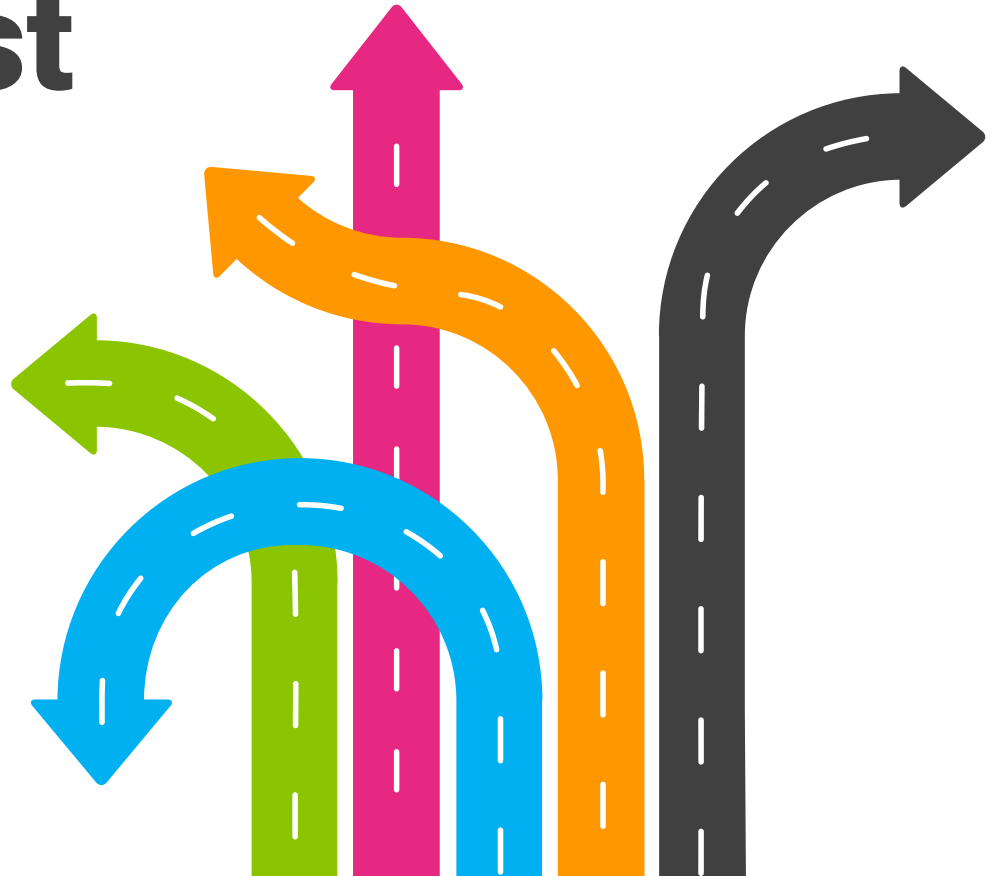# Quality Quest

**Navigating the Challenges
of Opt-In Samples
Through Hybrid Solutions**

Cameron McPhee | Chief Methodologist
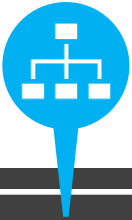**Kristen Conrad |** Vice President

It starts with sample.

The people you are talking to are **as important** as the questions you are asking.

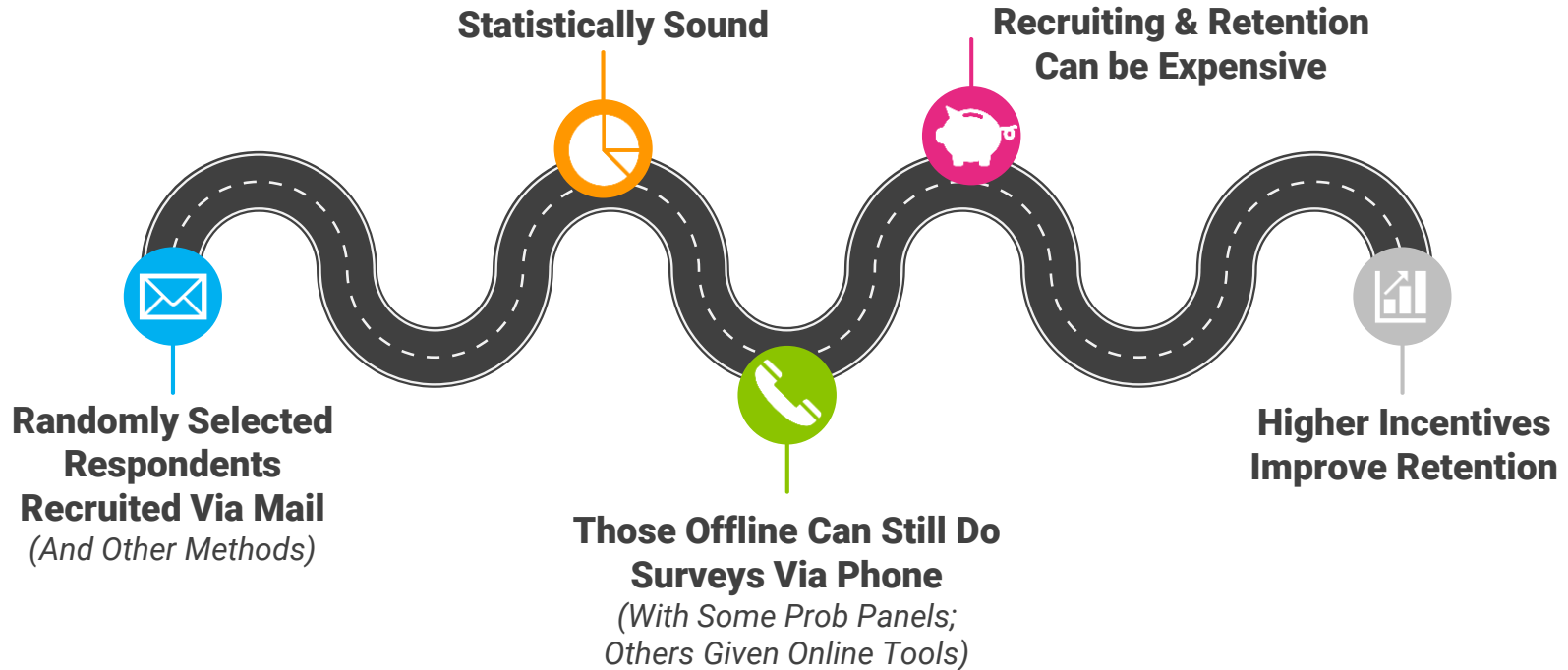# Opt-in Online Panels = Efficient Data Collection

