

**No Opinion/Don't Know
Response Options**

“Don’t Know” Offered

Have you ever taken a trip to Chicago?

Yes

No

I don’t remember

“Don’t Know” Offered

Now we’d like to get your opinion of some consumer products. For each product I mention, please tell me if you think it is excellent, good, fair, or poor. If you are not familiar enough with the drug to give us an opinion, please say so.

Excellent

Good

Fair

Poor

Not familiar enough to have an opinion

“Not Sure” Offered

Please indicate whether you agree or disagree with this statement: “America is a great country.”

Agree

Disagree

Not sure

Don't Knows

- **Common Assumption:**
 - Attitudes people report are real.
 - People without attitudes say DK.
- **Challenge:**
 - Non-attitudes, due to pressure to appear opinionated.
- **Proposed Solution:**
 - Offer DK Options

Bogart, 1972

Converse & Presser, 1986

Payne, 1950

Vaillancourt, 1973

Evidence of Non-Attitudes

- Low to moderate attitude stability
- Low to moderate constraint
- Weak attitude-behavior consistency

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■ But relations weakened by measurement error

-Achen, 1975

-Ajzen & Fishbein, 1977

-Krosnick & Berent, 1993

Obscure/Fictitious Objects

-Gill (1947)	70%
-Hartley (1946)	70%
-Ehrlich & Rinehart (1965)	27%
-Fink (1971)	23%
-Hawkins & Coney (1981)	97%
-Schuman & Presser (1981)	29%
-Bishop et al. (1986)	34%
-Calsyn, Roder, & Calsyn (1992)	27%
-Calsyn & Klinkenberg (1995)	25%
<u>-Calsyn (1995)</u>	<u>14%</u>
AVERAGE:	42%

Filters Attract an Average of 16% of Respondents

-Ehrlich (1964)	22%
-Kalton, Collins, & Brook (1978)	11%
-Schuman & Presser (1981)	22%
-Schuman & Scott (1984)	11%
-Bishop et al. (1983)	24%
-McClendon (1986)	9%
-Poe et al. (1988)	18%
-Hippler & Schwarz (1989)	13%
-Presser (1990)	17%
-Ayidiya & McClendon (1990)	13%
-McClendon (1991)	11%

Increasing Strength of Filter

Quasi-Filter

“... or don't you have an opinion on this?”

Blunt Full Filter

“Do you have an opinion on this or not?”

Justified Full Filter

“Have you been interested enough in this to favor one side or the other?”

“Have you thought much about this issue?”

“Have you heard or read much about this issue?”

**So offering a “don’t know” option
is a good idea.**

Or is it?

Other Views

ISR Survey Research Center Interviewer Manual:

Probe all DKs by

- Repeating the question
- Pausing
- Reassuring respondents (“We’re just interested in your general ideas about this.”)
- Neutral probe (“What are your ideas about this?”)

Why?

Bradburn and Sudman (1988)

DK = “Temporizing” while thinking of an answer

Feick (1989)

DK = Not clear about question meaning

Oppenheim (1982)

DK = Attempt to avoid thinking

One Cognitive Model of DK Responses: Optimizing

1. Interpret the Question

- DK = Meaning of question not clear

2. Search Memory for Information

- DK = No information found at all*

3. Integrate Information into a Judgment

- DK = Ambivalence (conflict among information)
= Insufficient information to justify an opinion

4. Translate Judgment onto Response Alternatives

- DK = Meaning of response alternatives not clear
= No response alternative matches the judgment

***For all reasons except this one, pushing people to offer opinions might yield meaningful responses.**

Another Cognitive Model of DK Responses: Satisficing

Some respondents sometimes look for cues in a question to allow them to skip all interpretation or retrieval yet justify an answer.

Most likely when respondent ability is low, respondent motivation is low, and cognitive demands of the question are significant.

If pushed to offer opinions, these people would offer meaningful ones.

Another Model: Self-Image Protection

Spiral of Silence: People say DK instead of reporting minority opinions.

More generally, people may say DK in order to avoid reporting opinions that may appear unflattering to them.

Again, if pushed, these people would offer meaningful opinions.

So Which Is It?

Should DK responses be:

- Encouraged in order to minimize non-attitude reporting?
- Discouraged in order to measure as many real opinions as possible?

Evidence of the Validity of DK Responses

Predictors of DK:

- Education**
- Cognitive skills**
- Topic knowledge**
- Topic interest**
- Exposure to topic information**
- Behavioral experience**
- Affective involvement**
- Subjective competence**
- Perceived demand for opinionation**

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Reliability:

$r=.67$ between DK rates in Gallup and NORC surveys across issues

Evidence of the Validity of DK Responses

Predictive Ability:

**$r=-.91$ between DK rate and attitude stability
across issues**

**Lower DK = Stronger correspondence of public
opinion with government policy across
issues**

**(although one study found no such
relation)**

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Respondent Satisfaction:

Respondents prefer DK option

Evidence Challenging the Validity of DK Responses

Pushing DKs:

Gilljam & Granberg (1993)

People who select DK when it's offered but offer substantive opinions when DK is omitted.

Consistency between answers to 2 questions on same topic: $r = .41$

Answers predicted 76% of people's votes on referendum

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Dunlap et al. (1929)

Instructions not to guess vs. instructions to guess

Guessing improved test scores on a yes/no knowledge test graded:
correct - # incorrect

Visser, Krosnick, Marquette, & Curtin (2000)

In pre-election polls, when respondents say DK about candidate preference, they can be asked whether they lean toward one candidate.

Accuracy of poll result predicting election outcome increases if responses to the “leaning” question are treated as real preferences.

Experiments: Offering vs. Omitting DK Options

McClendon & Alwin (1993), Krosnick & Berent (1993); Poe et al. (1988)

- Questions asked in filtered or unfiltered form; structural equation modeling to assess item reliability.
- No more unreliability in responses to unfiltered questions.

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Schuman & Presser (1981); Presser (1977); Sanchez & Morchio (1992)

- Filtering doesn't strengthen constraint correlations between attitudes on different issues.

