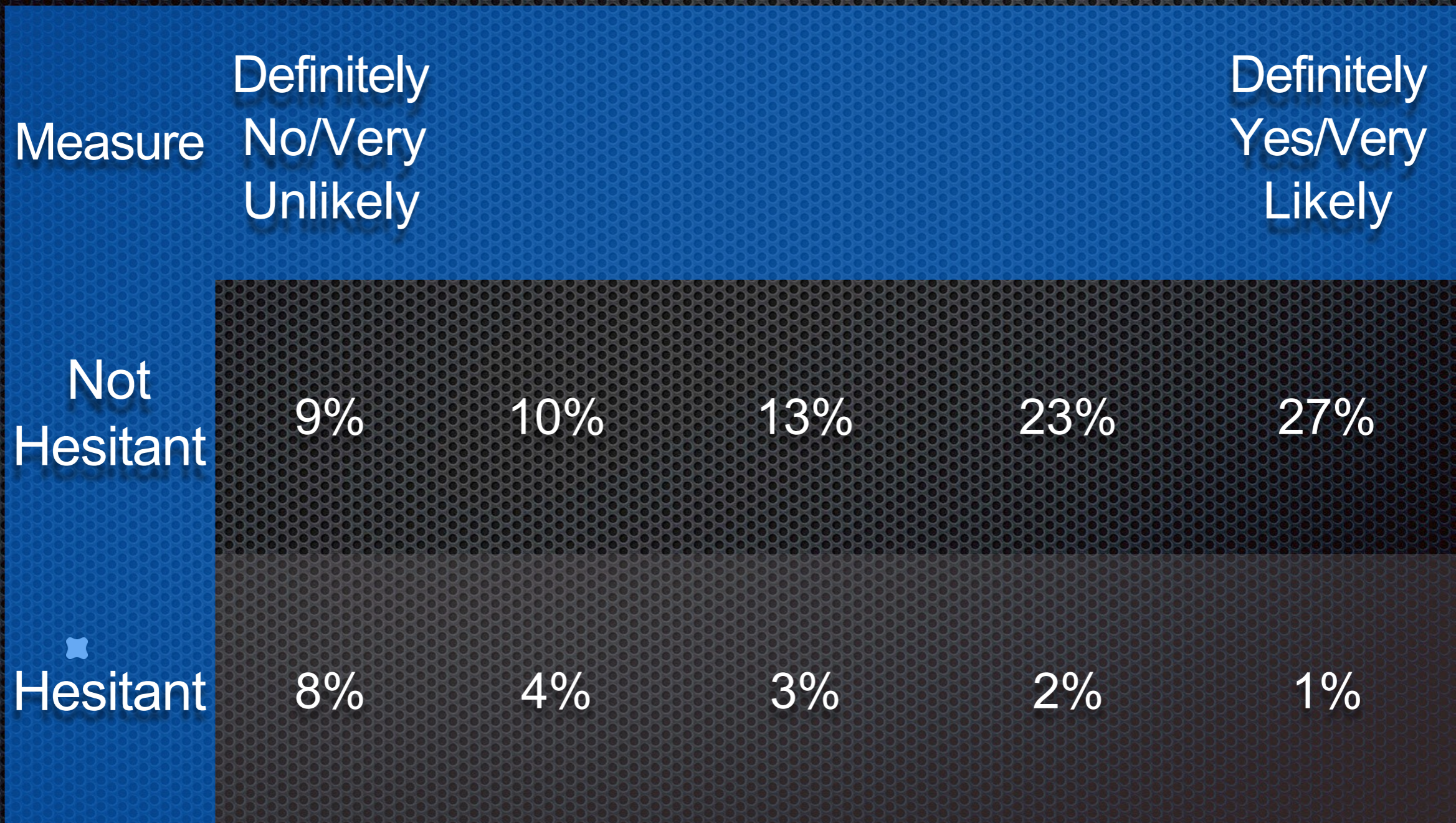
Measure	Definitely No/Very Unlikely	Probably Not/Unlikely	I Don't Know	Probably Yes/Likely	Definitely Yes/Very Likely
Will you take it?	13%	14%	12%	23%	39%
How likely are you to take it?	20%	14%	10%	25%	31%

NATIONAL: 51% definitely, 26% probably (Census, Jan 27, 2021)

Vaccination Intentions + VACCINE HESITANCY

- ✦ VACCINE INTENTIONS — COVID SPECIFIC
- ✦ VACCINE HESITANCY — GENERAL TENDENCY
 - ✦ Have you ever refused or postponed a vaccine for yourself or a child because you considered it useless or dangerous?
 - ✦ Yes, No, Don't Know
 - ✦ 19% Yes or Don't Know ->> Vaccine hesitant

Vaccination Intentions + VACCINE HESITANCY



What are Vaccination Intentions for the 89% unvaccinated?