Large

Plentiful

Fast

Targetable

Affordable
(Usually)

Convenience Sample

Two Roads Diverged

Probability
Panel Chooses Respondent

✓ Inclusive of Full Population

✓ Collect Data About Panelists for Targeting

Opt-in
Respondent Chooses Panel

✗ Different People Join Than a Random Sample
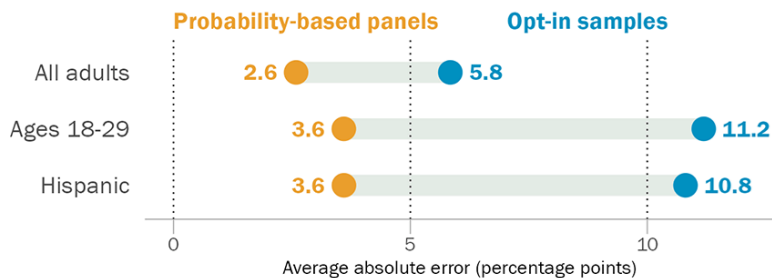
✗ Panel Discovery – Sought Out?

✗ Bias with Recruiting via Advertising, Websites, Banners

It Matters

Larger errors on online opt-in samples, especially for 18- to 29-year-olds and Hispanic adults

Average absolute error on benchmark variables

Probability-based panels — Opt-in samples

	Probability-based panels	Opt-in samples
All adults	2.6	5.8
Ages 18-29	3.6	11.2
Hispanic	3.6	10.8

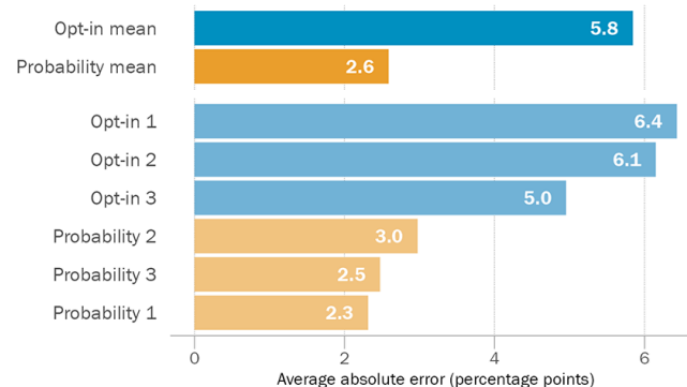Average absolute error (percentage points)

Note: Results shown are the mean value of the average absolute errors across three probability-based panels and across three online opt-in samples. Results for all adults are based on 28 benchmark variables. Results for 18- to 29-year-olds and Hispanic adults are based on 25 variables for which reliable subgroup benchmarks are available. Source: Pew Research Center analysis of six online samples surveyed June 14-July 21, 2021.

PEW RESEARCH CENTER

Average error on online opt-in samples was twice that of probability-based panels

Average absolute error on 28 benchmark variables for estimates among U.S. adults

	Average absolute error
Opt-in mean	5.8
Probability mean	2.6
Opt-in 1	6.4
Opt-in 2	6.1
Opt-in 3	5.0
Probability 2	3.0
Probability 3	2.5
Probability 1	2.3

Average absolute error (percentage points)

Source: Pew Research Center analysis of six online samples surveyed June 14-July 21, 2021.

PEW RESEARCH CENTER

Isn't opt-in **good enough?**
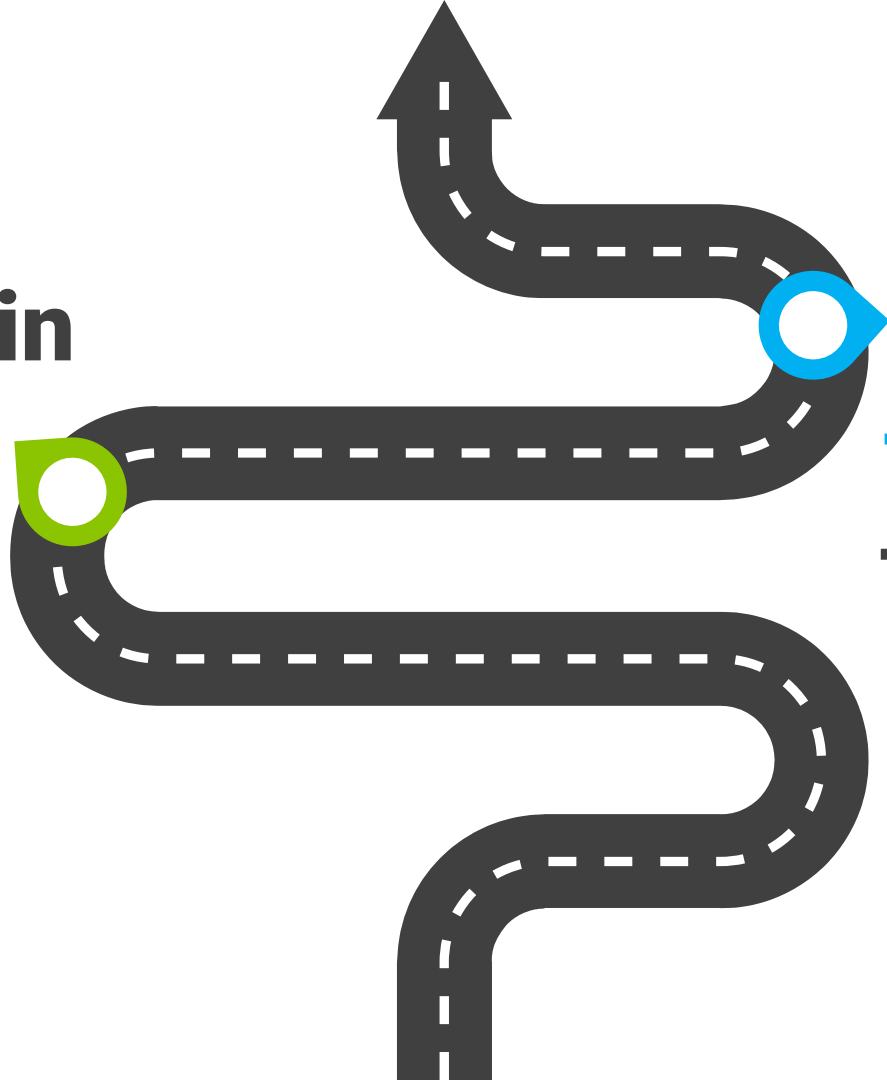
Why does this matter for MR and UX/CX research?
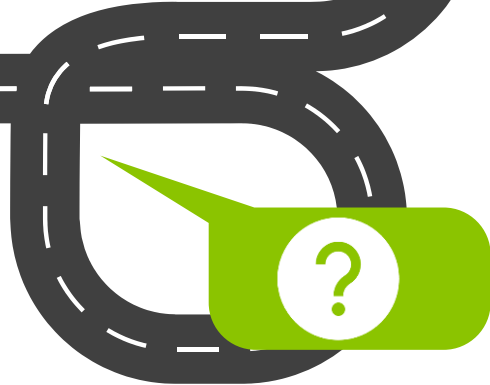
Did you visit a casino in 2022 or 2023?

