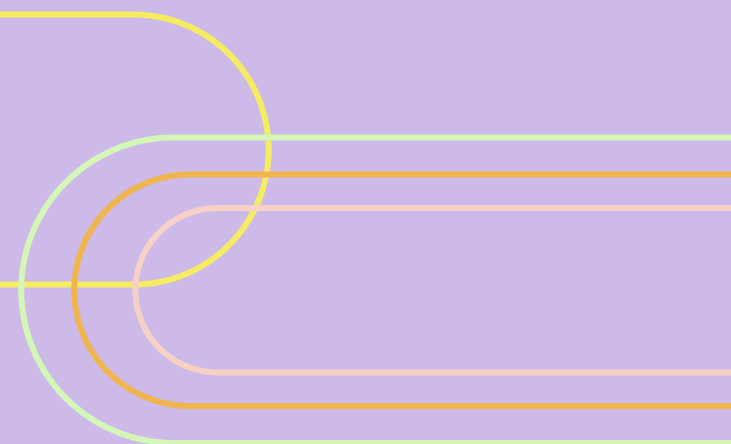


# Intersectional minority stressors as determinants of mental health among sexual minority women

**Campbell Loi with Mary Andrews**

SUMR Symposium

Wednesday August 16, 2023



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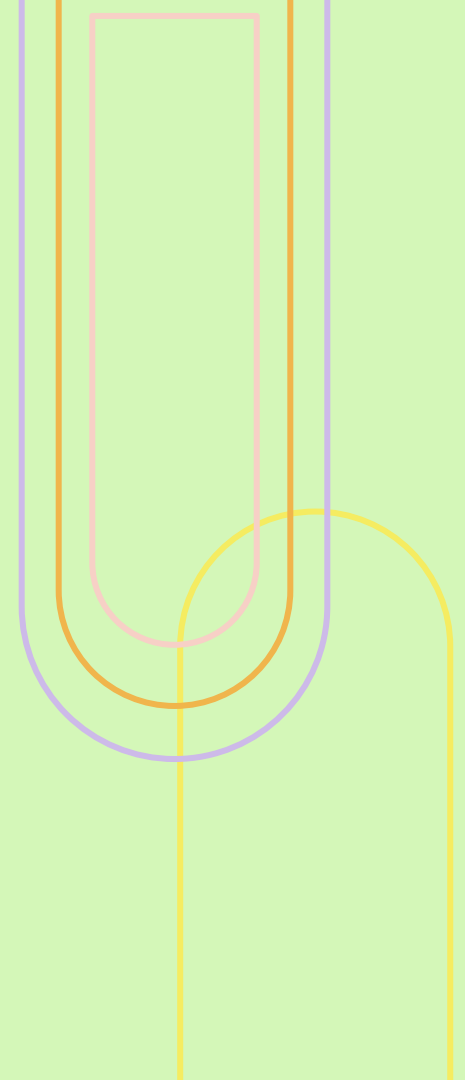
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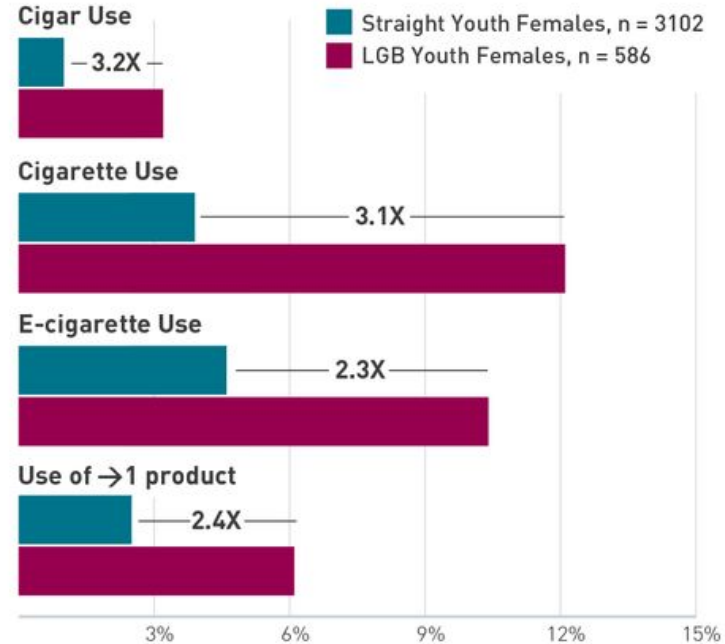
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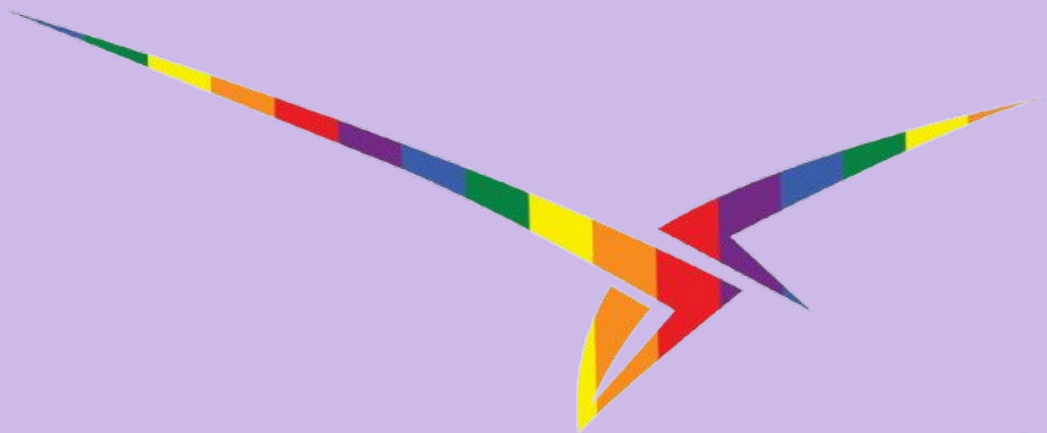
01

# Project Resist Overview



## LGB Females vs Straight Females Current Tobacco Use, 2016 (Youth)<sup>4</sup>





projectresist

**Stress:** victimization, sexual orientation concealment, discrimination events  
**Demographics:** race, education, income, partnership status  
**Health:** substance use, mental health, health status, health insurance

**Cultural:** identification with LGBT community, salience of LGBT identity  
**Social:** bonding, social support, social norms of smoking and alcohol use, bar culture

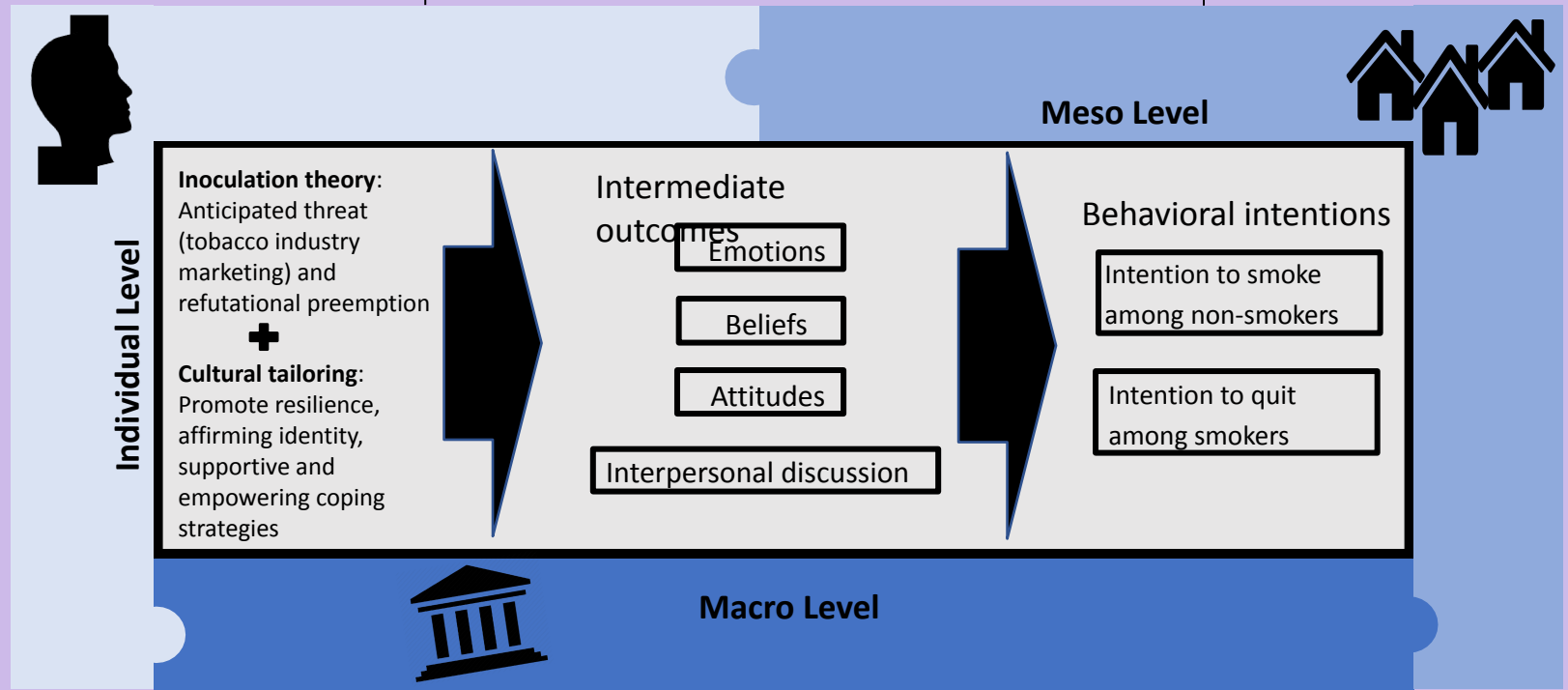


Figure 1 – Conceptual model

**Policy:** state level tobacco environments, tobacco control policies  
**Tobacco industry:** LGBT-targeted advertising, positive smoking-related imagery