$23\% + 39\% + 12\% = 74\%$

Dashboard for 18+: 69%
 fully dosed, 77% one
 fully dosed, 77% one
 dose

Probably Likely
 Definitely Likely
 Yes/Yes/Very
 Likely

Will you take it?

13% 14% 12% 23% 39%

How likely are you to take

20% 14% 10% 25% 31%

Vaccine intentions Across the state

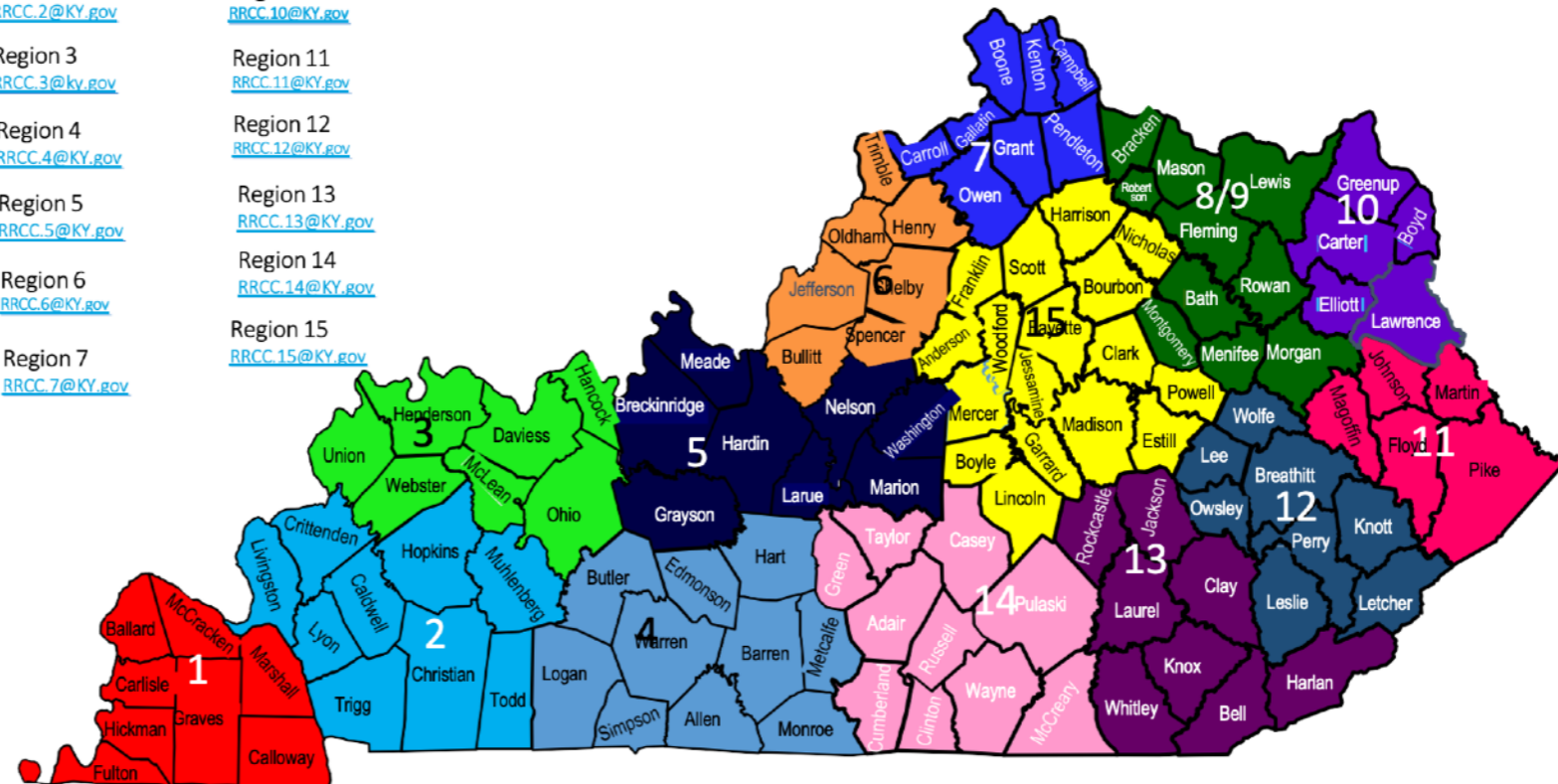
Regional Response and Coordination Center

14 Regional Response and Coordination Centers (RRCC) have been established across the state in order to support ongoing response efforts to COVID-19. These centers will serve to enhance planning, collaboration and information sharing with regional stakeholders, including all enrolled vaccine providers, to support equitable and efficient distribution of COVID vaccine and improved situational awareness at local, regional and state levels.