Did you visit a casino in 2022 or 2023?

37%

OVERALL

Did you visit a casino in 2022 or 2023?

Legend: ■ Opt-in

37% — OVERALL

48% — 24 - 29
50% — 30 - 49
32% — 50 - 64
22% — 65+

AGE
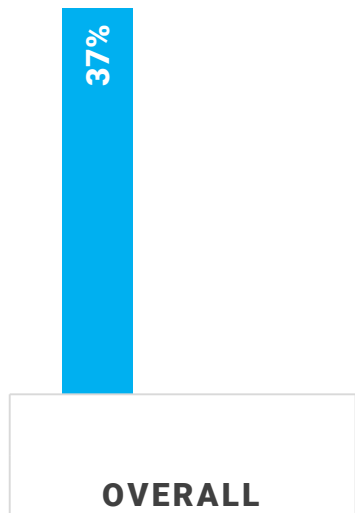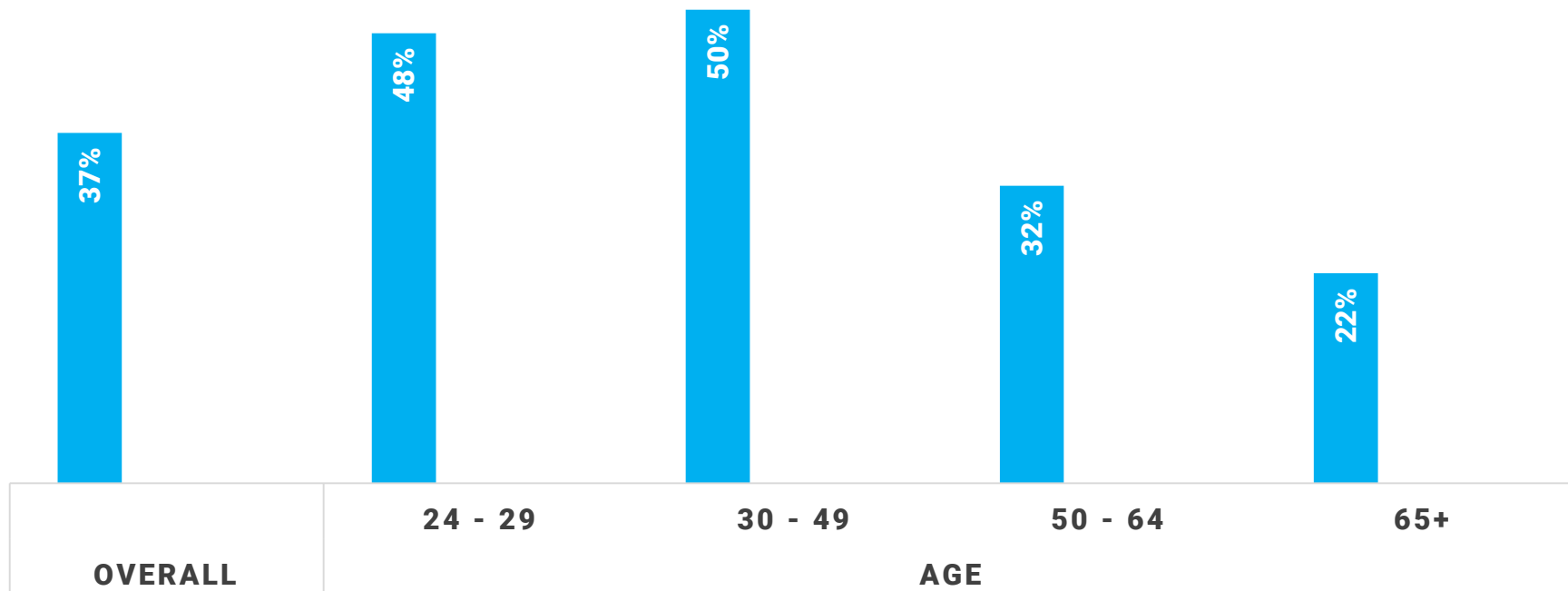
Did you visit a casino in 2022 or 2023?

Opt-in   Probability
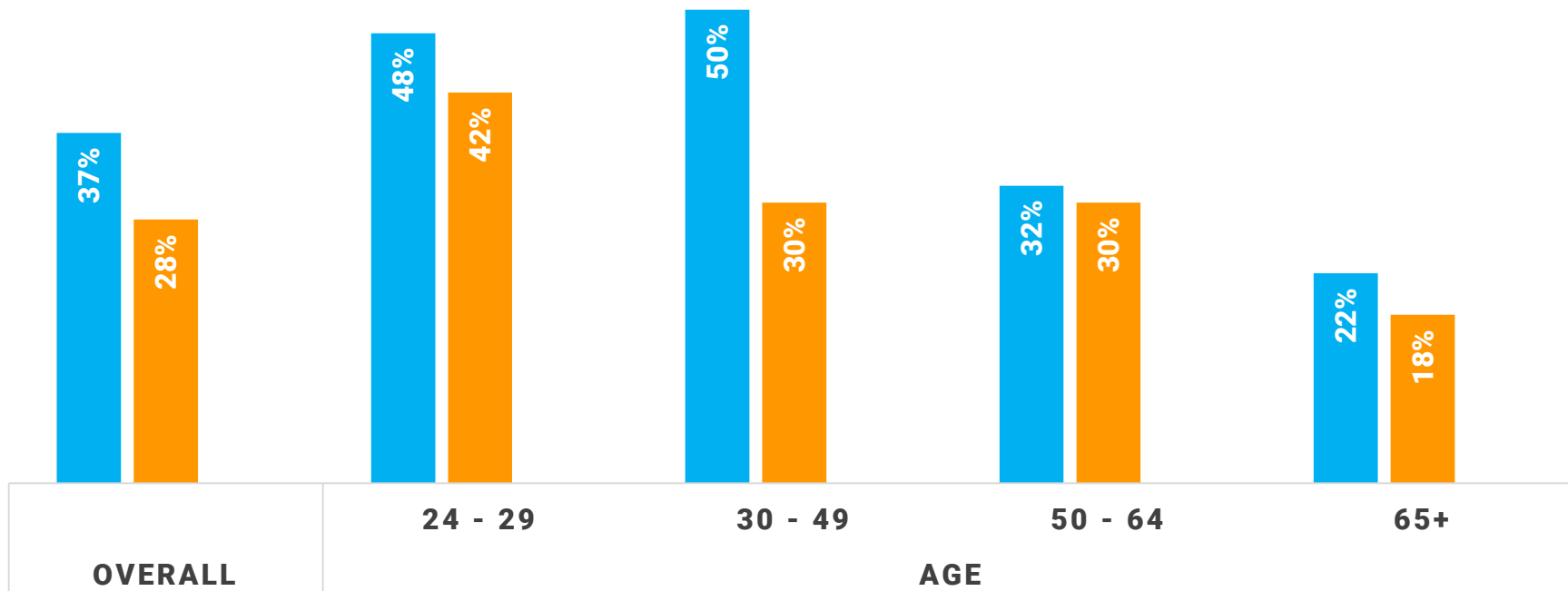
OVERALL: 37%, 28%
24 - 29: 48%, 42%
30 - 49: 50%, 30%
50 - 64: 32%, 30%
65+: 22%, 18%