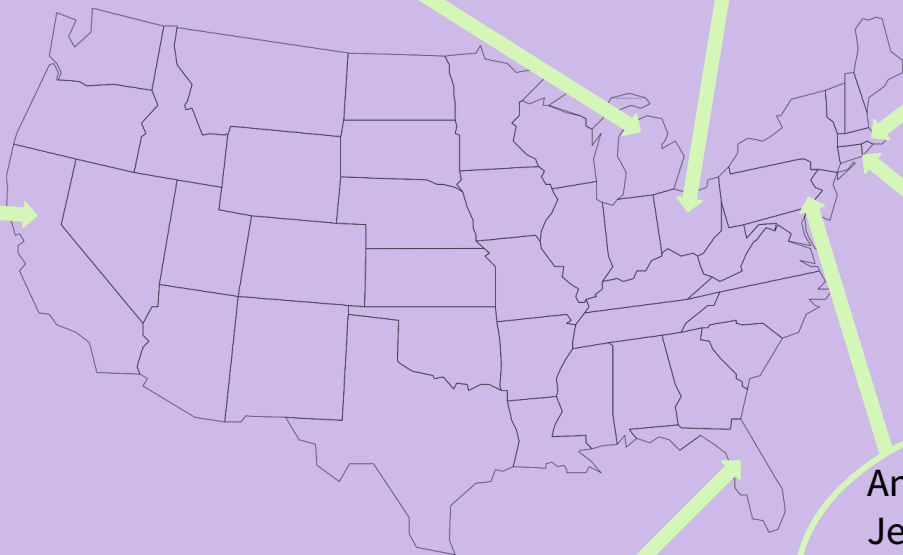
Ashley Sanders-Jackson, Qijia Ye,  
Faith Delle, Dominik Neumann,  
Lou Schiavone, Maral Zakharia  
(Michigan State University)

Julia Applegate (OSU)

K Viswanath (DFCI)  
Shoba Ramanadhan, Jarvis  
Chen, Meg Salvia, Ryan Keen  
(Harvard Chan)  
Jennifer Potter (The Fenway  
Institute, HMS, BIDMC)

Bob Gordon (CA LGBTQ  
Tobacco Education  
Partnership)

Mitchell Lunn, Juno  
Obedin-Maliver Zubin  
Dastur (Stanford  
University School of  
Medicine, The PRIDE  
Study)



Scout (National LGBT  
Cancer Network)

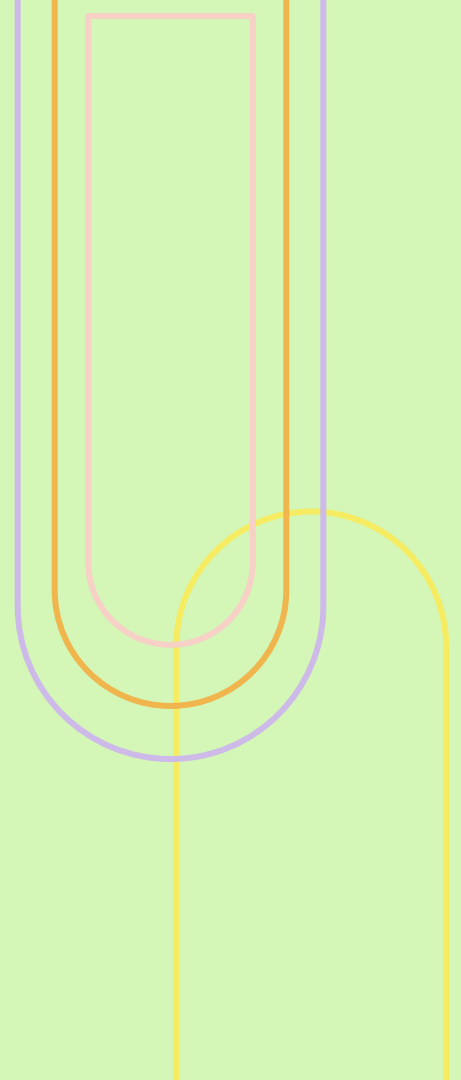
Ana Machado, (CenterLink)

Andy Tan, Elaine Hanby,  
Jenine Pilla, David Cordero,  
Mary Andrews, Vivian Liu,  
Brittany Zulkiewicz, Danielle  
Clark (UPenn Annenberg)

+Campbell!

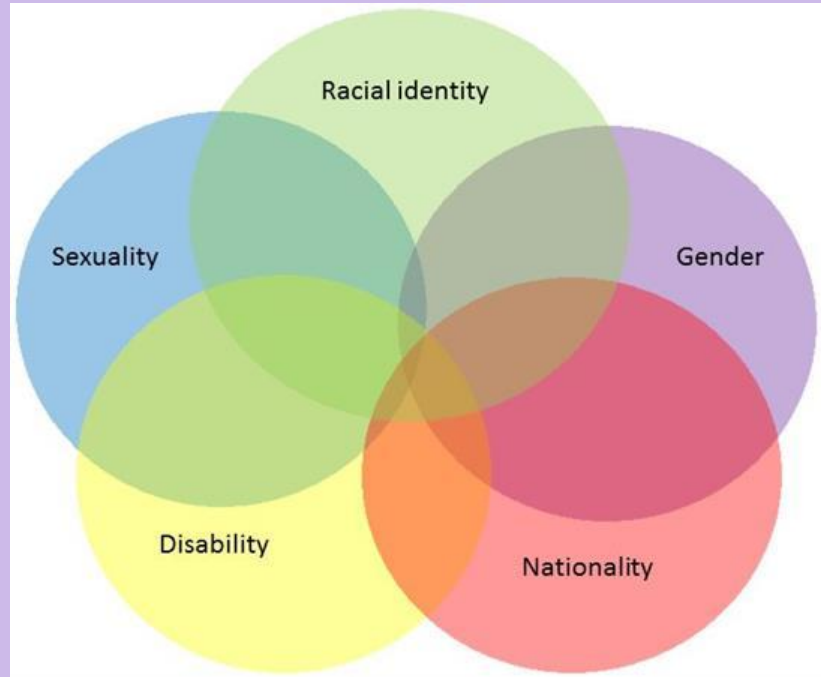
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My Role

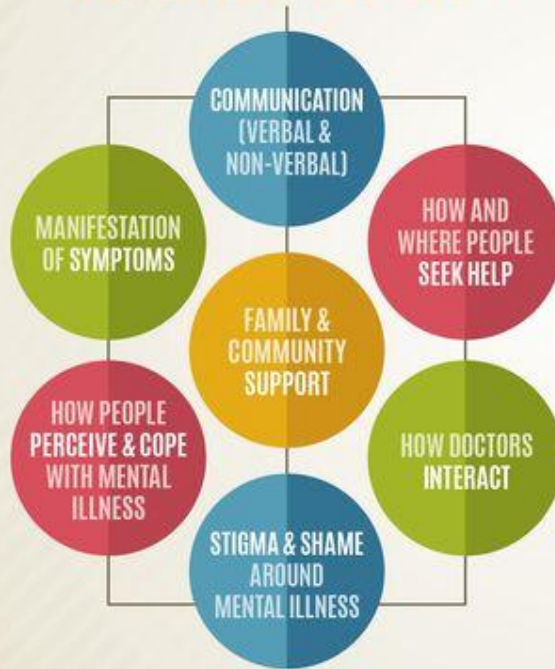




# On Intersectionality...



# How Can Race/Ethnicity/Culture INFLUENCE MENTAL HEALTH?

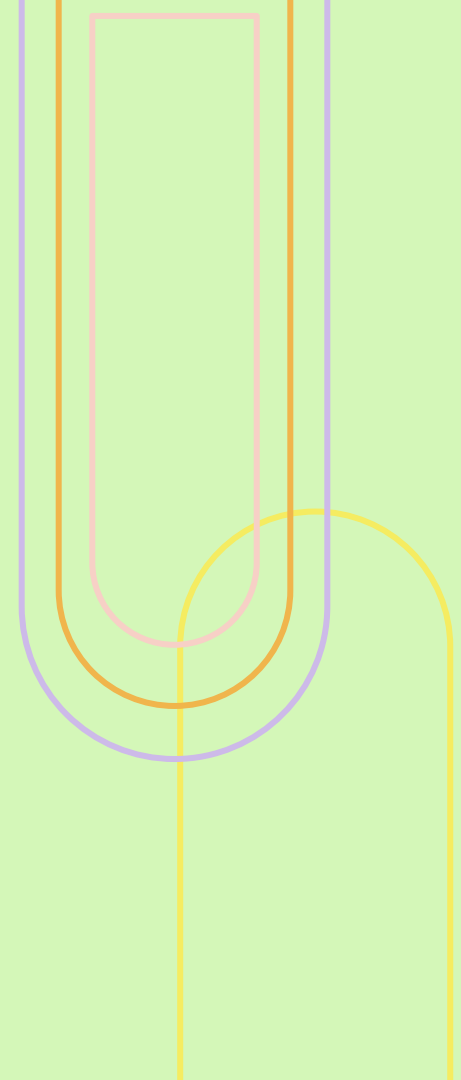


# Research Question

How do sexual identity-based stressors, coping mechanisms, and mental health outcomes differ by race and ethnicity?

03

# Methods



# Measures

- Race/ethnicity
- Depression / Depressive symptoms
- Victimization
- Concealment
- Connectedness to LGBTQ community

Construct	Item	Answers/Format
Minority Stressor: Victimization	Please think carefully about your life as you answer the questions below. Read each question and select the best option for the number of times this has happened in the PAST YEAR.	
	How many times has each of the following happened because of your sexual orientation?	
Harassment and Rejection	Been rejected by friends	1 = Never 2 = Once in a while 3 = Sometimes 4 = A lot 5 = Most of the time 6 = Almost all of the time
	Been verbally insulted	
	Been made fun of, picked on, pushed, shoved, hit or threatened	
	Heard discriminatory remarks from family members	
	Been rejected by family members	
	Been called an offensive name	
	Been treated unfairly by your family	
Workplace and School Discrimination	Been treated unfairly by your employer, boss, or supervisors	
	Been denied a raise, promotion, tenure, a good assignment, a job, or other such things that you deserved	
	Been treated unfairly by teachers or professors	
	Been treated unfairly by your co-workers, fellow students, or colleagues	
Other Discrimination	Been treated unfairly by people in service jobs (by store clerks, waiters, bartenders, waitresses, bank tellers, mechanics, and others)?	
	Been treated unfairly by strangers?	
	Been treated unfairly by people in helping jobs (by health care providers or social workers)?	