Please use the email for your region to contact the RRCC.

- | | |
|--|--|
| Region 1
RRCC.1@KY.gov | Region 8/9
RRCC.89@KY.gov |
| Region 2
RRCC.2@KY.gov | Region 10
RRCC.10@KY.gov |
| Region 3
RRCC.3@KY.gov | Region 11
RRCC.11@KY.gov |
| Region 4
RRCC.4@KY.gov | Region 12
RRCC.12@KY.gov |
| Region 5
RRCC.5@KY.gov | Region 13
RRCC.13@KY.gov |
| Region 6
RRCC.6@KY.gov | Region 14
RRCC.14@KY.gov |
| Region 7
RRCC.7@KY.gov | Region 15
RRCC.15@KY.gov |



Vaccine intentions Across the state

REGIO	INTENTION	REGION	INTENTION MEAN
1	3.1	8/9	3.2
2	3.3	10	3.0
3	3.3	11	3.14
4	3.5	12	3.6
5	3.5	13	3.2
6	3.8	14	3.1
7	3.5	15	3.5

Vaccine intentions Across the state

REGION	INTENTION MEAN	REGION	INTENTION MEAN
1	3.1	8/9	3.2
2	3.3	10	3.0
3	3.3	11	3.1
4	3.5	12	3.6
5	3.5	13	3.2
6	3.8	14	3.1
7	3.5	15	3.5

Demographic Predictors of Intention

- EDUCATION: higher education, higher intentions
- RACE/ETHNICITY: black/African American < white; Latino > white
- INCOME: higher income, higher intentions
- POLITICAL AFFILIATION: Republicans < Democrats; Republicans somewhat < Independent/Other
- RURALITY: more rural —> Lower intentions
- GENDER: Women < Men
- (ALSO IN MODEL: insurance type, employment status)

Political Affiliation

- ❖ Political affiliation is a strong differentiator of vaccine intentions. Only 43% Republicans in Kentucky intend to vaccinate,, compared with 49% of independents / other parties and 65% of Democrats.

INTENTION	Republican	Independent/Other	Democrat
Intend <u>Not</u> to Vaccinate	40%	35%	19%
Uncertain	18%	16%	17%
Intend <u>To</u> Vaccinate	43%	49%	65%

Rurality

INTENTION	Metropolitan EMM (raw)	Semi-Urban EMM (raw)	Rural EMM (raw)
Intend <u>Not</u> to Vaccinate	28% (25%)	29% (30%)	36% (39%)
Uncertain	16% (15%)	22% (21%)	15% (17%)
Intend <u>To</u> Vaccinate	55% (59%)	48% (47%)	48% (44%)

Beliefs

ATTITUDE/BELIEF	Strongly disagree	Disagree	Agree	Strongly Agree
I will feel safe getting the COVID-19 vaccine.	16%	24%	36%	23%
The COVID-19 vaccine might cause short term problems, like fever or discomfort.	3%	10%	66%	21%
The COVID-19 vaccine is being pushed to make money for drug companies.	20%	39%	30%	11%
The COVID-19 vaccine might cause lasting health problems.	10%	36%	41%	14%
I am concerned that the COVID-19 vaccine will cost more than I can pay.	26%	40%	25%	8%
The COVID-19 vaccine is so new that I want to wait a while before deciding if I should get it.	15%	26%	36%	23%
I think the COVID-19 vaccine will be effective in preventing the virus.	8%	21%	50%	21%
I think it would be hard to find a provider or clinic that is easy to get to.	19%	46%	28%	6%
I think it would be hard to find a provider or clinic that has the vaccine available.	12%	38%	38%	12%