McClendon (1991)

- **Filtering did not reduce acquiescence or response order effects.**

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Krosnick et al. (1997)

- **Contingent valuation survey: Describe program to prevent oil spills. Ask respondents whether they're willing to pay \$X toward a plan to prevent it. X varies between respondents.**
- **Equal responsiveness to price manipulation when DK option is offered or omitted.**
- **Belief and attitude predictors of substantive responses are just as powerful when DK is offered as when it is omitted.**

OTHER FINDINGS

Schuman & Presser (1981)

- Filters just about as impactful for obscure and fictitious issues ($r = .30$) as for real issues ($r = .26$).

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Krosnick & Milburn (1990); Rosenberg, Izard, & Hollander (1955); Sigelman et al. (1982); etc.

- DK propensity across a set of items is very consistent over time.
- BUT individual DK responses are very inconsistent.

Only about 20% of people who say DK to an item today will also say DK to the same item tomorrow.

Respondent Explanations, Behavior Coding

Sometimes, DK is mostly due to insufficient information in memory.

More often, DK is mostly due to ambivalence or question ambiguity.

Note: Satisficing can't be detected by an interviewer and won't be reported by a respondent.

Evidence Regarding Satisficing

Reinterpret earlier list of correlates of DK: Not determinants of attitude formation, but rather correlates of ability and motivation to report the attitude during the survey.

- Education**
- Cognitive skills**
- Topic knowledge**
- Topic interest**
- Exposure to topic information**
- Behavioral experience**
- Affective involvement**
- Subjective competence**
- Perceived demand for opinionation**

More DKs for dichotomous questions than for politimous ones.

More DKs for questions with more complex language.

More DKs for very long rating scales than for moderate length rating scales.

More DKs later in a questionnaire, due to fatigue.

Conclusions

- 1. DKs are mostly not due to complete lack of information.**
- 2. DKs are mostly due to ambivalence, unclear questions, self-image protection, and satisficing.**
- 3. Do what major survey firms have always done: omit the DK option and tell respondents: “I’ll note that, but if you had to choose, would you say...”**
- 4. People who truly have no information at all will still say “Don’t Know”**
- 5. The result: you will collect informative data from more people.**

Two Afterthoughts:

1. What about all those opinions on obscure or fictitious issues?

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Two Afterthoughts:

1. What about all those opinions on obscure or fictitious issues?

-The fault lies with the researcher, who violated conversational conventions by saying to respondents that the issue was real and/or implying that it was well-publicized enough that people are likely to have opinions on it.

-The opinions people do offer are meaningful derivations from their attitudes (e.g., opinion about U.S. aid to Chad can be concocted from opinions about U.S. foreign aid generally, with no knowledge of Chad).

“[Some think] it would not be wise to ask [people] about giving foreign aid to Chad if they knew nothing about Chad. Their answer[s]...might reflect opinion[s] about foreign aid and not Chad. [But an] uninformed respondent...really does have an opinion, for whatever reason, and likely would exhibit behavior consonant with that opinion if it were called for. Many congressmen voting on aid to Chad might fall into this category” (Mitofsky, 1989).

2. The kernel of truth in Converse's (1964) idea.

-Attitudes do vary in relevant knowledge and prior thought.

-DK filters require respondents to place themselves on such dimensions and then specify cut points.



-Specifying cut points is obviously not sensible; it's better to measure the respondents' self-placements on the knowledge and thought dimensions instead.

Measuring Attitude Strength

Personal importance of the topic

Certainty of correctness

Strength of feeling

Knowledge

Amount of prior thought

Interest in the topic

Extremity

Accessibility

Direct experience

Latitudes of rejection and non-commitment

Affective-cognitive consistency

Conclusions

Never, ever, ever, under any circumstances offer a DK option or anything remotely like it.

Allow interviewers to probe DK's, as major survey houses always have.

Accept DK's that the respondent utters twice.

**Measure attitude/belief strength
in as many ways as you can.**



Social Desirability Response Bias



Respondent Laziness (Satisficing)

**Would Respondents
Sometimes Lie on Purpose?**

Why Bother?

The motivation to participate:

Help the research project

Why not just end the interview?

In a Survey?

- **No real rewards or punishments at stake**
- **Short relationship with the interviewer**
- **Hard work to figure out what's respectable**
- **Who is the audience?**
 - ◆ **The interviewer?**
 - ◆ **The researcher?**
 - ◆ **Significant others?**
 - ◆ **Society generally?**

Habit!

Bella DePaulo et al. (1996)

