## **In-person** Session 3

#### **January 27, 2022**

PMAP 8521: Program evaluation Andrew Young School of Policy Studies

#### **Plan for today**

#### **Regression and R stuff**

#### Logic models

### **Regression and R stuff**

### Big ol' example of running, interpreting, and exploring some regression models

### andhs.co/live

### Side-by-side regression tables

	Model 1	Model 2	Model 3	Model 4			
(Intercept)	362.307	-5780.831***	-5736.897***	-5433.534***			
	(283.345)	(305.815)	(307.959)	(286.558)			
bill_length_mm	87.415***		6.047	-5.201			
	(6.402)		(5.180)	(4.860)			
flipper_length_mm		49.686***	48.145***	48.209***			
		(1.518)	(2.011)	(1.841)			
sexmale				358.631***			
				(41.572)			
Num.Obs.	342	342	342	333			
R2	0.354	0.759	0.760	0.807			
R2 Adj.	0.352	0.758	0.759	0.805			
AIC	5400.0	5062.9	5063.5	4863.3			
BIC	5411.5	5074.4	5078.8	4882.4			
Log.Lik.	-2696.987	-2528.427	-2527.741	-2426.664			
F	186.443	1070.745	536.626	457.118			
+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001							

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#### + p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

#### See full documentation and examples for modelsummary() here

# Make nicer tables when knitting with kable()

(Or even fancier tables with kableExtra!)





### **Cleaner chunk output**



### Non-English characters in PDFs

### Logic models

### Logic models as managerial tools

### Inputs vs. Activities vs. Outputs vs. Outcomes

### Impact theory vs. logic model

#### Impact theory

#### Ensure that the theory linking activities to the outcomes is sound!





\* Because 11th and 12th graders who receive 3rd citations are generally unable to graduate from high school, district social workers no longer attempt to increase their commitment to school. As such, any outcomes that occur as a result of the alternative plans made for these students (work study programs, career development assistance, etc.) are only tangentially related to the outcomes of the truancy program itself. The system for creating alternative plans is an entirely separate program with its own logic model, goals, and outcomes.

#### **MPA/MPP** at GSU

#### Master of Public Policy

Preparing students for roles as effective citizens and workers in the public sphere.

#### About Curriculum Admissions MPA vs. MPP Current Students

The Master of Public Policy (MPP) is an interdisciplinary degree program designed to prepare students for work in the analysis, development, and evaluation of public policies. In all levels of government and on a global scale, public needs and limited resources require public policy choices that are at once economically efficient, socially and technically effective, and politically responsive. Such choices confront policymakers in a broad range of critical issues, including health, education, economic development, public finance, social policy, nonprofit policy, and disaster policy.

Decision-makers often lack the knowledge and skills needed to interpret the full social, political, economic, and technical dimensions of the policy issues they face. In response, state and local governments, businesses, and federal agencies have turned to trained policy analysts for assistance in assessing policy options and in evaluating public programs. The same is true for nonprofit agencies, such as hospitals, schools, emergency preparedness and relief agencies, and regional planning organizations.

#### Master of Public Administration

A flexible program for working professionals and full-time scholars.

About Curriculum Careers Admissions MPA vs. MPP

The mission of the Master of Public Administration (MPA) program is to prepare students to become leaders in public service careers as executives, managers, analysts, and policy specialists in government and nonprofit organizations.

## Isn't it best to always have an articulated theory?

# Should implicit theory and articulated theory be the same thing in most cases?

#### How much does this evaluation stuff cost?

## Can you do scaled-down versions of these evaluations?

# What if a program exists already and doesn't have a logic model?

# What if a program exists already and doesn't have baseline data (or any data!)?

How can programs evaluate their final outcomes if they are not measurable? Do they find a different outcome that is easier to measure?

Why would they pick final outcomes that can't be measured?

#### What should you do if you find that your theory of change (or logic model in general) is wrong in the middle of the program? Is it ethical to stop or readjust?

#### **Outcomes and programs**

**Outcome variable** 

Thing you're measuring

**Outcome change** 

 $\Delta$  in thing you're measuring over time

Program effect

 $\Delta$  in thing you're measuring over time because of the program

#### **Outcomes and programs**



Before program

**During program** 

After program