AGE

Why did you visit a casino in 2022 or 2023?

■ Opt-in

TO GAMBLE — 78%

FOOD & BEVERAGE — 50%

ENTERTAINMENT — 38%

Why did you visit a casino in 2022 or 2023?

Legend: Opt-in (green), Probability (pink)

TO GAMBLE
- Opt-in: 78%
- Probability: 58%

FOOD & BEVERAGE
- Opt-in: 50%
- Probability: 47%

ENTERTAINMENT
- Opt-in: 38%
- Probability: 39%

Why did you visit a casino in 2022 or 2023?

Male ■ **Female** ■

TO GAMBLE		FOOD AND BEVERAGE		ENTERTAINMENT	
OPT-IN	PROBABILITY	OPT-IN	PROBABILITY	OPT-IN	PROBABILITY
78% / 78%		48% / 53%		43% / 32%	
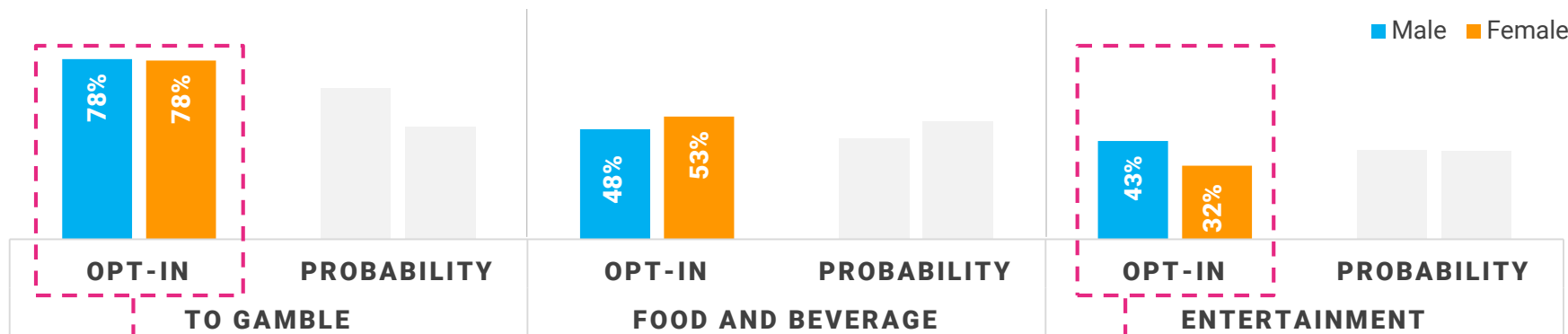
USING OPT-IN ONLY:
Men & Women Go to Casinos to
Gamble at Equal Rates,
Women Less Likely to Go for Entertainment

Why did you visit a casino in 2022 or 2023?

TO GAMBLE

- OPT-IN
- PROBABILITY
  - 66%
  - 49%

FOOD AND BEVERAGE

- OPT-IN
- PROBABILITY
  - 44%
  - 51%

ENTERTAINMENT

- OPT-IN
- PROBABILITY
  - 39%
  - 39%
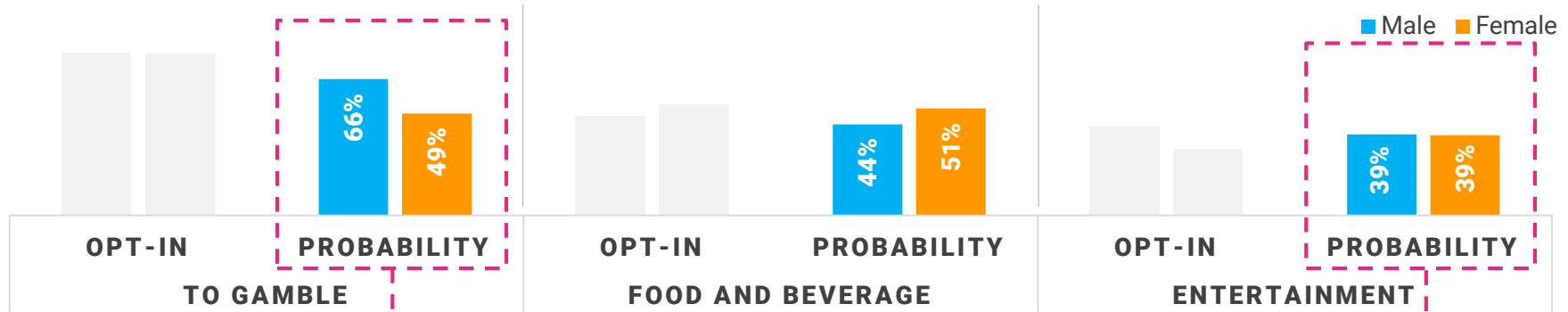
USING PROBABILITY:
Women Go to Casinos to
Gamble Much Less than Men,
= Men for Entertainment

Why did you visit a casino in 2022 or 2023?