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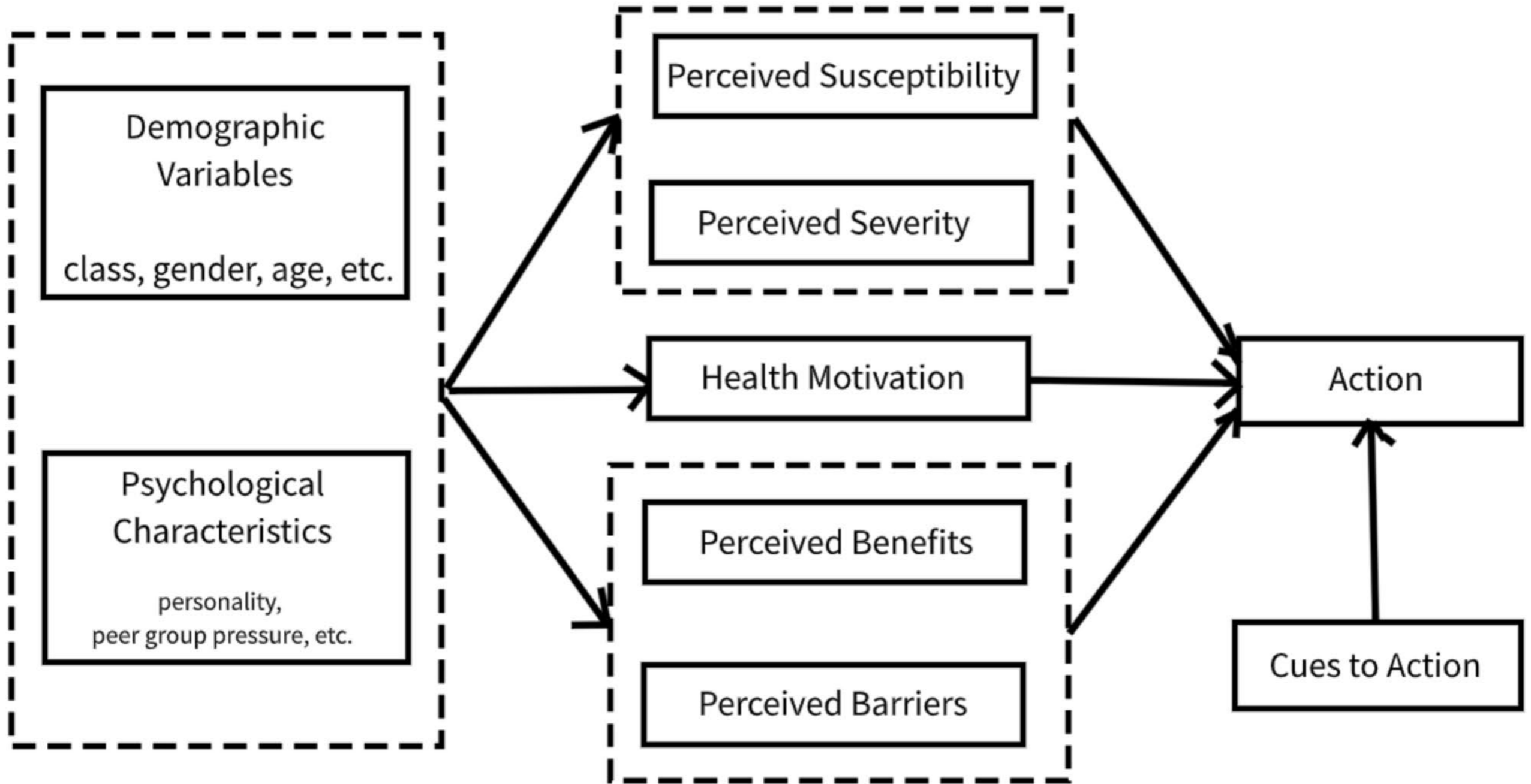
Beliefs and behavior

ATTITUDE/BELIEF	Strongly disagree	Disagree	Agree	Strongly Agree
I will feel safe getting the COVID-19 vaccine. ★	16%	24%	36%	23%
The COVID-19 vaccine might cause short term problems, like fever or discomfort.	3%	10%	66%	21%
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★ Perceived Risk