Daily diaries

Average: 1 lie per day

Some people: Many more per day

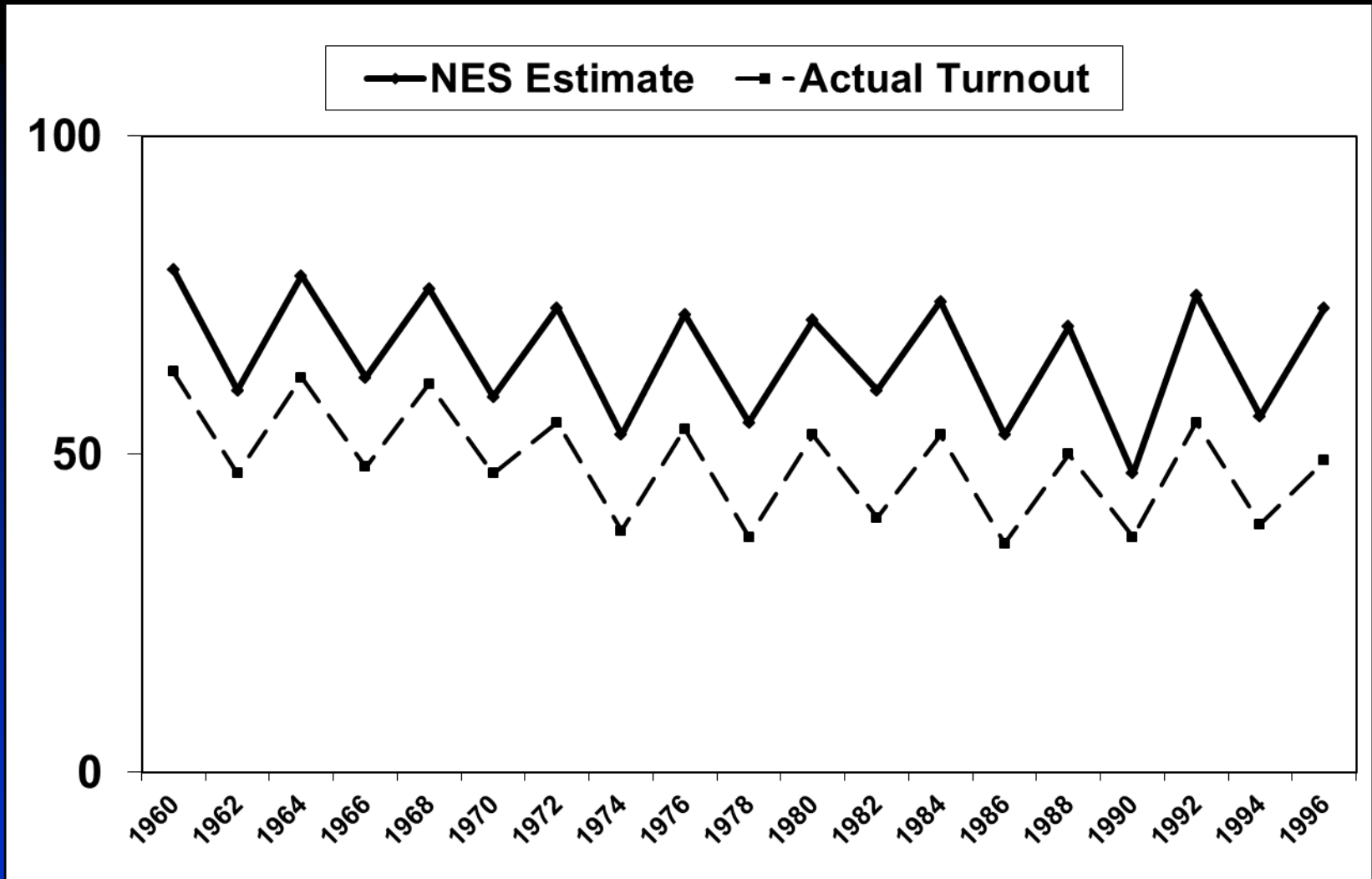
**91% of lies were misrepresentations
of oneself**

And in a Survey ...

The frown from an interviewer may be momentarily painful.

The feeling of embarrassment in front of an interviewer may be painful.

Someone might see answers later.



Voter Turnout in National Elections, $r = .94$.

NCPP “Major” Pre-Election Polls

- **1988** **George H. W. Bush** **All but one**
- **1992** **Bill Clinton** **All**
- **1996** **Bill Clinton** **All but one**
- **2000** **George W. Bush** **All but one**



Obviously Lying.

Or is it?

Other Explanations

Sampling

Non-response bias

Being interviewed before an election

Denominator used for official estimates is different from population from which respondents are drawn

More Other Explanations

- **Acquiescence**

- ◆ question typically frames having voted as “yes” response

- **Recall error (source confusion)**

- ◆ confuse voting in the target election with voting in another election
- ◆ confuse thinking about voting with voting

Getting Serious

Impression Management

Cultivating images in the minds of others.

Getting Serious

Impression Management

Cultivating images in the minds of others.

Self-Deception

Cultivating images in our own minds.

Documenting Impression Management Bias

- **Anonymity**
- **Mode**
- **Bogus Pipeline**
- **Randomized Response Technique**

■ **Cheating**

Franklin 1988; Kerkvliet 1994; Scheers and Dayton 1987; Shotland and Yankowski 1982)

■ **Falsifying income tax reports or tax evasion**

Himmelfarb and Lickteig 1982; Musch, Bröder, and Klauer 2001

■ **Stealing**

Franklin 1989; Wimbush and Dalton 1997

■ **Performing unprofessional behaviors**

Buchman and Tracy 1982

■ **Using illegal drugs**

Goodstadt and Cook 1978; Goodstadt and Gruson 1975; Himmelfarb and Lickteig 1982; Weissman, Steer, and Lipton 1986

■ **Drinking alcohol and smoking by high school students**

Barth and Sandler 1976; Fisher, Kupferman, and Lesser 1992

■ **Smuggling liquor in Norway**

Nordlund, Holme, and Tamsfoss 1994

■ **Alcohol abuse**

Volicer et al. 1983; Volicer and Volicer 1982

- **Having had an abortion or being willing to consider having one**
Himmelfarb and Lickteig 1982; I-Cheng, Chow, and Rider 1972; Krotke and Fox 1974; Lara, Strickler, Olavarrieta, and Ellertson 2004; Rider, Harper, Chow, and I-Cheng 1976; Tezcan and Omran 1981
- **Engaging in homosexual behavior**
Franklin 1989
- **Enjoying pornography**
Himmelfarb and Lickteig 1982
- **Engaging in potentially stigmatized sexual behaviors (e.g., masturbation and oral sex)**
Fidler and Kleinknecht 1977
- **Failing to report a death to the government**
Madigan, Abernathy, Herrin, and Tan 1976
- **Being at least slightly likely to perform date rape if there was no possibility of being caught**
Himmelfarb 2004
- **Racism and prejudice**
Jarmen and Himmelfarb 1992; Himmelfarb 2004
- **Depression**
Himmelfarb 2004

Documenting Impression Management Bias

- **Anonymity**
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- **Item Count Technique**

- **Racial animosity among Southerners**

Kuklinski et al. 1996; Kuklinski and Cobb 1998; Kuklinski, Cobb, and Gilens 1997

- **Anti-Semitism**

Kane, Craig, and Wald 2004

- **Less support for affirmative action**

Cobb 2001

- **Illegal drug use**

Miller 1984; Miller, Harrel, and Cisin 1986

- **Unethical workplace behavior**

Dalton, Wimbush, and Daily 1994

- **Employee theft**

Wimbush and Dalton 1997

- **Risky sexual behavior**

LaBrie and Earleywine 2000

- **Hate crime victimization**

Rayburn, Earleywine, and Davison 2003a, 2003b

Documenting Impression Management Bias

- **Anonymity**
- **Mode**
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- **Item Count Technique**
- **Interviewer Effects**

- **(Polygraph does NOT work)**

But ...