OPT-IN TO GAMBLE
- White: 79%
- Black: 76%
- Hispanic: 71%

PROBABILITY

OPT-IN FOOD AND BEVERAGE
- White: 49%
- Black: 64%
- Hispanic: 50%

PROBABILITY

OPT-IN ENTERTAINMENT
- White: 38%
- Black: 39%
- Hispanic: 51%
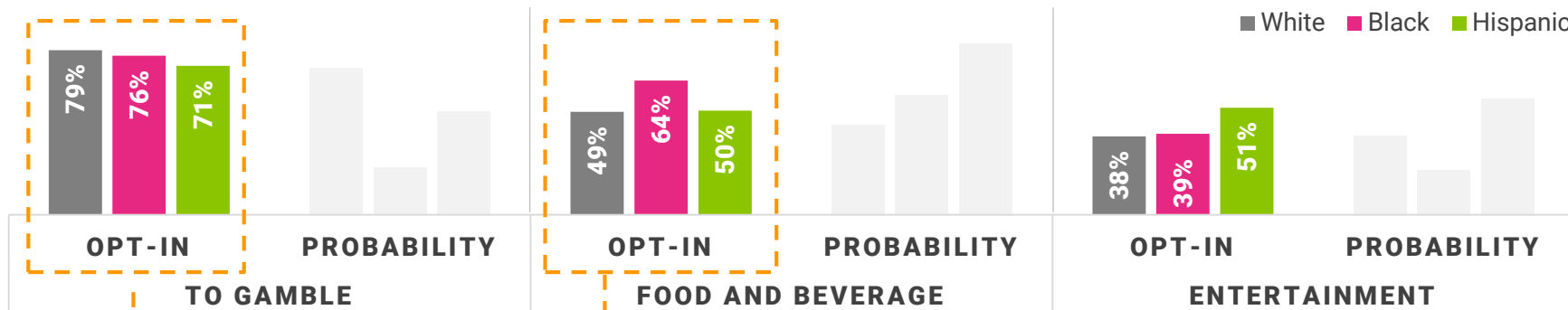
PROBABILITY

USING OPT-IN ONLY:
Minimal Differences by Race
When it Comes to Gambling

Why did you visit a casino in 2022 or 2023?

Legend: ■ White ■ Black ■ Hispanic

TO GAMBLE
- OPT-IN
- PROBABILITY: White 71%, Black 23%, Hispanic 50%

FOOD AND BEVERAGE
- OPT-IN
- PROBABILITY: White 43%, Black 57%, Hispanic 82%

ENTERTAINMENT
- OPT-IN
- PROBABILITY: White 38%, Black 22%, Hispanic 56%
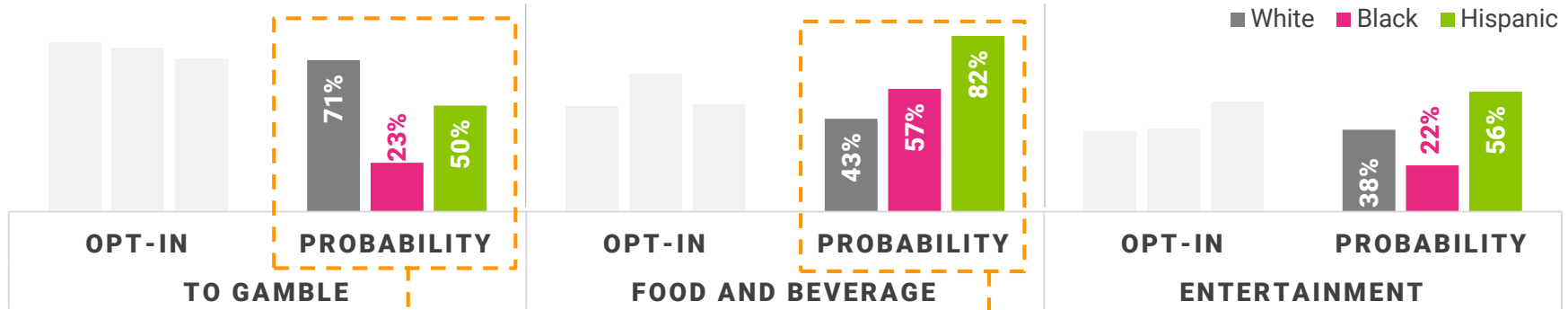
USING PROBABILITY :
Blacks & Some Hispanics are
Much Less Likely to Gamble;
More Likely to Go for Food & Beverage

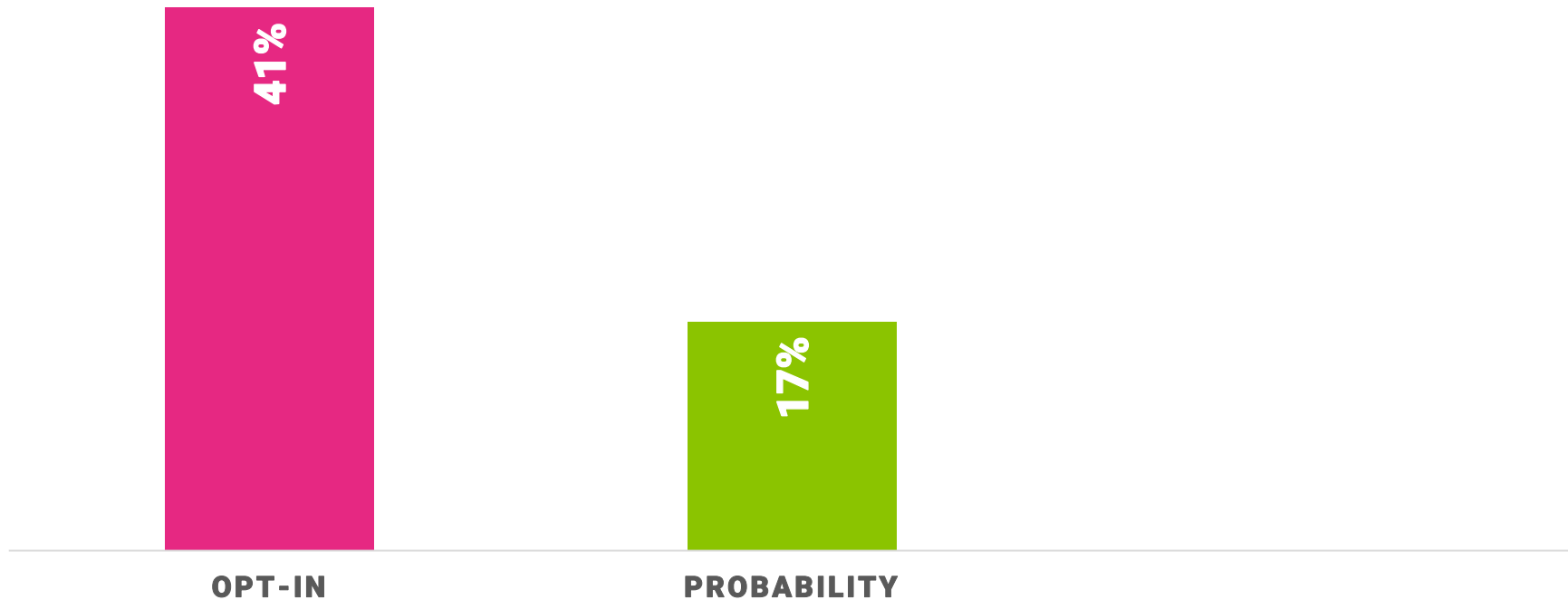# Positive Impression of For-profit Colleges