3) Types of Risk and Behavior

The Health Belief Model



DON'T PUMP TROUBLE

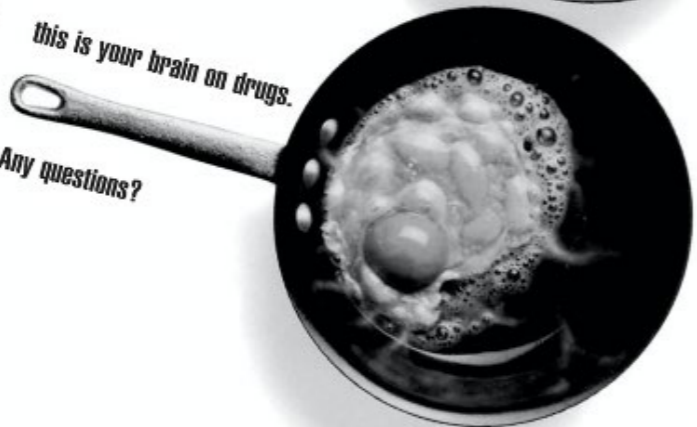
STAY AWAY FROM STEROIDS



this is drugs,



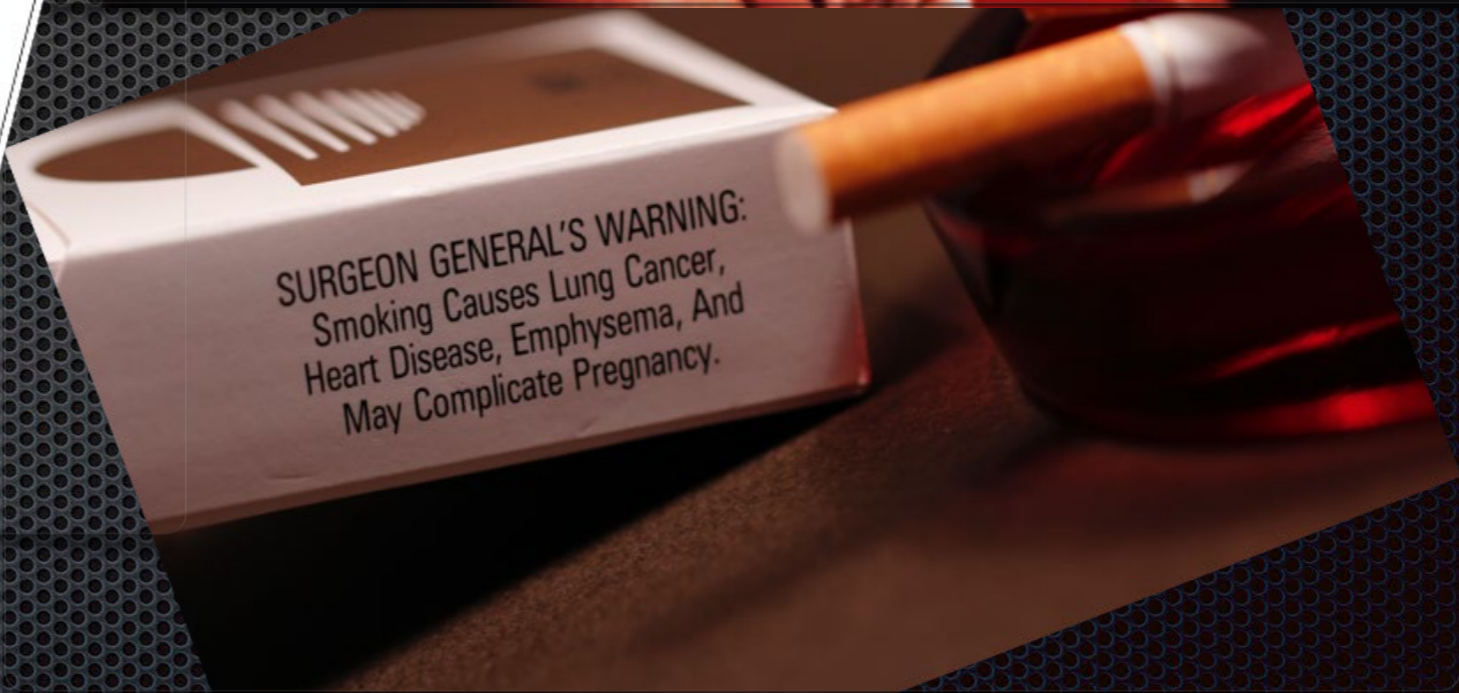
this is your brain on drugs.



Any questions?