The effects are small!

(almost always)

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- **2000** **George W. Bush** **All but one**

NCPP “Major” Pre-Election Polls

■ 1968	Richard Nixon	None
■ 1972	Richard Nixon	All but one
■ 1976	Jimmy Carter	All but two
■ 1980	Ronald Reagan	None
■ 1984	Ronald Reagan	All but four
■ 1988	George H. W. Bush	All but one
■ 1992	Bill Clinton	All
■ 1996	Bill Clinton	All but one
■ 2000	George W. Bush	All but one
■ 2004	George W. Bush	All but 13

**NCPP “Major”
Pre-Election Polls**

Total

34 out of 61

NCPP “Major” Pre-Election Polls

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34 out of 61

56%

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Total

34 out of 61

56%

!!!

Solutions

- **The most popular:**

Find the bad apples and pull them out.

(or statistically adjust for them)

Crowne and Marlowe (1964)

Before voting, I thoroughly investigate the qualifications of all the candidates.

I never hesitate to go out of my way to help someone in trouble.

***It is sometimes hard for me to go on with my work if I am not encouraged.**

I have never intensely disliked anyone.

***On occasion I have had doubts about my ability to succeed in life.**

***I sometimes feel resentful when I don't get my way.**

I am always careful about my manner of dress.

My table manners at home are as good as when I eat out in a restaurant.

Silly

■ Do liars always lie?

■ No!

Only when they have to!

So whether someone is tempted to lie is a function of:

- His her “true” response.
- The situational context encouraging or discouraging truth-telling.

Better Solutions

Anonymity

Mode (no interviewer or face-to-face)

(Bogus Pipeline)