Positive Impression of For-profit Colleges

41%

OPT-IN

Positive Impression of For-profit Colleges
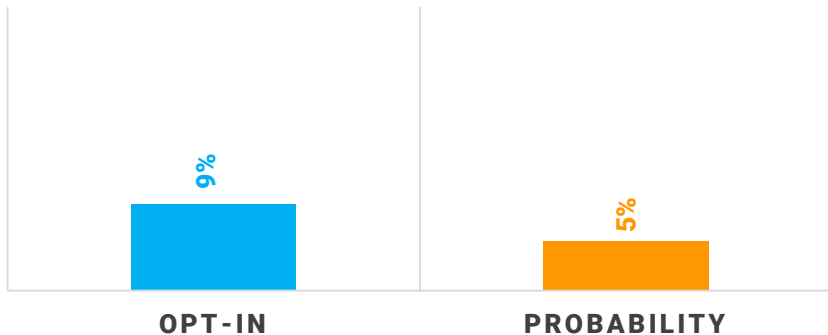

41%

17%

OPT-IN

PROBABILITY

Why is this happening?

The **Respondent** Chooses the Panel

PLAYS ON AN ORGANIZED TEAM FOR ANY SPORT?

9% — OPT-IN
5% — PROBABILITY

SMOKE CIGARETTES

25% — OPT-IN
16% — PROBABILITY
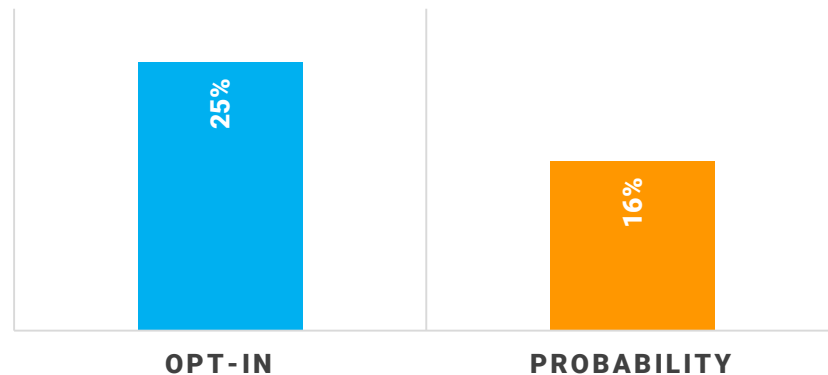
MAKE PUCHASES ONLINE SEVERAL TIMES A WEEK

15% — OPT-IN
25% — PROBABILITY
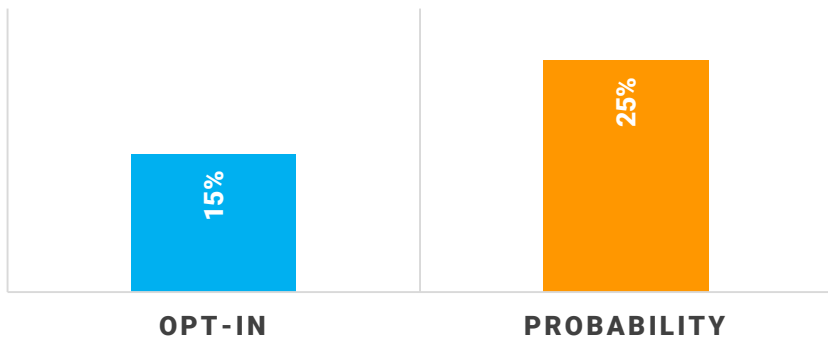
PLEASE INDICATE WHETHER THE FOLLOWING IS A MAJOR SOURCE OF POLITICAL AND ELECTION NEWS FOR YOU

11% — OPT-IN
7% — PROBABILITY
TALK RADIO, SUCH AS GLENN BECK

10% — OPT-IN
6% — PROBABILITY
PODCASTS, SUCH AS JOE ROGAN
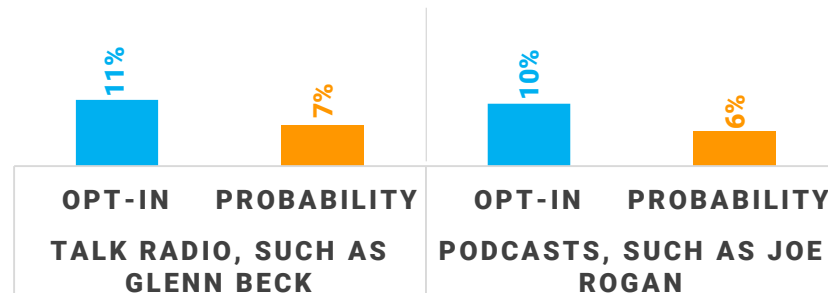
It's Not Only Behaviors that are Different, but also Beliefs

THE GOVERNMENT IS CONCEALING WHAT IT KNOWS ABOUT THE 9/11 ATTACKS

■ Agree/Strongly Agree ■ Disagree/Strongly Disagree

OPT-IN: 61% / 39%
PROBABILITY: 50% / 50%
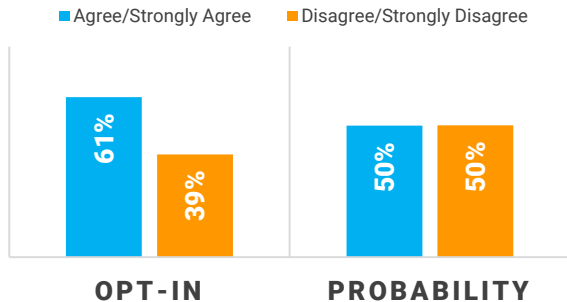
"VACCINES CAUSE AUTISM"