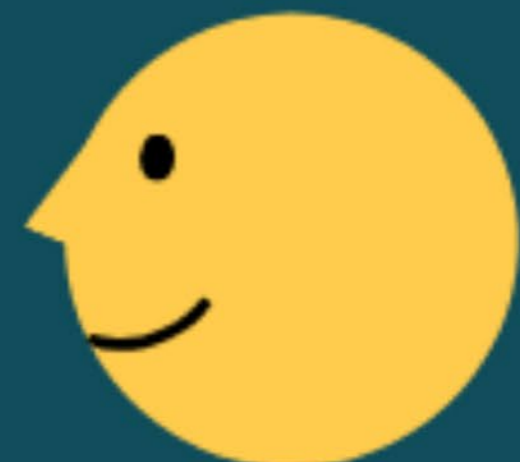
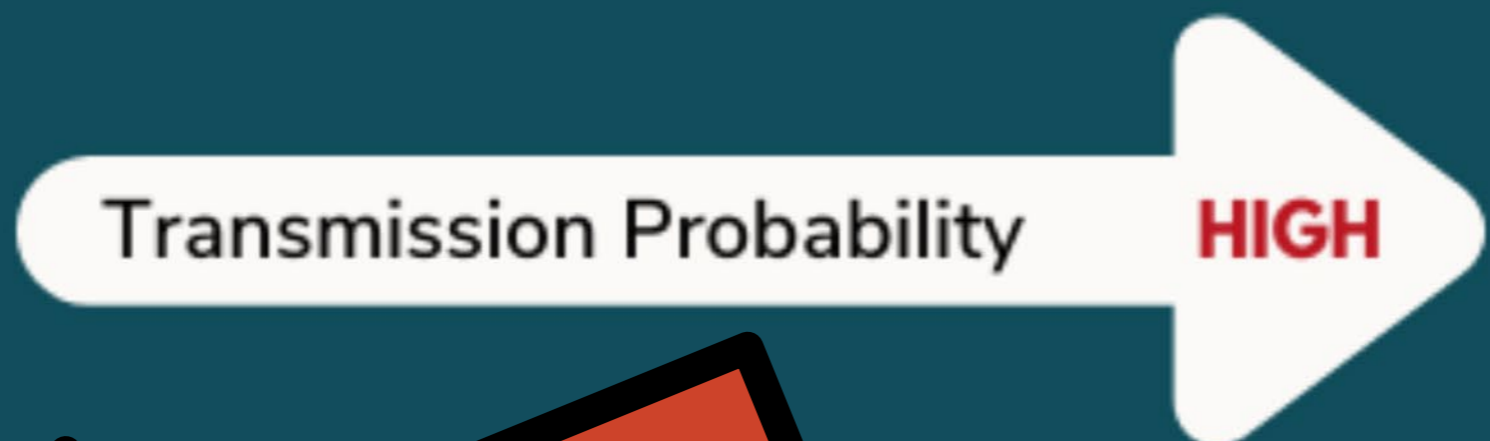
Partnership For A Drug-Free America

SURGEON GENERAL'S WARNING:
Smoking Causes Lung Cancer,
Heart Disease, Emphysema, And
May Complicate Pregnancy.





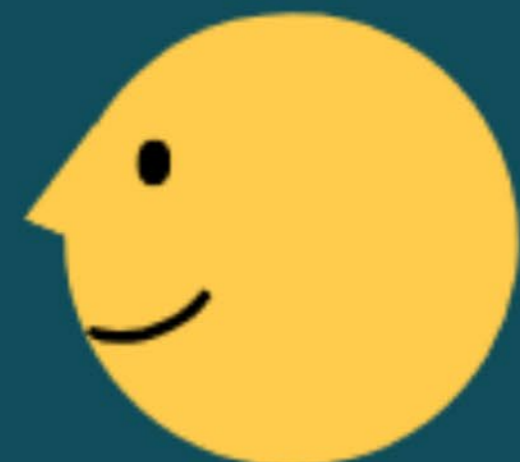
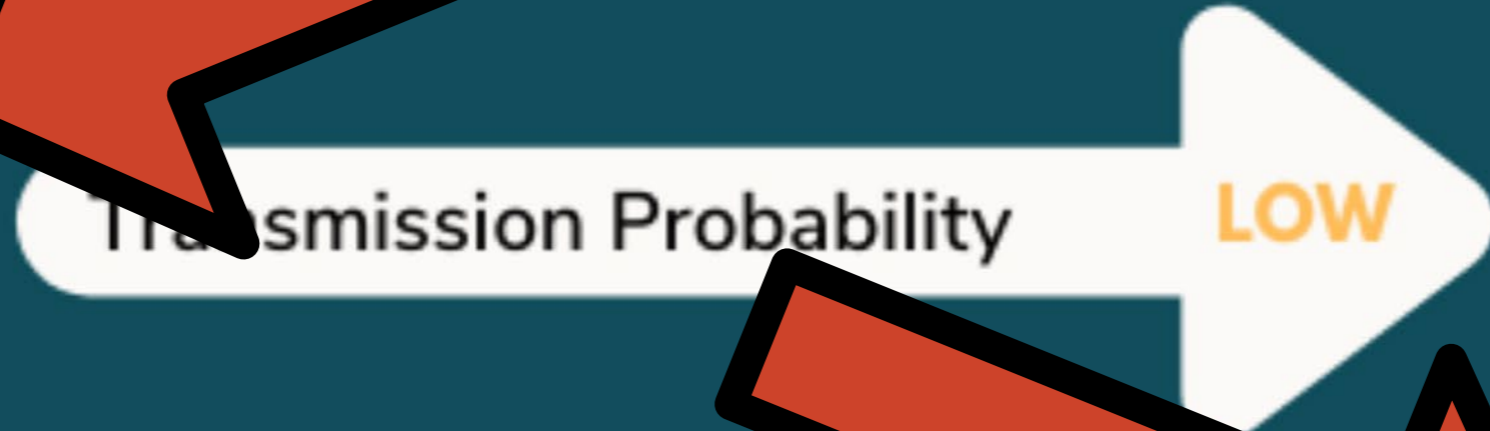
without mask