Randomized Response Technique

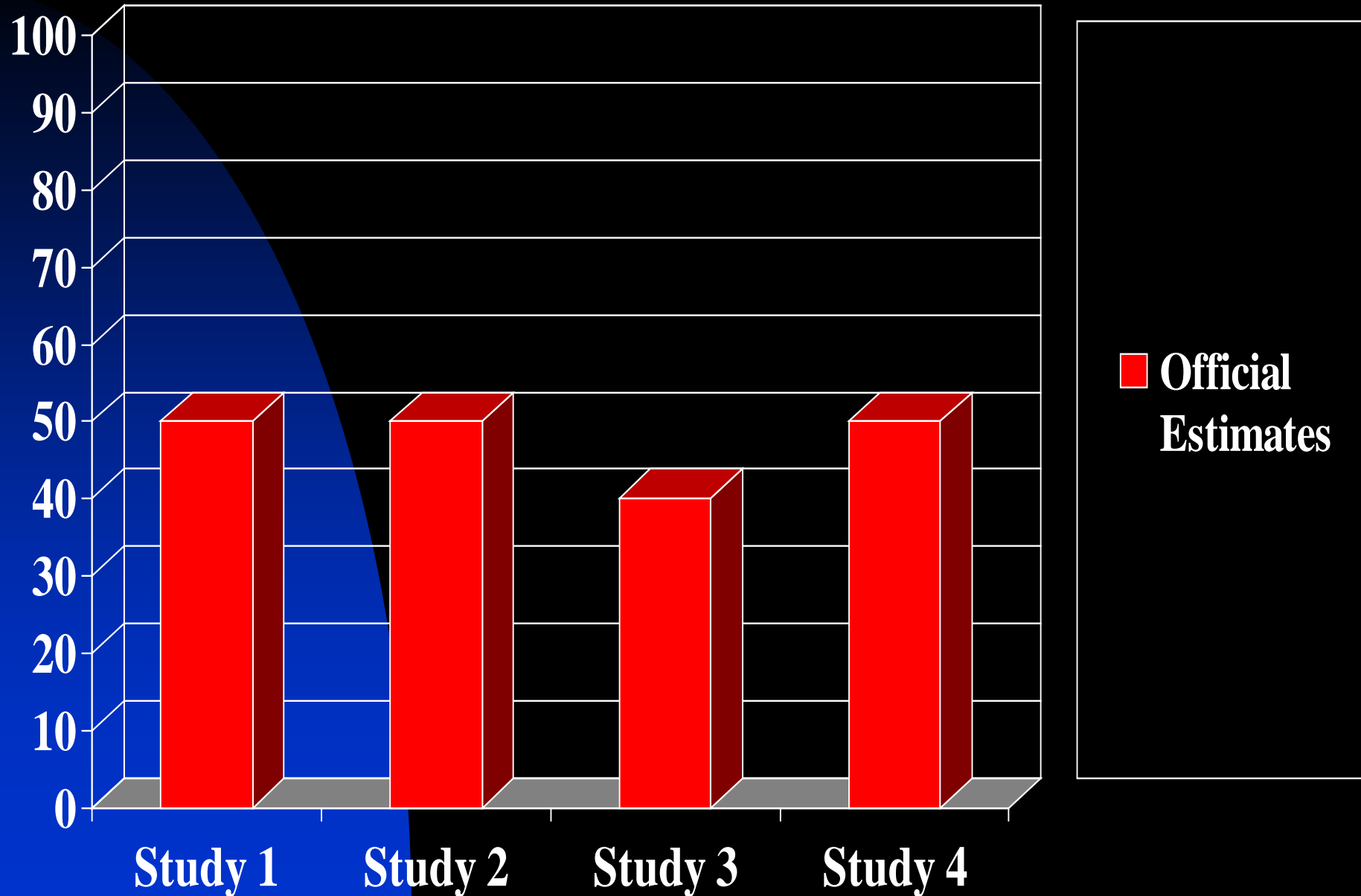
The Item Count Technique

Studies

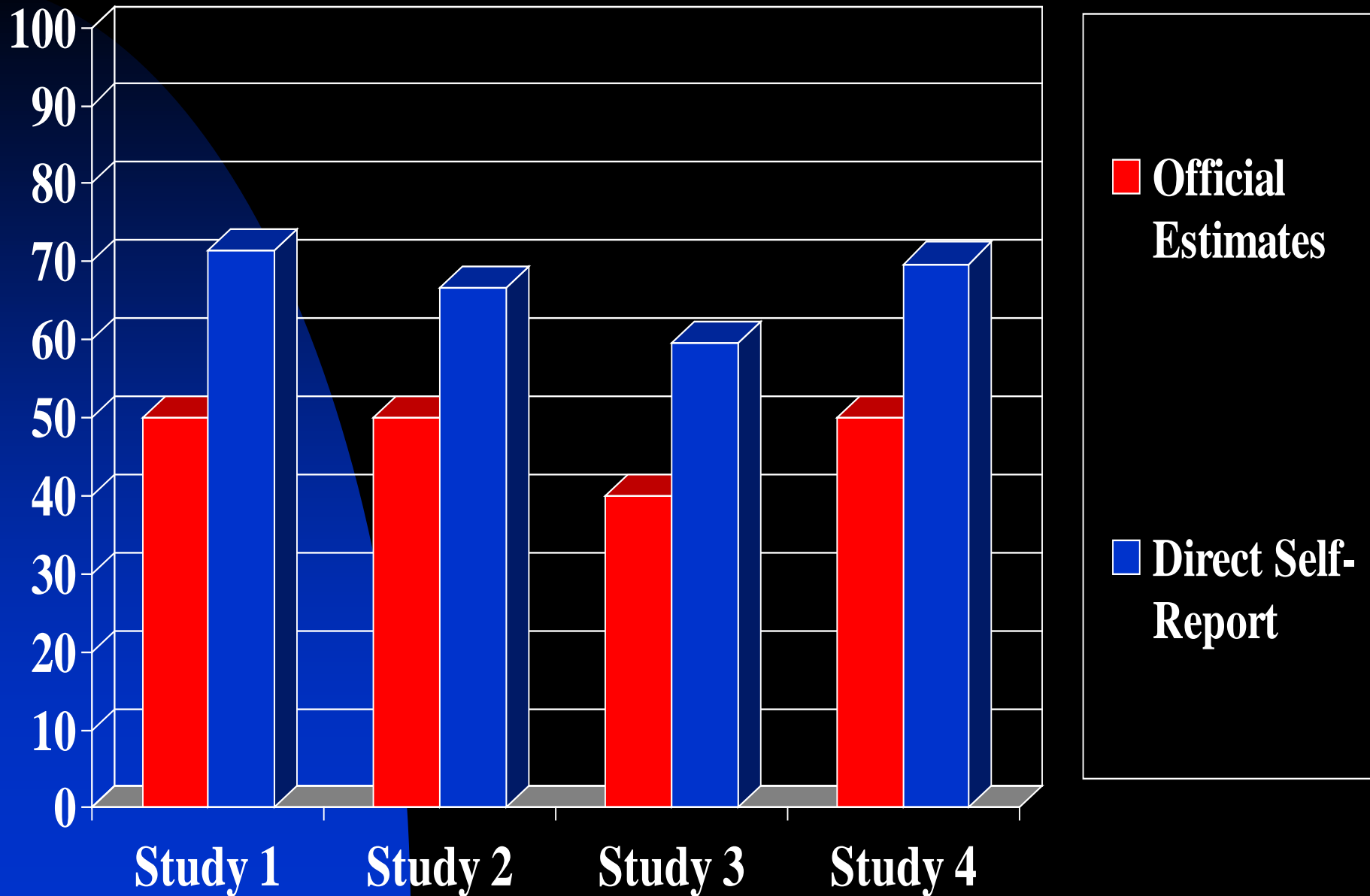
<u>Study #</u>	<u>Mode</u>	<u>Organization</u>	<u>Response Rate</u>	<u>N</u>
1	Telephone	SRBI	35.6%	966
2	Internet	Knowledge Networks	73.0%	1123
3	Internet	Knowledge Networks	62.0%	6094
4	Internet	SPSS, SSI, Harris Interactive, Greenfield Online, Survey Direct, and Gozing	1.3%-11.0%	7803

- **Three conditions:**
 - **Direct self-report (standard ANES wording)**
 - **Item Count Technique**
 - **Randomized Response Technique**