OPT-IN: 18%
PROBABILITY: 12%
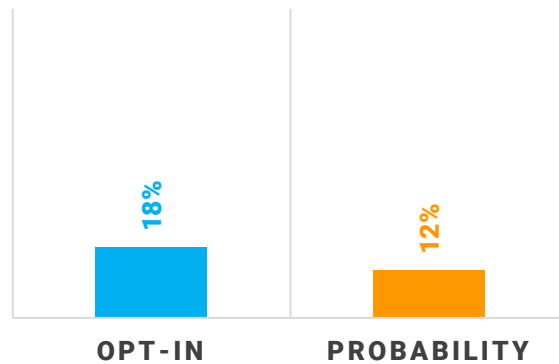
HOW MUCH DO YOU TRUST____TO DO WHAT IS RIGHT? "TRUST COMPLETELY"

■ Overall ■ Male ■ Female

THE BIDEN ADMINISTRATION
OPT-IN: 13% / 19% / 7%
PROBABILITY: 10% / 11% / 10%

THE U.S. CONGRESS
OPT-IN: 4% / 7% / 1%
PROBABILITY: 2% / 2% / 2%

THE U.S. SUPREME COURT
OPT-IN: 8% / 12% / 4%
PROBABILITY: 7% / 9% / 6%
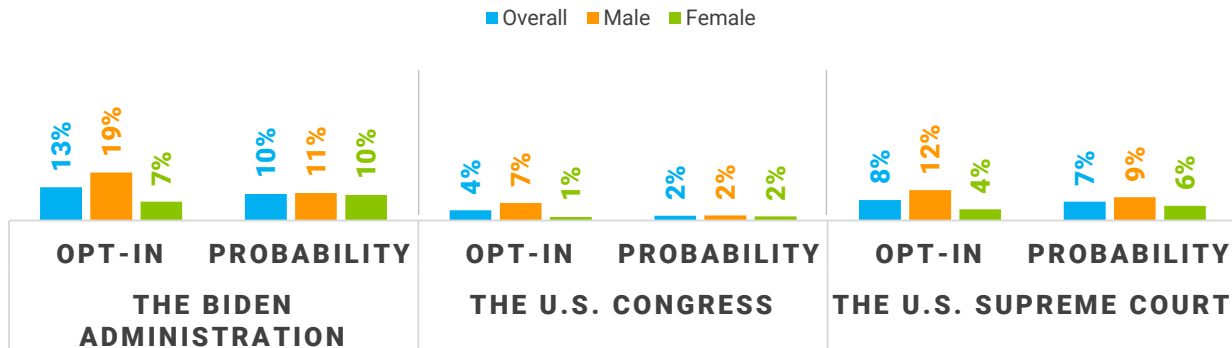
What can a **researcher** do?

Converge with Hybrid Calibration!

1 — **Anchor**
Anchor the Opt-in Sample to Something Trusted

2 — **Compass**
e.g., the Probability Panel Sample is the Compass

3 — **GPS**
Joining Samples Together; SSRS Calls this "Encipher"
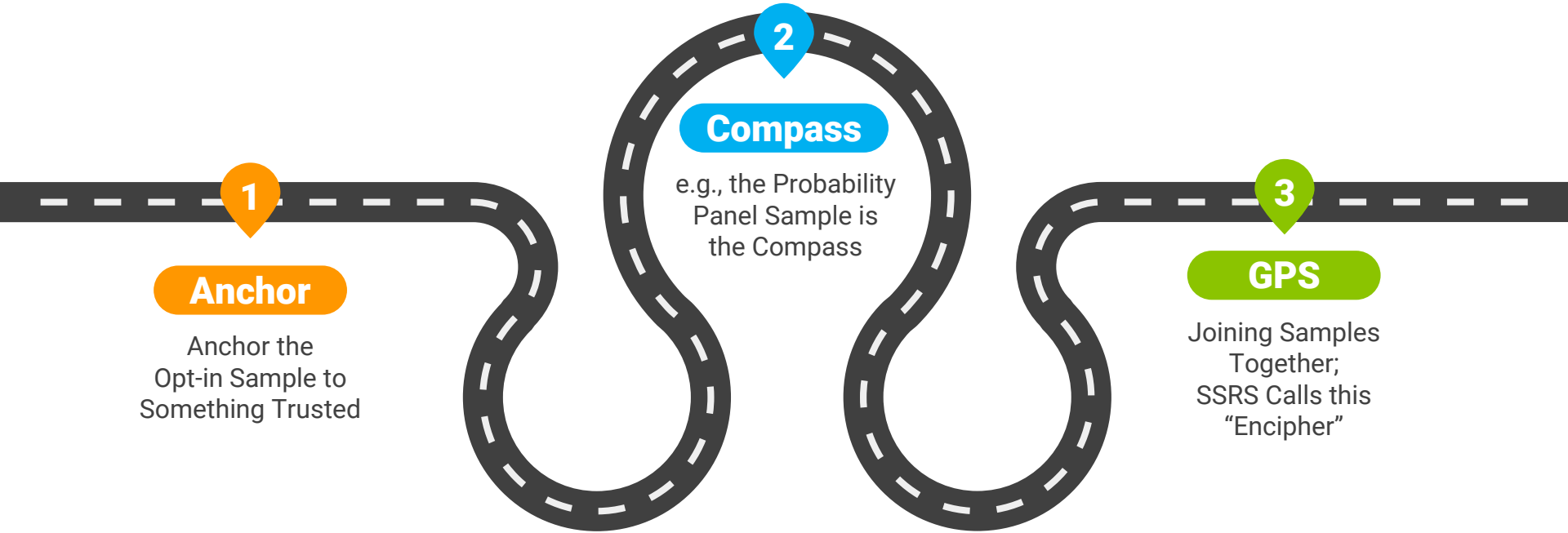
What is Hybrid Calibration?

1 Middle Ground
Between Accuracy of Probability Samples & Lower Cost of Nonprobability Samples

Blend 2
Administer Survey Side-by-side to Probability & Nonprobability Samples & Blend Responses

3 Matching
Matches nonprobability respondents to probability respondents on non-demographic characteristics related to key outcomes

Anchor 4
Probability Sample "Anchor" Generalizes Population; Nonprobability Sample Is Cost-effective Respondent Source

Important Considerations

Size

Must Have a Large Enough Probability Sample Within Any Subgroup You Want to Calibrate to

Questions

Must Administer Demographic **Attitudinal & Behavioral** Calibration Questions to Both Samples

Variables

Must Systematically Identify the Best Calibration Variables to Minimize Bias in Outcomes **(Not Just the Difference Between Samples on Characteristics)**

Buckle Up...

Did you visit a casino in 2022 or 2023?

Legend: Opt-in, Probability

	Overall	24 - 29	30 - 49	50 - 64	65+
Opt-in	37%	48%	50%	32%	22%
Probability	28%	42%	30%	30%	18%

AGE

Did you visit a casino in 2022 or 2023?