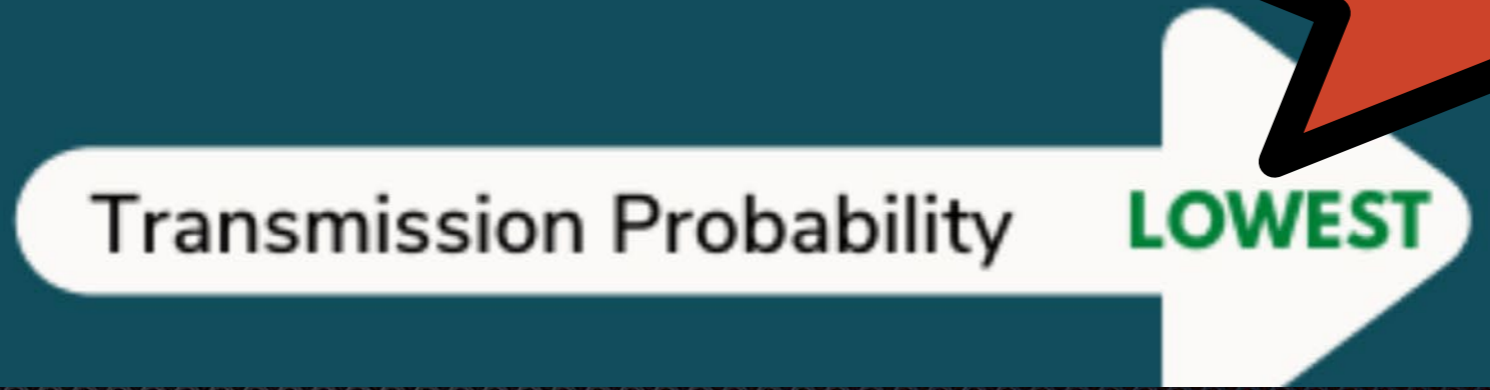
without mask



with mask



without mask



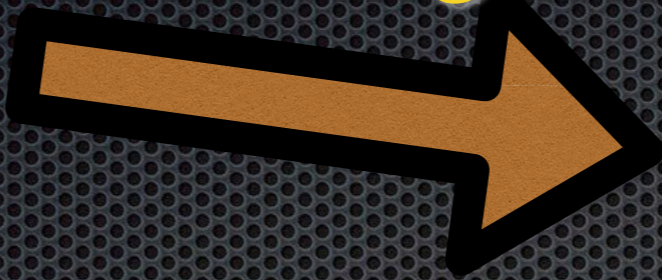
National Survey Study

- ✦ July-August 2020
 - ✦ Risk Perception — own risk, other people's risk
 - ✦ Prevention behaviors — wash hands, wear mask, etc.