Construct	Item	Answers/Format
Minority Stressor: Concealment	How many of each of the following individuals know about your sexual orientation?	
	Family	1 = None 2 = Some 3 = Most 4 = All
	Close friends	
	Casual friends	
	LGBTQ+ friends	
	Straight friends	
	Coworkers	

Construct	Item	Answers/Format
Depression	Over the LAST 2 WEEKS, how often have you been bothered by the following problems?	
	Little interest or pleasure in doing things	0= Not at all 1= Several days 2= More than half the days 3= Nearly every day
Feeling down, depressed, or hopeless		

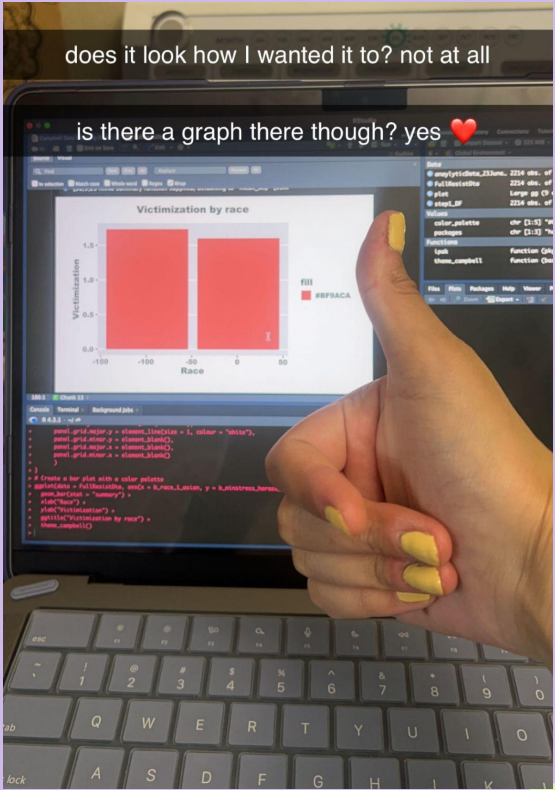
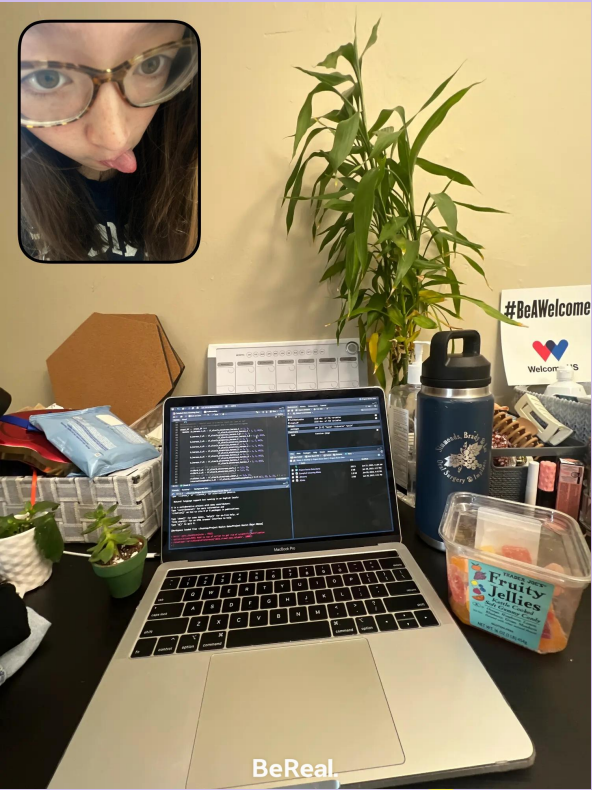
Baseline Sample Characteristics	Overall
	(n=2214)
<b>Sexual Orientation (n, %)</b>	
Bisexual	664 (30.0)
<b>Lesbian or Gay</b>	945 (42.7)
Other	605 (27.3)
<b>Gender Identity (n, %)</b>	
<b>Cisgender Woman</b>	1,678 (75.7)
Transgender woman	78 (3.5)
Woman (not otherwise specified)	458 (20.7)
<b>Race/Ethnicity (n, %)</b>	
<b>White</b>	1364 (61.6)
<b>Black</b>	257 (11.6)
<b>Asian/Pacific Islander</b>	214 (9.7)
Hispanic	262 (11.8)
Other	58 (2.6)
<b>Age (Years) at Baseline (n, %)</b>	
18 - 23	902 (40.7)
>23 - 30	1312 (59.3)

**Table 1. Characteristics of the study sample at baseline and loss to follow-up by smoking status and treatment assignment (non-tailored vs. tailored intervention)**

Sample Characteristics	Currently Smoking			Not Currently Smoking		
	Non-tailored N = 599	Tailored N = 613	p-value	Non-tailored N = 501	Tailored N = 501	p-value
<i>Sociodemographic variables</i>						
Sexual Orientation (n, %)			>0.9			>0.9
Bisexual	123 (21)	124 (20)		207 (41)	210 (42)	
Lesbian or gay	388 (65)	398 (65)		80 (16)	79 (16)	
Other	88 (15)	91 (15)		214 (43)	212 (42)	
Gender Identity (n, %)			0.3			0.9
Cisgender woman	473 (79)	467 (76)		370 (74)	368 (73)	
Transgender woman	19 (3.2)	30 (4.9)		13 (2.6)	16 (3.2)	
Woman (no other specified)	107 (18)	116 (19)		118 (24)	117 (23)	
Race/Ethnicity (n, %)			0.9			>0.9
Non-Hispanic White	229 (38)	231 (38)		322 (64)	320 (64)	
Non-Hispanic Black	66 (11)	69 (11)		26 (5.2)	28 (5.6)	
Non-Hispanic Asian/ Pacific Islander	44 (7.3)	46 (7.5)		41 (8.2)	38 (7.6)	
Non-Hispanic Arab	118 (20)	110 (18)		5 (1.0)	7 (1.4)	
Non-Hispanic Other	84 (14)	100 (16)		34 (6.8)	34 (6.8)	
Hispanic	58 (9.7)	57 (9.3)		73 (15)	74 (15)	
Age (years) at Baseline (n, %)			0.8			>0.9
18-23	198 (33)	199 (32)		253 (50)	252 (50)	
24-30	401 (67)	414 (68)		248 (50)	249 (50)	
Education (n, %)			0.4			0.4
High school graduate or less	127 (21)	111 (18)		43 (8.6)	56 (11)	
Some college	118 (20)	130 (21)		151 (30)	145 (29)	
College graduate	247 (41)	265 (43)		208 (42)	207 (41)	
(Missing)	107 (18)	107 (17)		99 (20)	93 (19)	