Legend: Opt-in, Probability, Hybrid

OVERALL: Opt-in 37%, Probability 28%, Hybrid 30%

AGE
- 24 - 29: Opt-in 48%, Probability 42%, Hybrid 45%
- 30 - 49: Opt-in 50%, Probability 30%, Hybrid 35%
- 50 - 64: Opt-in 32%, Probability 30%, Hybrid 28%
- 65+: Opt-in 22%, Probability 18%, Hybrid 21%

Why did you visit a casino in 2022 or 2023?

Legend: ■ Opt-in ■ Probability

TO GAMBLE
- Opt-in: 78%
- Probability: 58%

FOOD & BEVERAGE
- Opt-in: 50%
- Probability: 47%

ENTERTAINMENT
- Opt-in: 38%
- Probability: 39%

Why did you visit a casino in 2022 or 2023?

Legend: ■ Opt-in ■ Probability ■ Hybrid

TO GAMBLE
- Opt-in: 78%
- Probability: 58%
- Hybrid: 68%

FOOD & BEVERAGE
- Opt-in: 50%
- Probability: 47%
- Hybrid: 49%

ENTERTAINMENT
- Opt-in: 38%
- Probability: 39%
- Hybrid: 40%

Why did you visit a casino in 2022 or 2023?

Male **Female**

OPT-IN — PROBABILITY TO GAMBLE
- Male: 78% / 66%
- Female: 78% / 49%

OPT-IN — PROBABILITY FOOD & BEVERAGE
- Male: 48% / 44%
- Female: 53% / 51%

OPT-IN — PROBABILITY ENTERTAINMENT
- Male: 43% / 39%
- Female: 32% / 39%

White **Black** **Hispanic**

OPT-IN — PROBABILITY TO GAMBLE
- White: 79% / 71%
- Black: 76% / 23%
- Hispanic: 71% / 50%

OPT-IN — PROBABILITY FOOD & BEVERAGE
- White: 49% / 43%
- Black: 64% / 57%
- Hispanic: 50% / 82%

OPT-IN — PROBABILITY ENTERTAINMENT
- White: 38% / 38%
- Black: 39% / 22%
- Hispanic: 51% / 56%

Why did you visit a casino in 2022 or 2023?

Legend: ■ Male ■ Female

PROBABILITY TO GAMBLE
- OPT-IN: Male 78%, Female 78%
- PROBABILITY: Male 66%, Female 49%
- HYBRID: Male 71%, Female 64%

FOOD & BEVERAGE
- OPT-IN: Male 48%, Female 53%
- PROBABILITY: Male 44%, Female 51%
- HYBRID: Male 46%, Female 53%

ENTERTAINMENT
- OPT-IN: Male 43%, Female 32%
- PROBABILITY: Male 39%, Female 39%
- HYBRID: Male 44%, Female 37%

Legend: ■ White ■ Black ■ Hispanic

PROBABILITY TO GAMBLE
- OPT-IN: White 79%, Black 76%, Hispanic 71%
- PROBABILITY: White 71%, Black 23%, Hispanic 50%
- HYBRID: White 74%, Black 49%, Hispanic 60%

FOOD & BEVERAGE
- OPT-IN: White 49%, Black 64%, Hispanic 50%
- PROBABILITY: White 43%, Black 57%, Hispanic 82%
- HYBRID: White 48%, Black 64%, Hispanic 53%

ENTERTAINMENT
- OPT-IN: White 38%, Black 39%, Hispanic 51%
- PROBABILITY: White 38%, Black 22%, Hispanic 56%
- HYBRID: White 39%, Black 42%, Hispanic 56%

Positive Impression of For-profit Colleges

Consider This

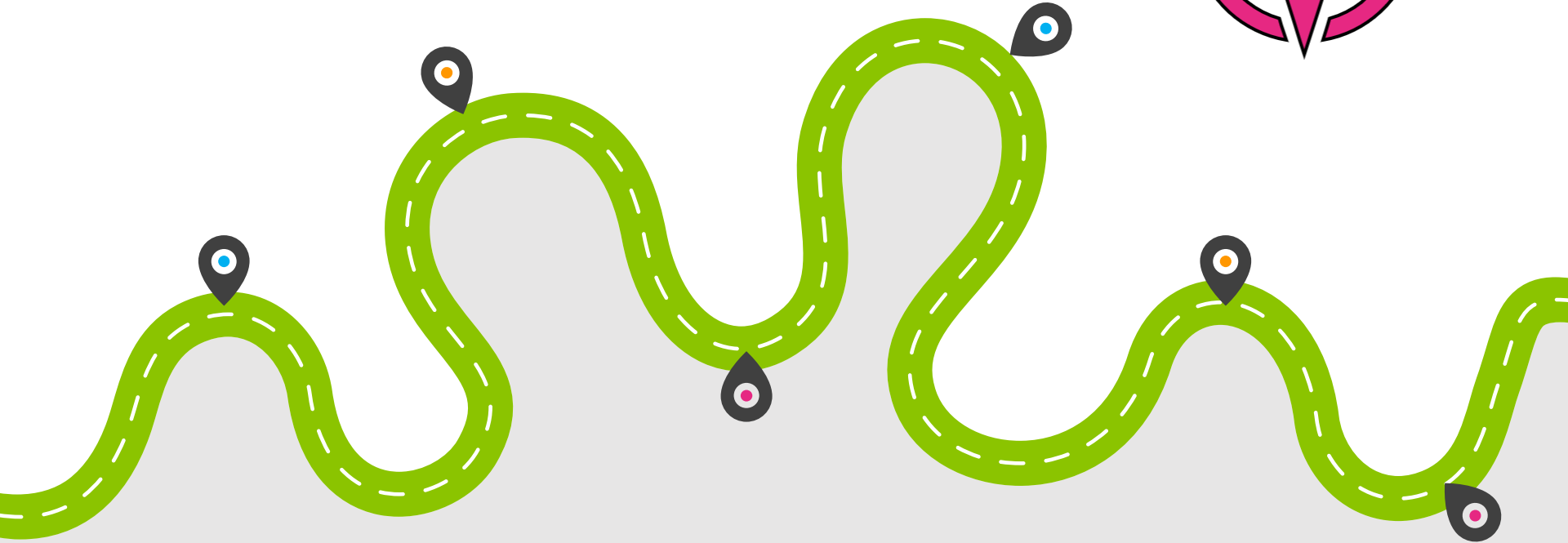**Anchored in Probability = Better Understanding of Customer**

~n=250 /25% of Sample is Good Anchor

Lowers Cost & Increases Quality

Improvement Over Opt-in Alone

Have Confidence
in your navigation.