✦

Absolute Risk -
Self

$$b = 0.13$$



Number of
Preventive
Behaviors

Absolute Risk -
Other

$$b = 0.94^{***}$$



Fear- Self

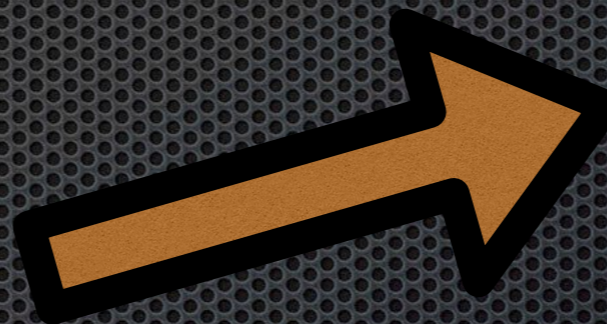
$$b = 0.72^{***}$$

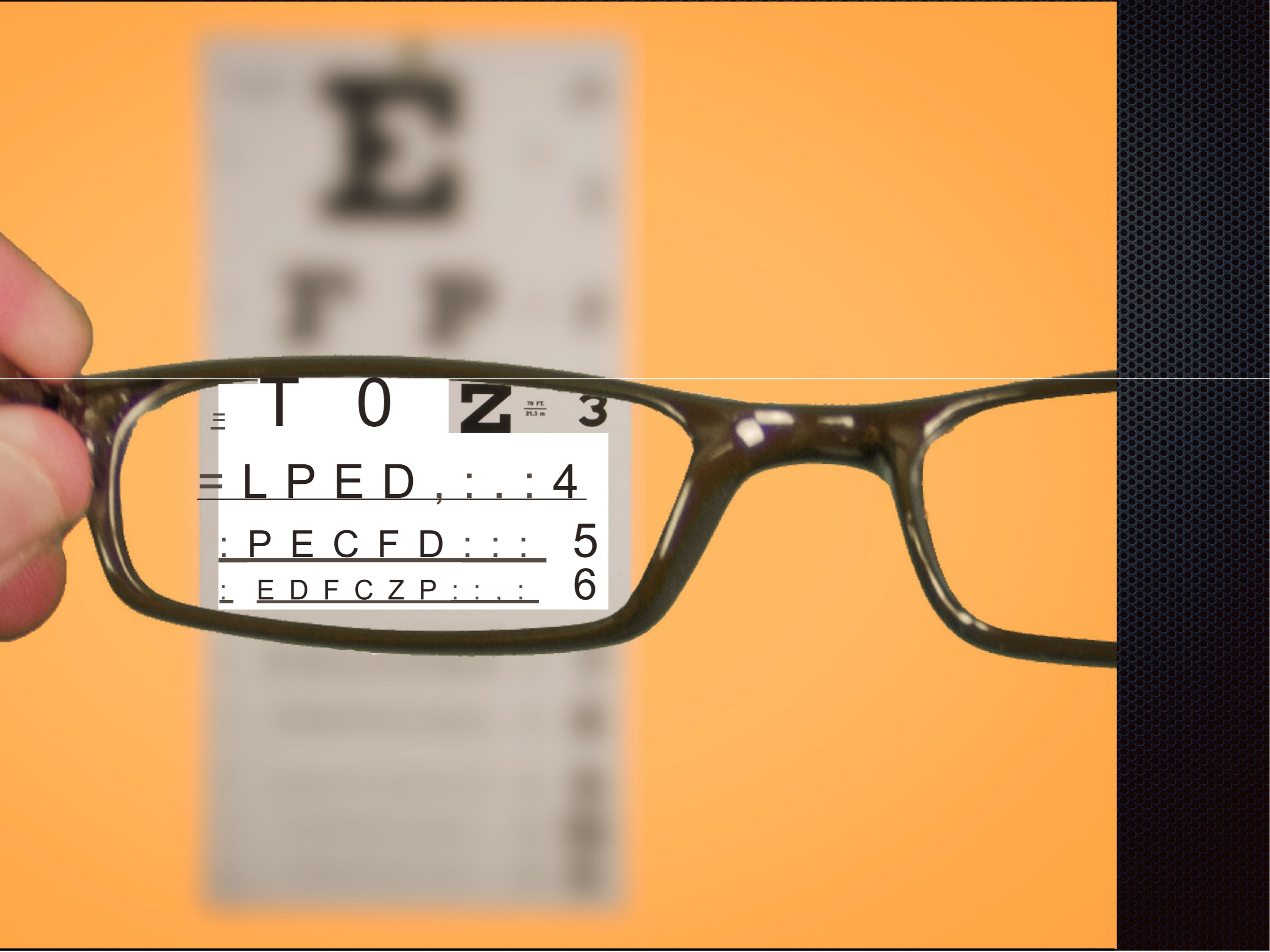


Number of
Preventive
Behaviors

Fear - Other

$$b = 0.82^{***}$$





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: P E C F D : : : 5
: E D F C Z P : : . : 6