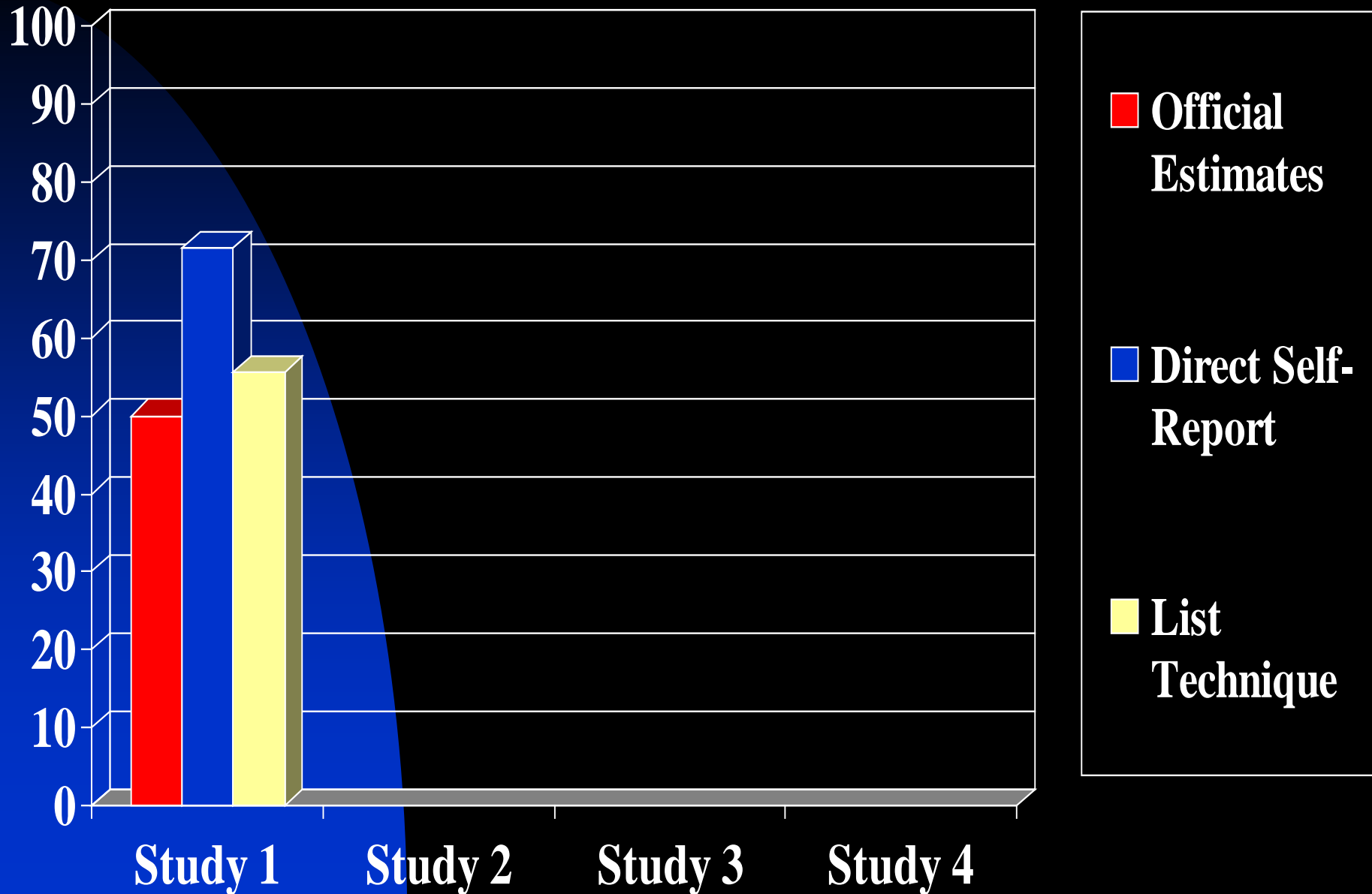
Results: Turnout Estimates



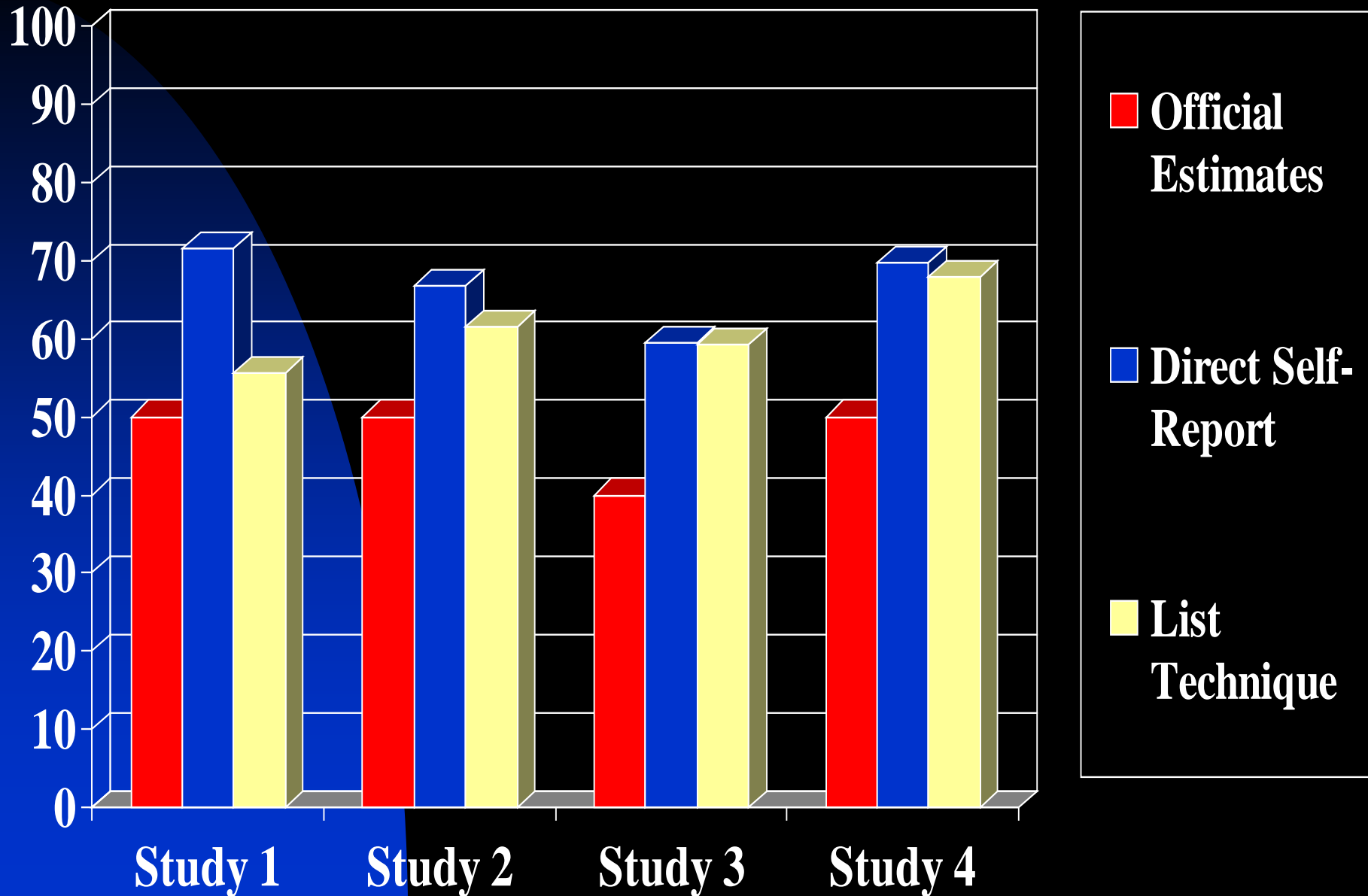
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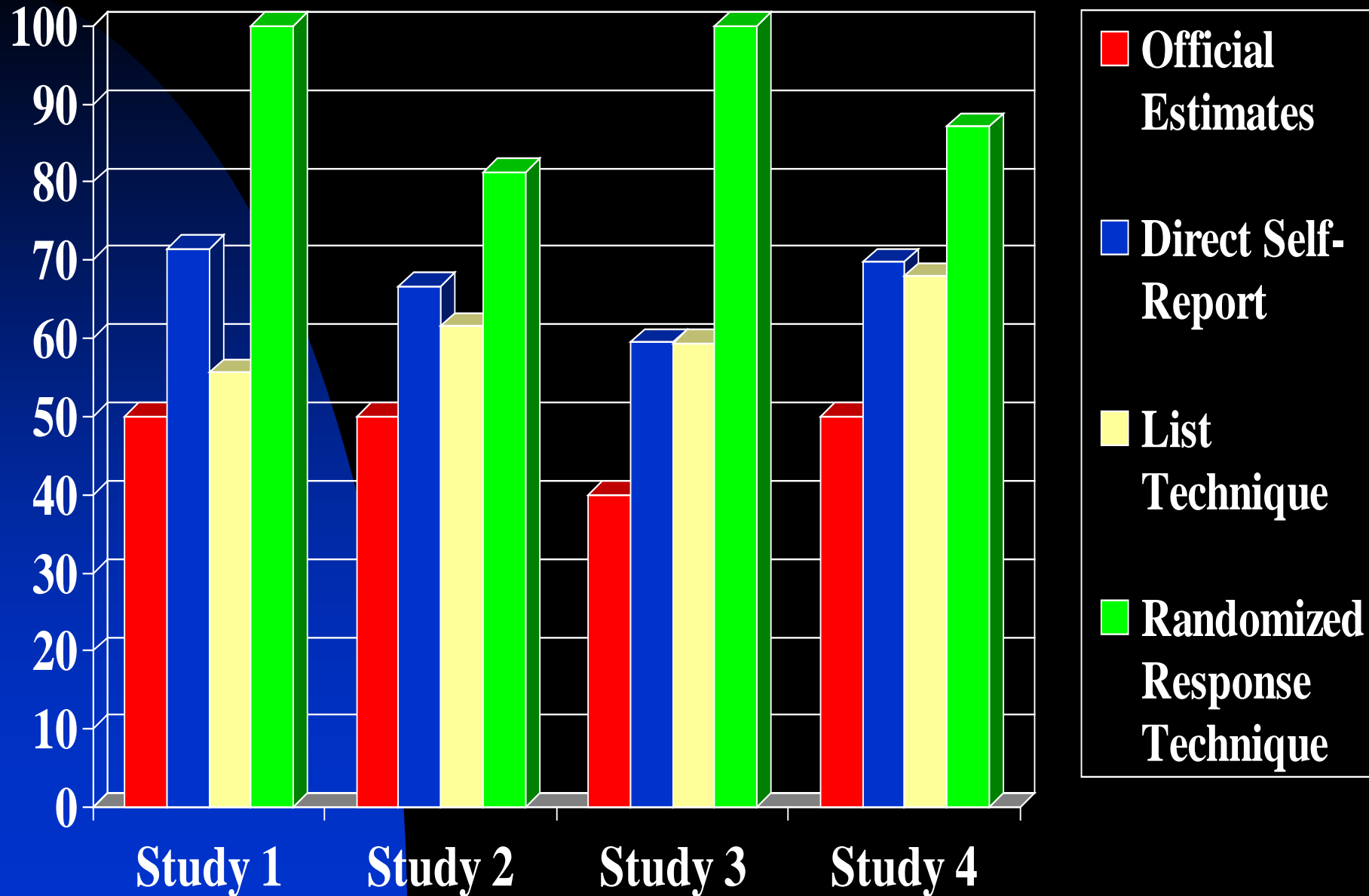
Results: Turnout Estimates