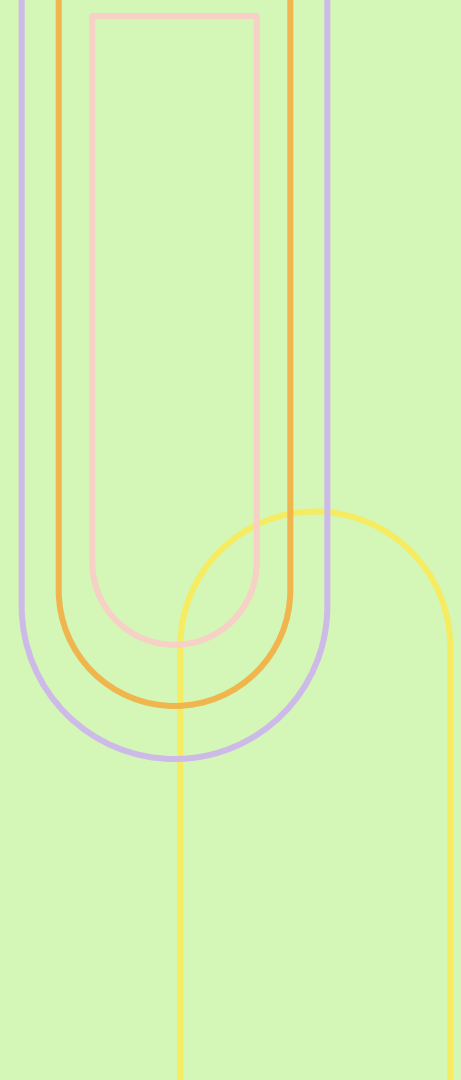


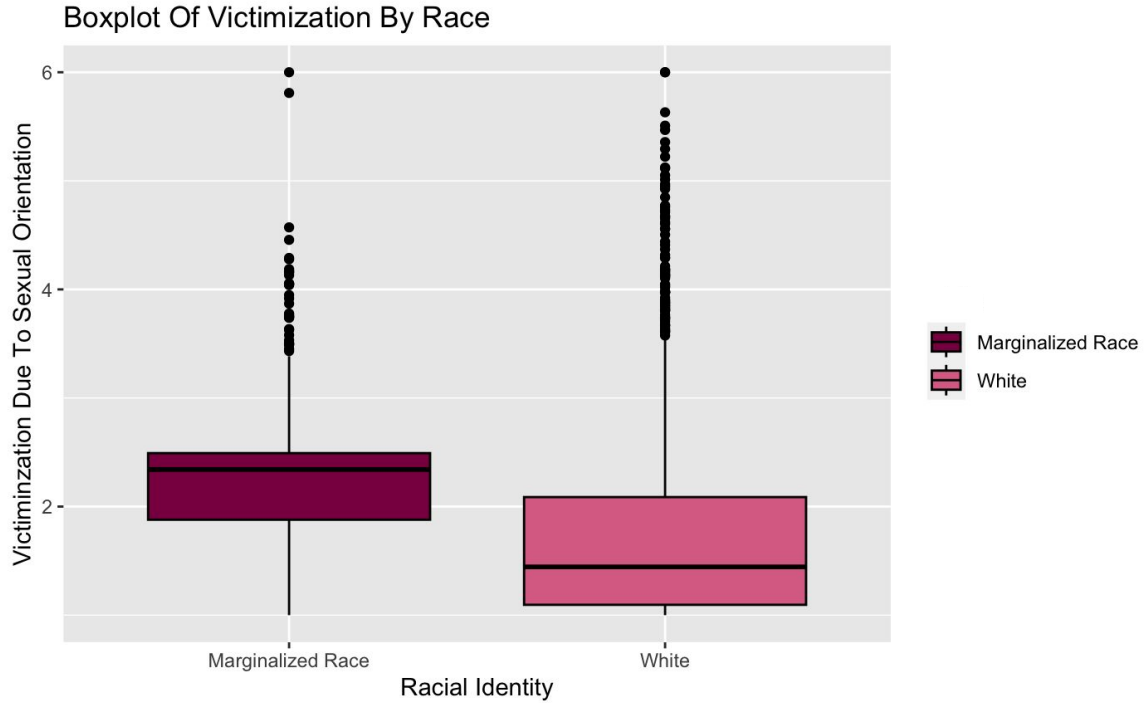
# Methods



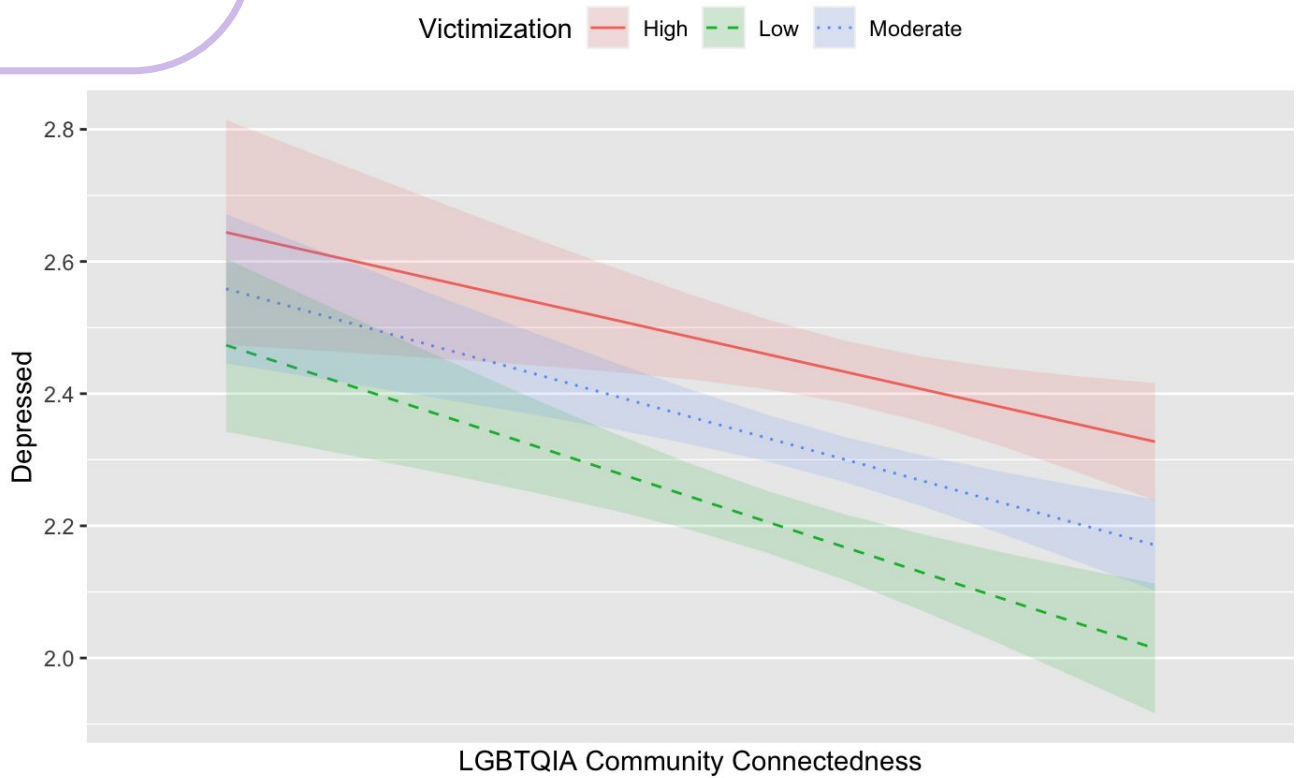
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# Findings

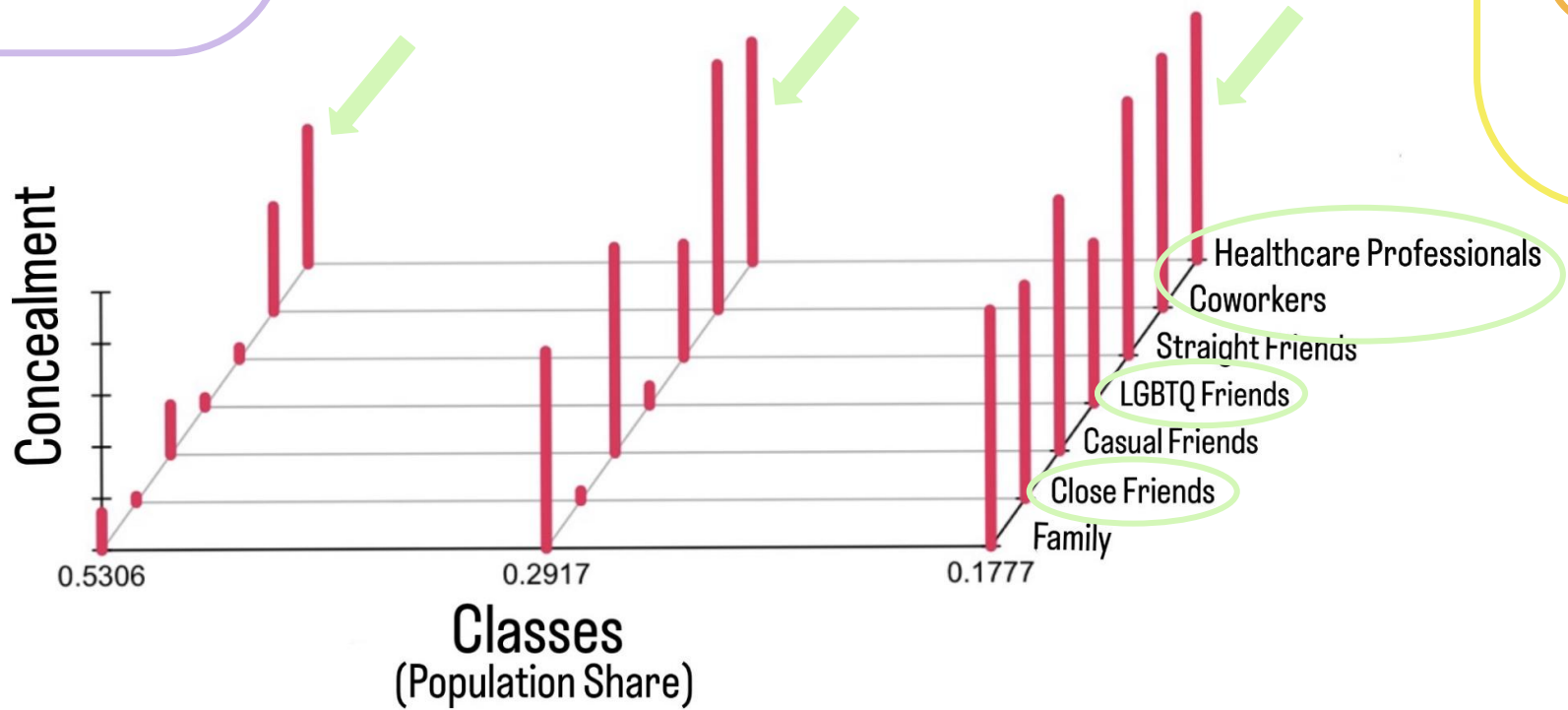




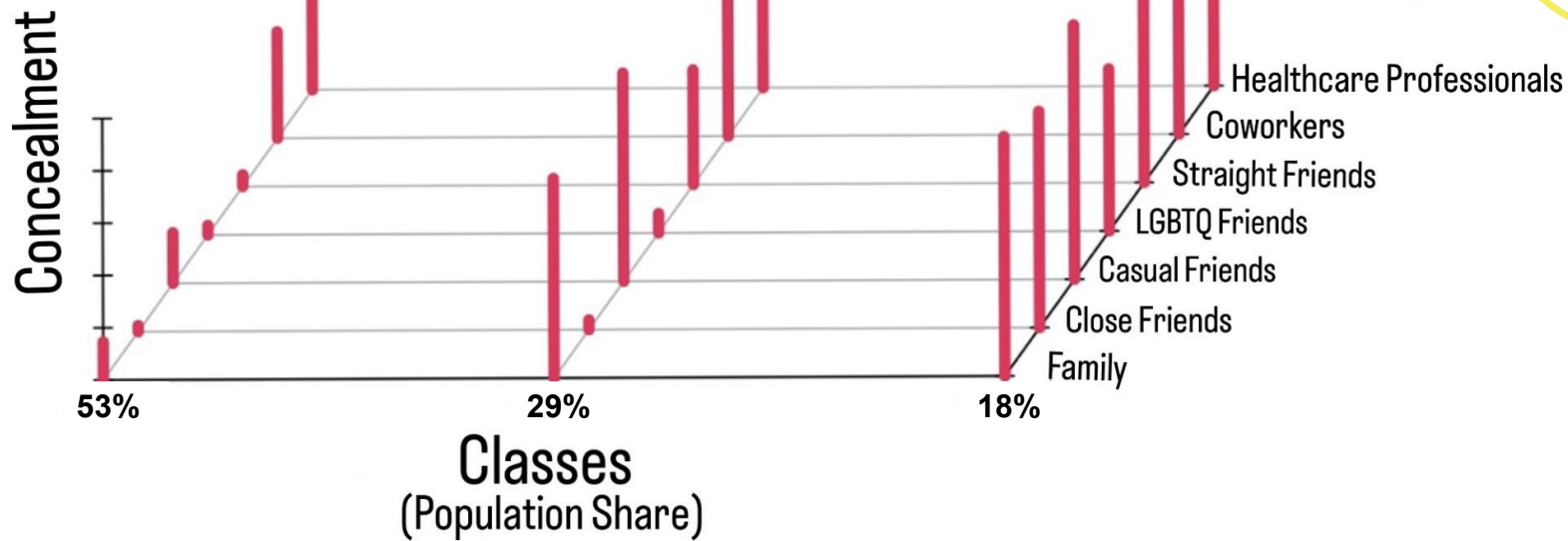
# Victimization by Race



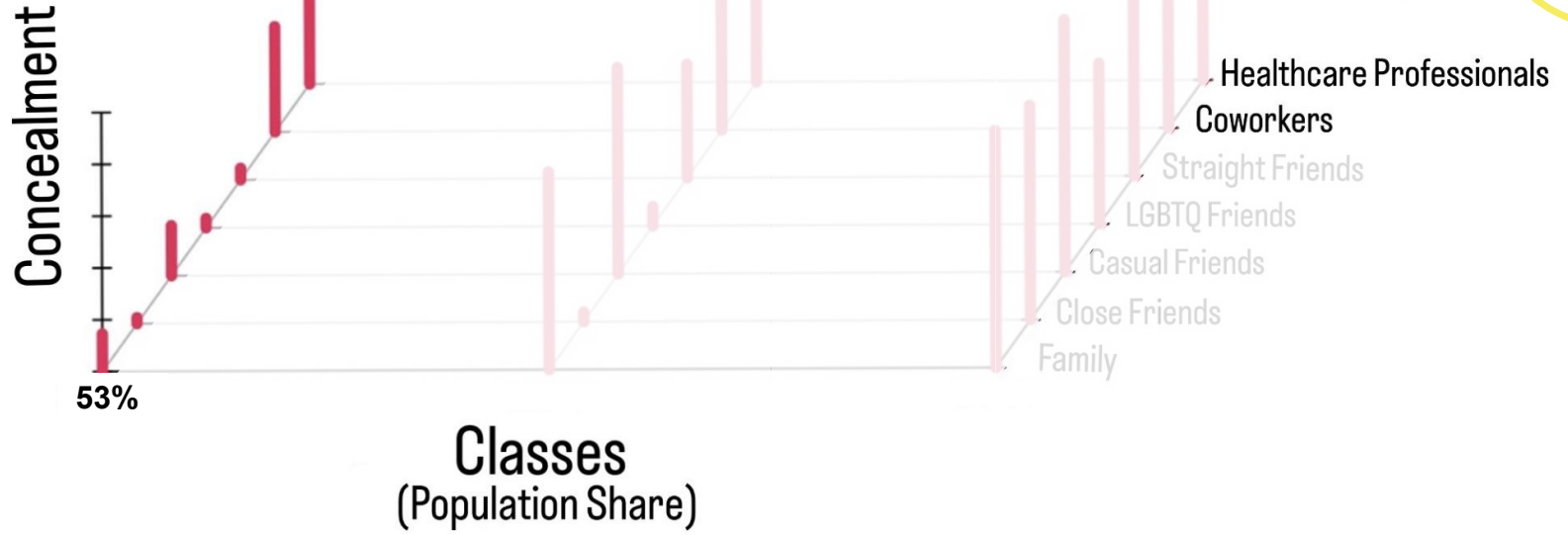
# Depression and Connection to Community



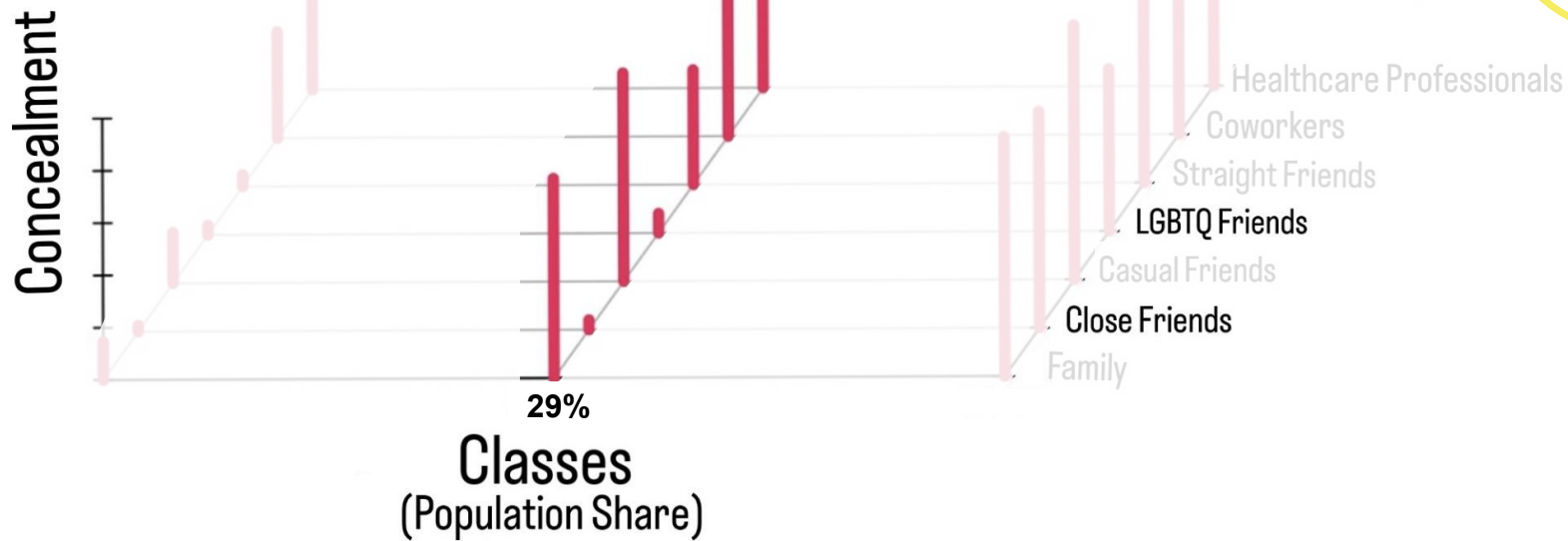
# Latent Class Analysis



## Latent Class Analysis

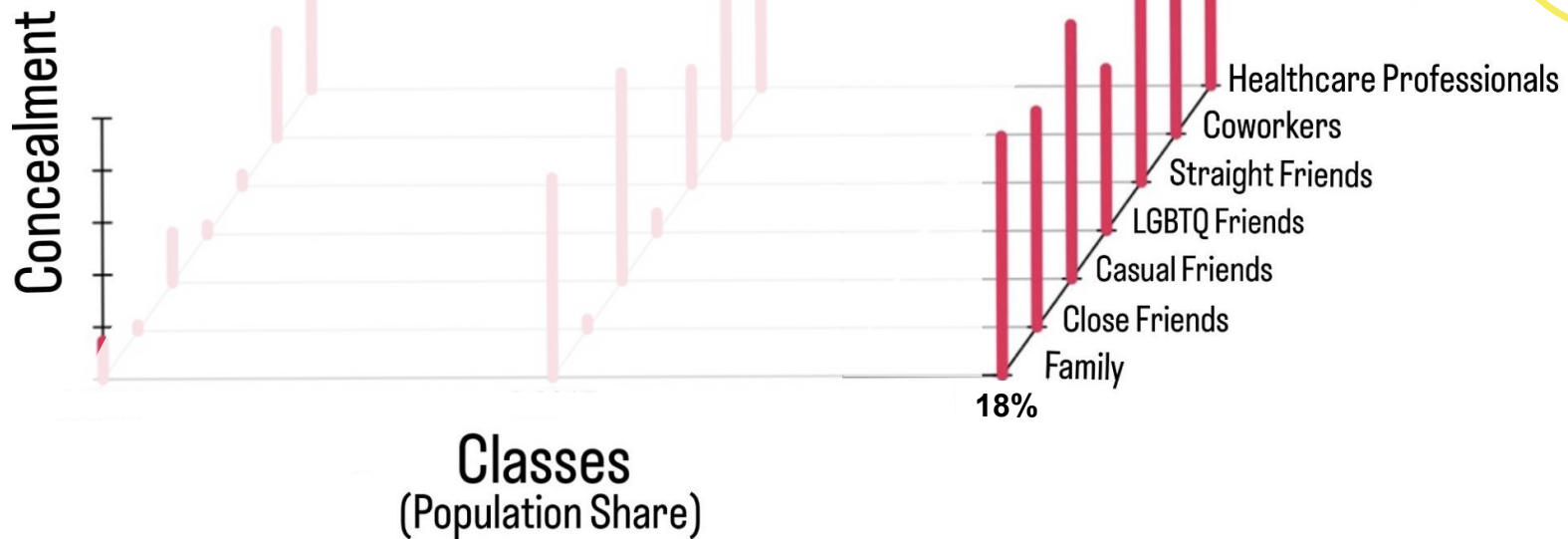


# Latent Class Analysis



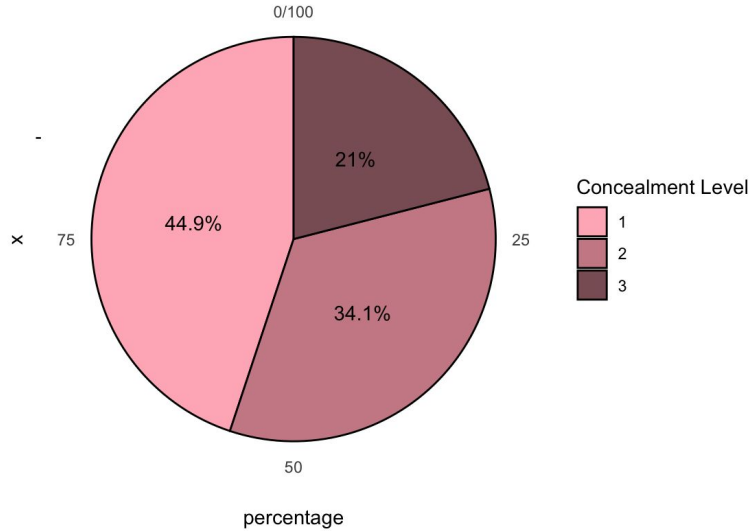
## Latent Class Analysis



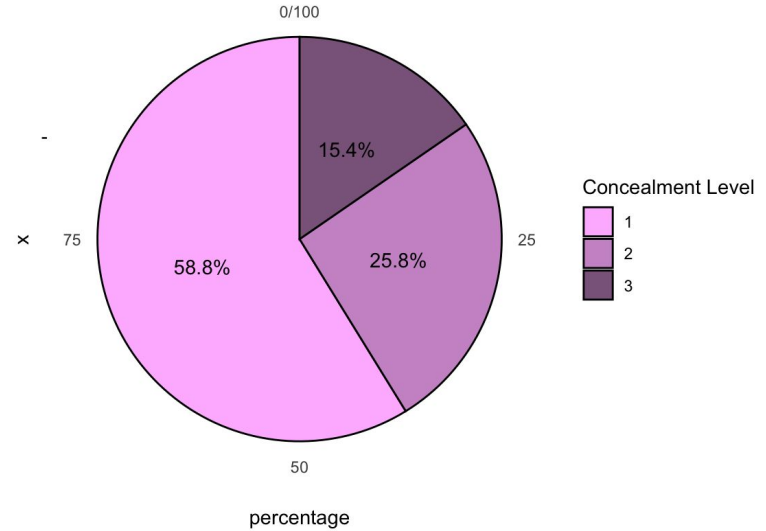


# Latent Class Analysis

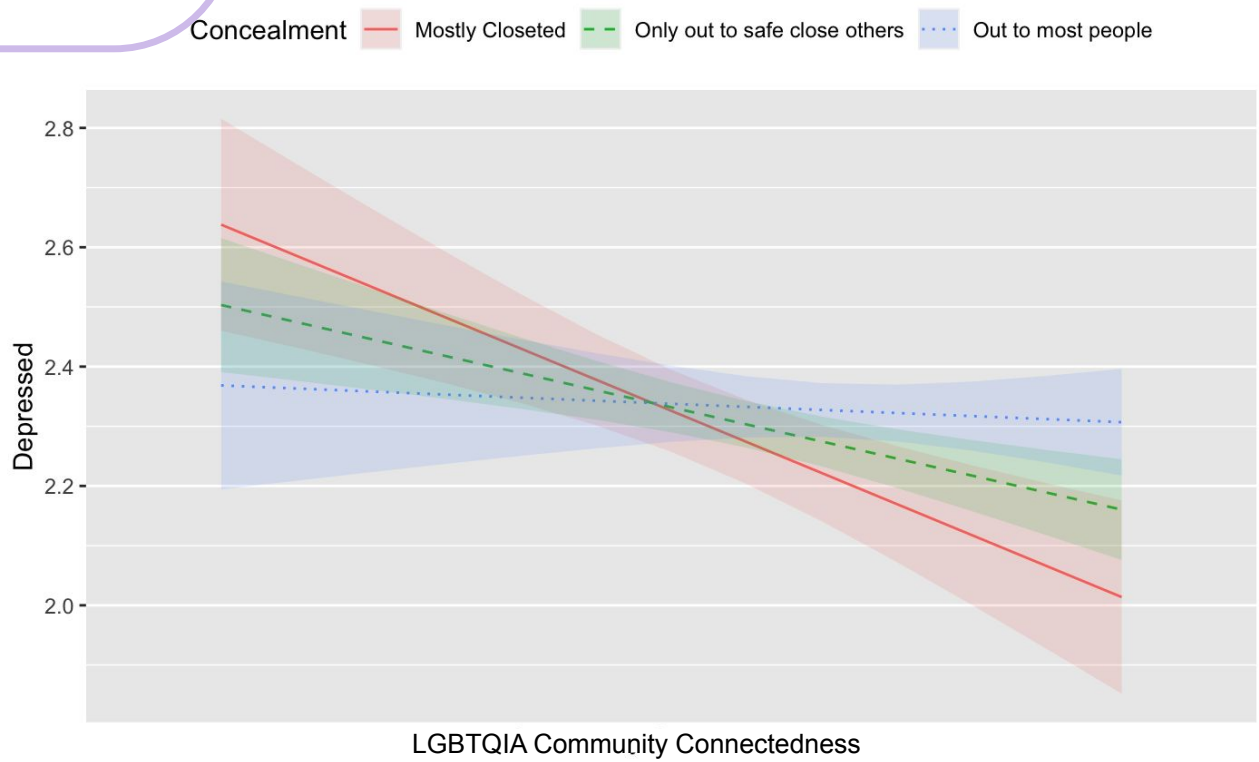
Pie Chart of Concealment Levels for Asian Participants



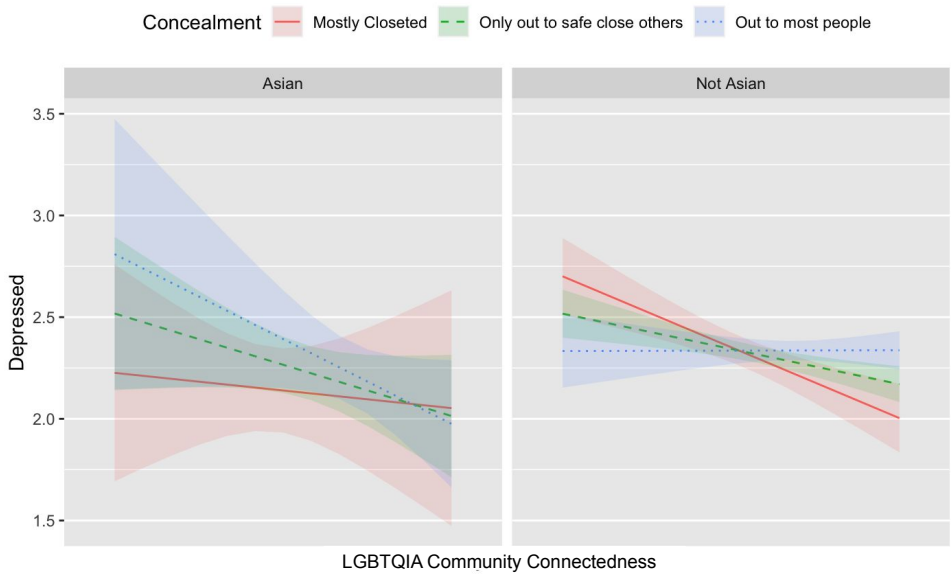
Pie Chart of Concealment Levels for Black Participants



# Concealment by Race



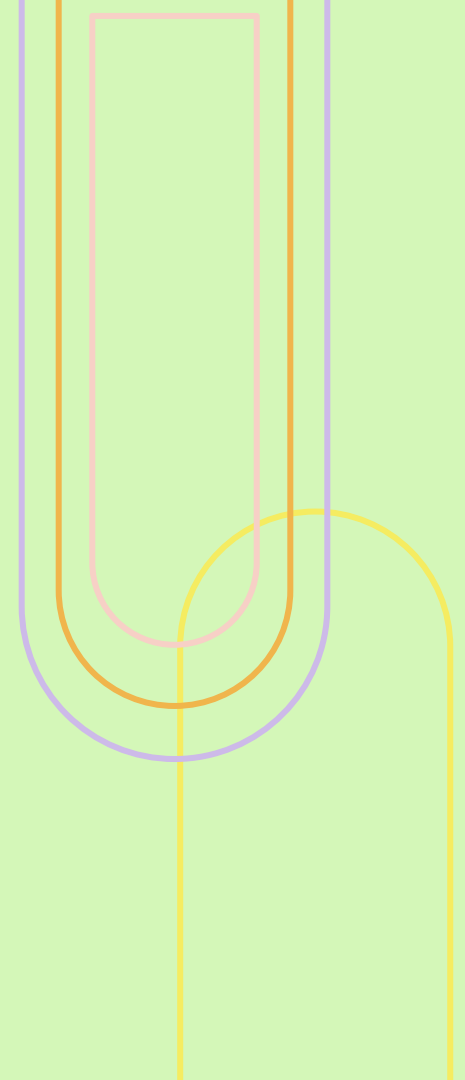
# Depression and Connection to Community



# Differences by Race

05

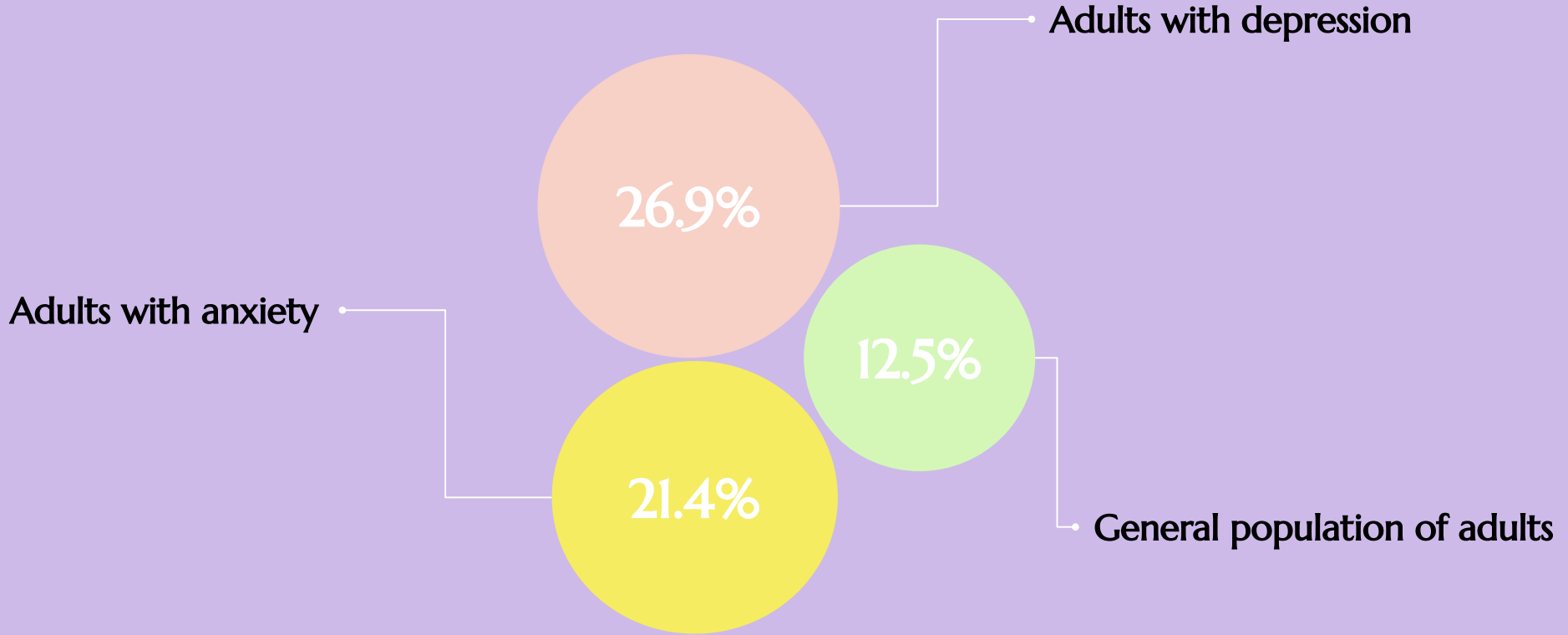
# Significance



## In summary...

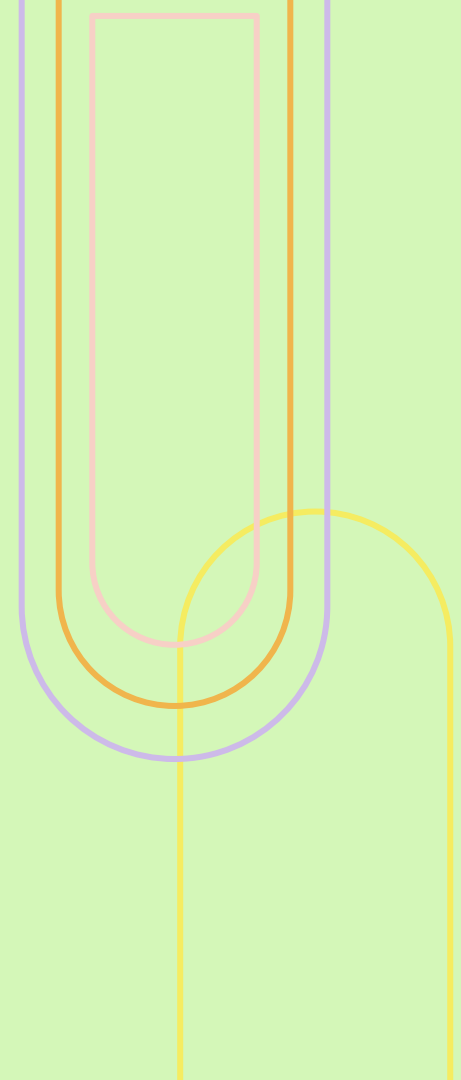
- Sexual identity-based stressors vary greatly across racial groups
- Connection to community moderates the effects of sexual identity-based stressors on depressive symptoms
  - These effects vary based on race

# Adults with psychological distress smoke more



06

# Lessons Learned






# Limitations

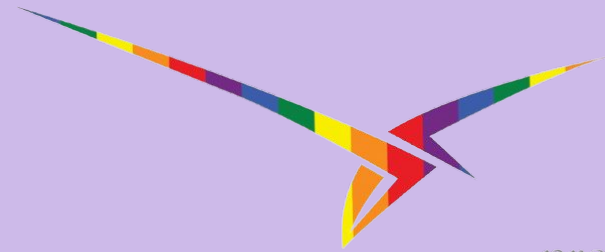
- Cross-sectional data collection
- Non-random recruitment
- Aims of the broader Project Resist study



# Lessons Learned

- Quantitative analysis
    - Rstudio
    - Basic stats
  - Familiarity with intersectionality
  - Latent class analysis
  - Connections to data
- 

# Thank You!



projectresist



# The slide title goes here!

Mercury is the closest planet to the Sun and the smallest one in the entire Solar System. This planet's name has nothing to do with the liquid metal, since Mercury was named after the Roman messenger god.

Despite being closer to the Sun than Venus, its temperatures aren't as terribly hot as that planet's.

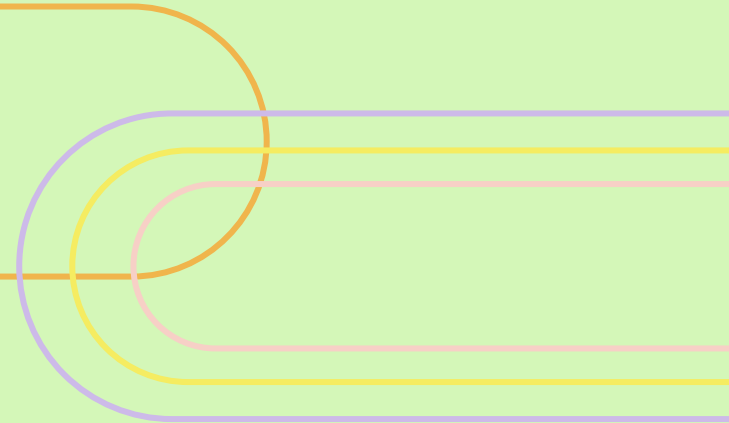
Speaking of craters, many of them were named after artists or authors who made significant contributions to their respective fields. Mercury takes a little more than 58 days to complete its rotation, so try to imagine how long days must be there! Since the temperatures are so extreme, albeit not as extreme as on Venus, and the solar radiation is so high, Mercury has been deemed to be non-habitable for humans





“This is a quote, words full of wisdom that someone important said and can make the reader get inspired.”

—Someone Famous



# Maybe you need to divide the content

## Jupiter and Mars

Jupiter is a gas giant and the biggest planet in the Solar System. It's the fourth-brightest object in the night sky. It was named after the Roman god of the skies and lightning

Despite being red, Mars is actually a cold place. It's full of iron oxide dust, which gives Mars its reddish cast

## Venus and Mercury

Venus has a beautiful name and is the second planet from the Sun. It's terribly hot, even hotter than Mercury, and its atmosphere is extremely poisonous. It's the second-brightest natural object in the night sky after the Moon

Mercury is the closest planet to the Sun and the smallest one of them all

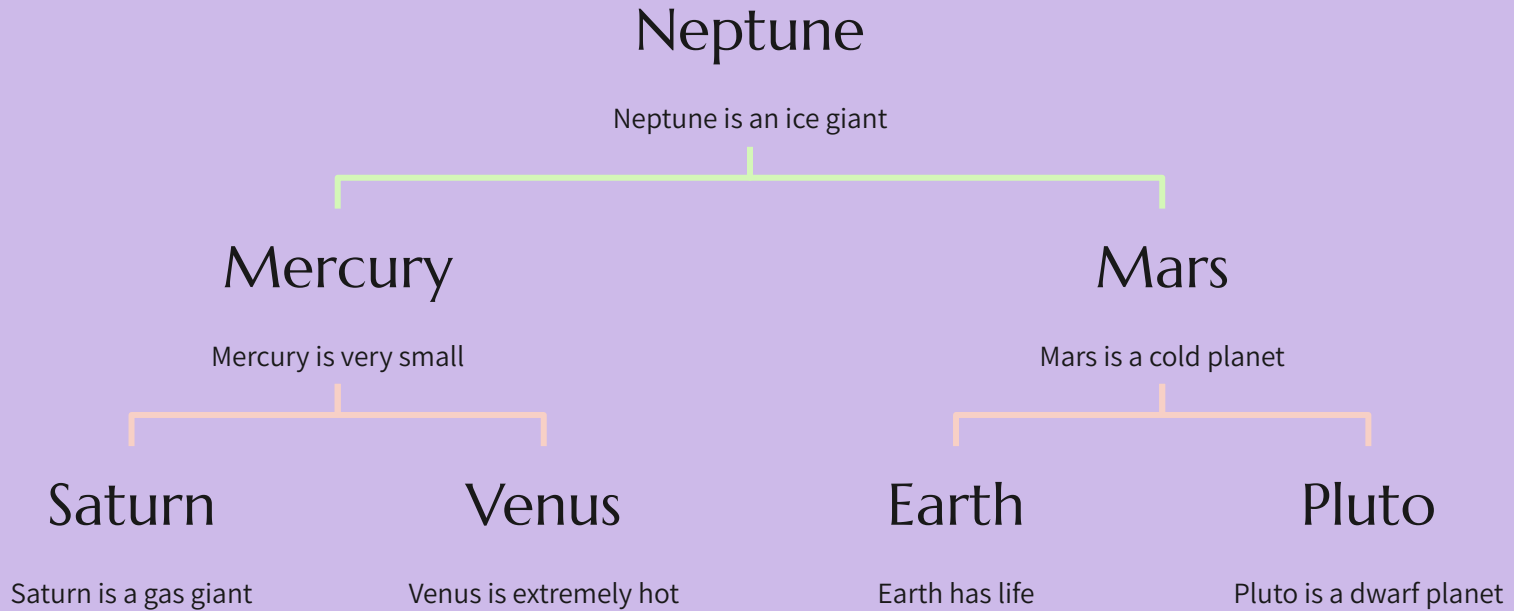


# You can use bullet points

- Venus has a beautiful name and is the second planet from the Sun. It's terribly hot, even hotter than Mercury, and its atmosphere is extremely poisonous. It's the second-brightest natural object in the night sky after the Moon
- Earth is the third planet from the Sun and the only one that harbors life in the Solar System. We all live on this planet
- Jupiter is a gas giant and the biggest planet in the Solar System. It's the fourth-brightest object in the night sky. It was named after the Roman god of the skies and lightning



# Infographics are always useful







A picture is worth a thousand words

# Long text slide

Mercury is the closest planet to the Sun and the smallest of them all. This planet's name has nothing to do with the liquid metal, since Mercury was named after the Roman messenger god. Despite being closer to the Sun than Venus, its temperatures aren't as terribly hot as that planet's. Its surface is quite similar to that of Earth's Moon, which means there are a lot of craters and plains. Speaking of craters, many of them were named after artists or authors who made significant contributions to their respective fields. Mercury takes a little more than 58 days to complete its rotation, so try to imagine how long days must be there! Since the temperatures are so extreme, albeit not as extreme as on Venus, and the solar radiation is so high, Mercury has been deemed to be non-habitable for humans

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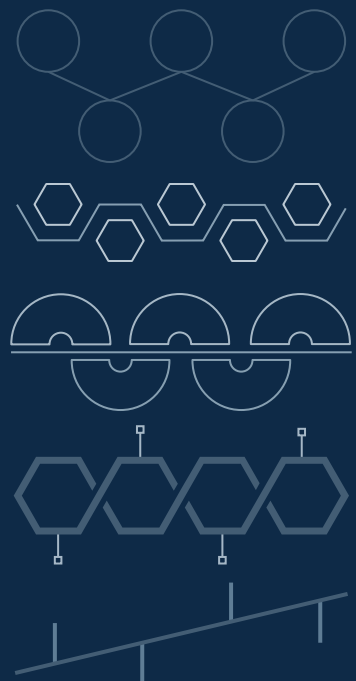
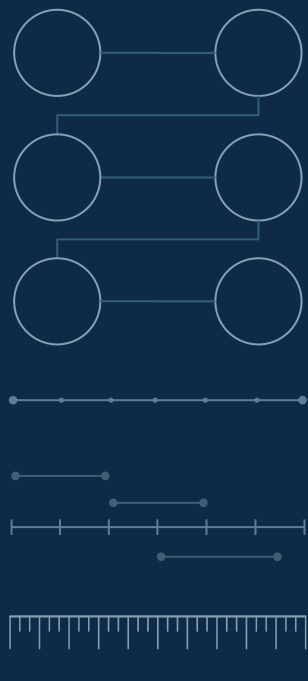
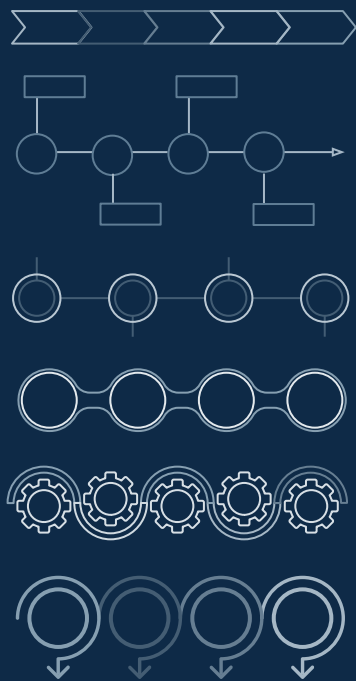
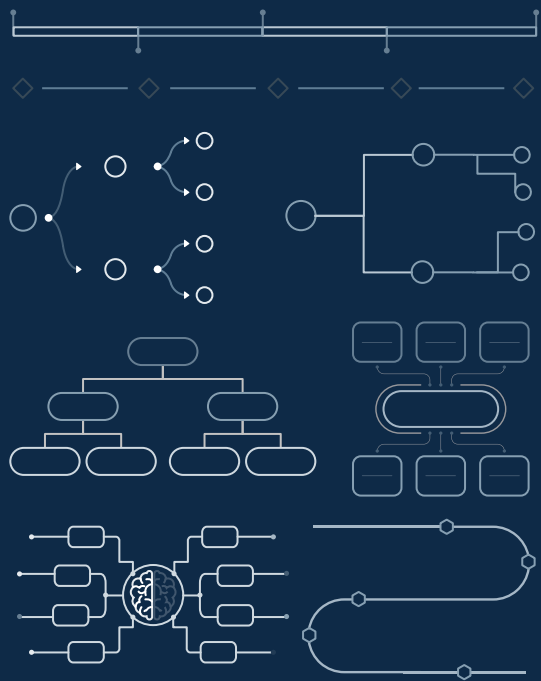
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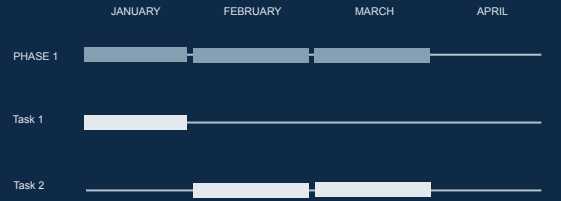
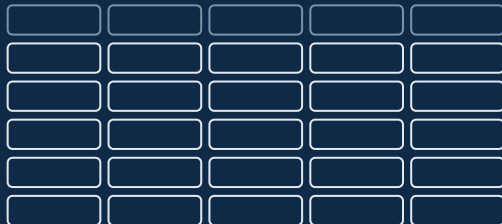
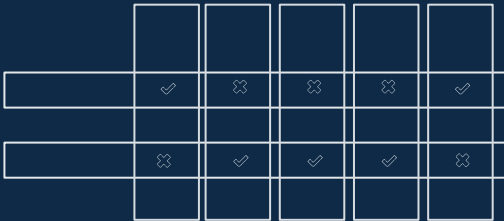
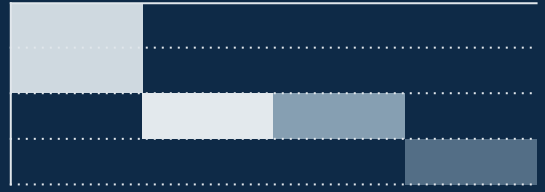
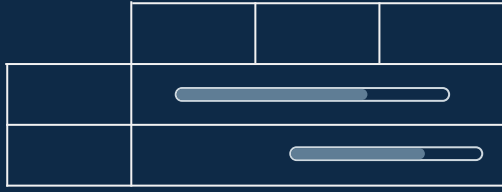
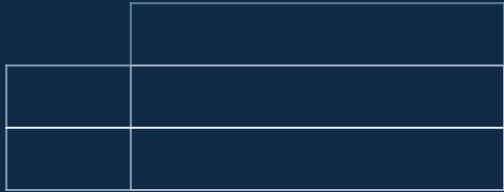
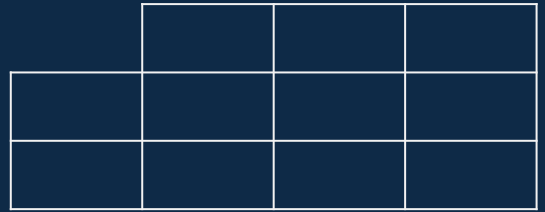
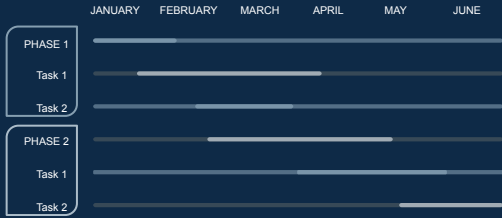
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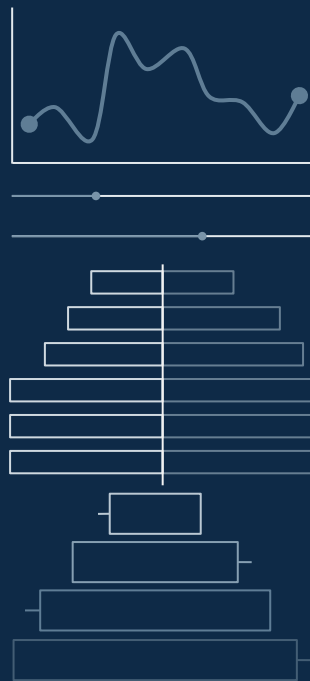
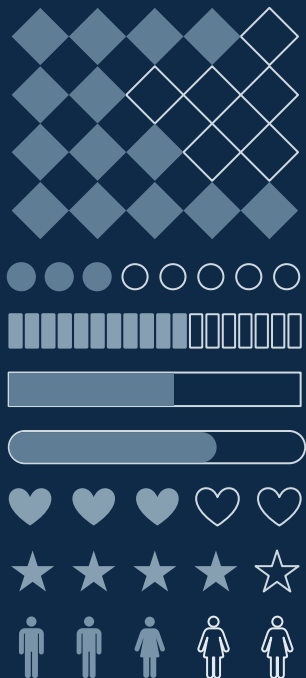
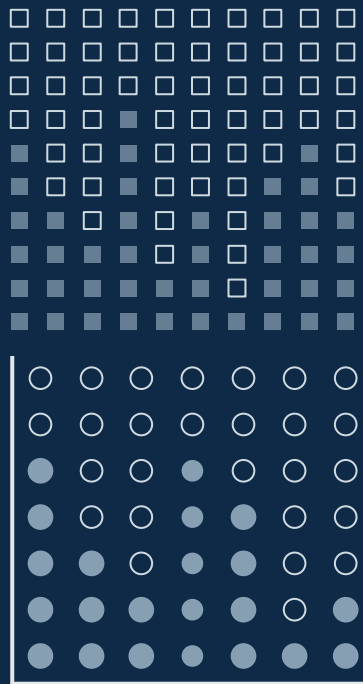












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# Creative Process Icons



# Performing Arts Icons



# Nature Icons



# SEO & Marketing Icons