Results: Turnout Estimates



Results: Turnout Estimates



Complete Anonymity

- **Anonymity may decrease pressure to appear desirable**
- **It complete anonymity may also reduce a sense of accountability and therefore reduce motivation.**
 - **Increase Satisficing**
 - **Decrease Accuracy**

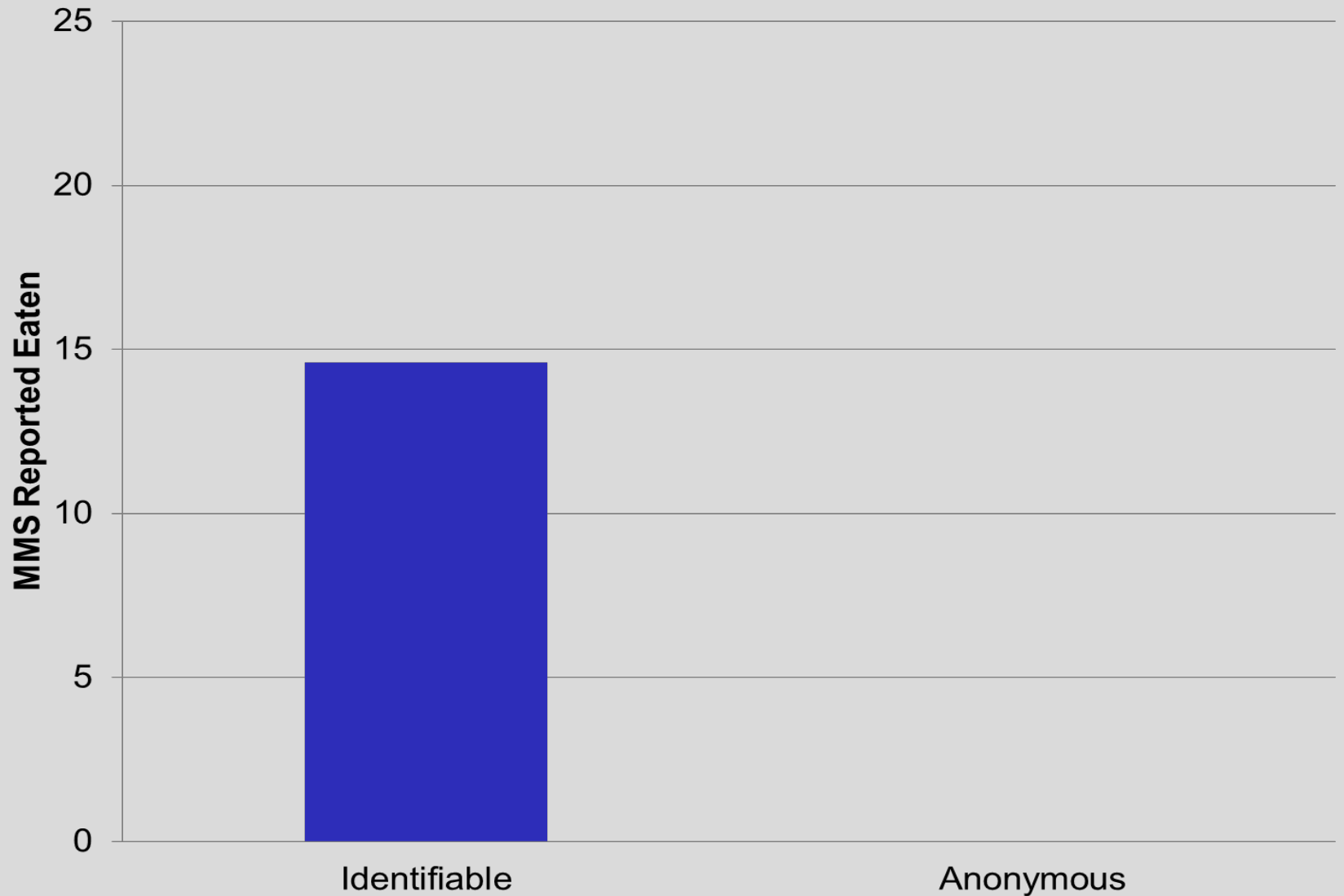
Being completely anonymous may yield:

1. More reports of socially undesirable attributes
2. More satisficing
3. Less accuracy

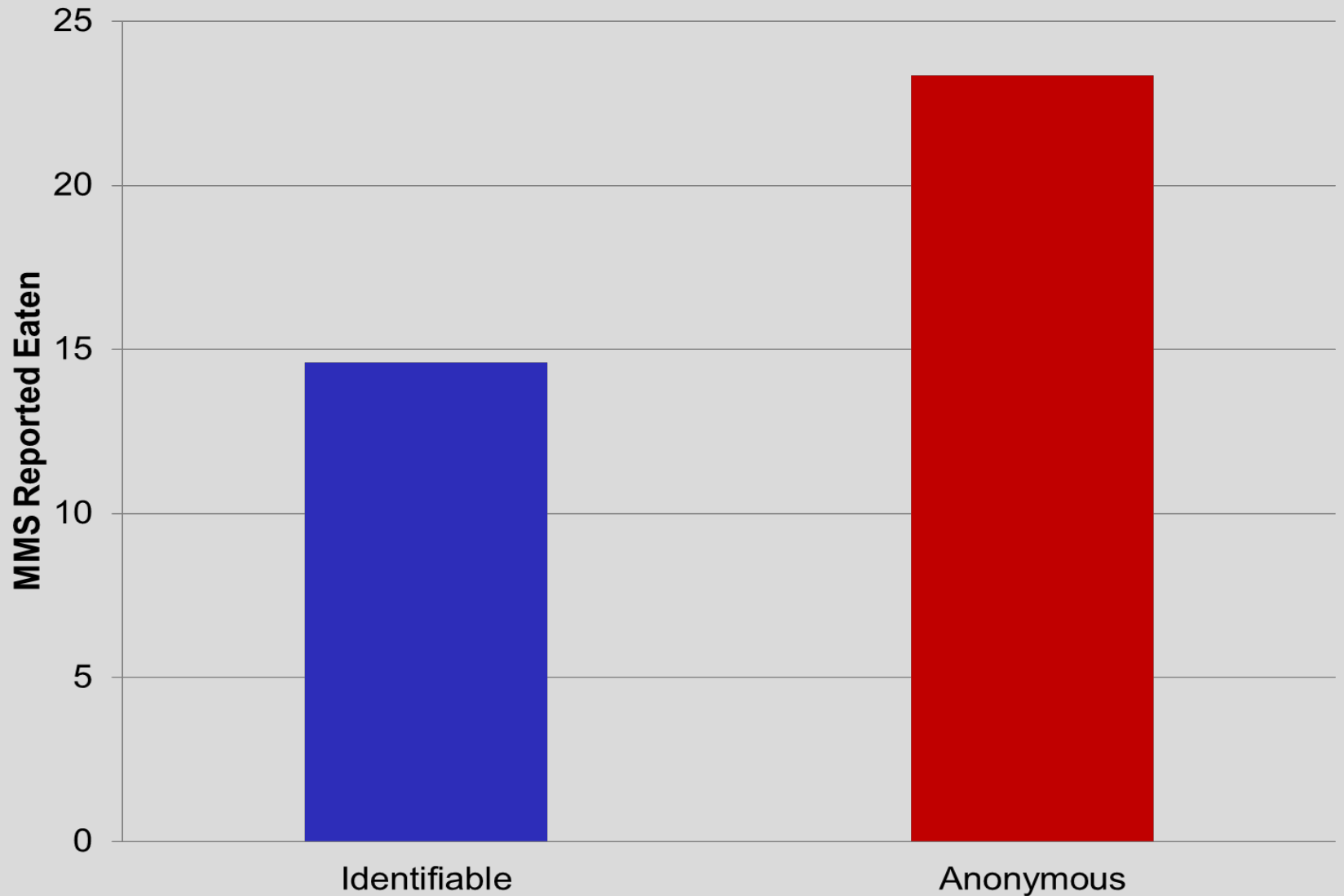
Method and Measures

- Undergraduates (n=93) were given a bowl of M&Ms and asked to complete a questionnaire.
- Half asked to add identifiable information to the questionnaire
- Half were completely anonymous
- Asked, at the end of the questionnaire, to estimate the number of M&Ms they ate.
- We counted the number amount they actually ate.

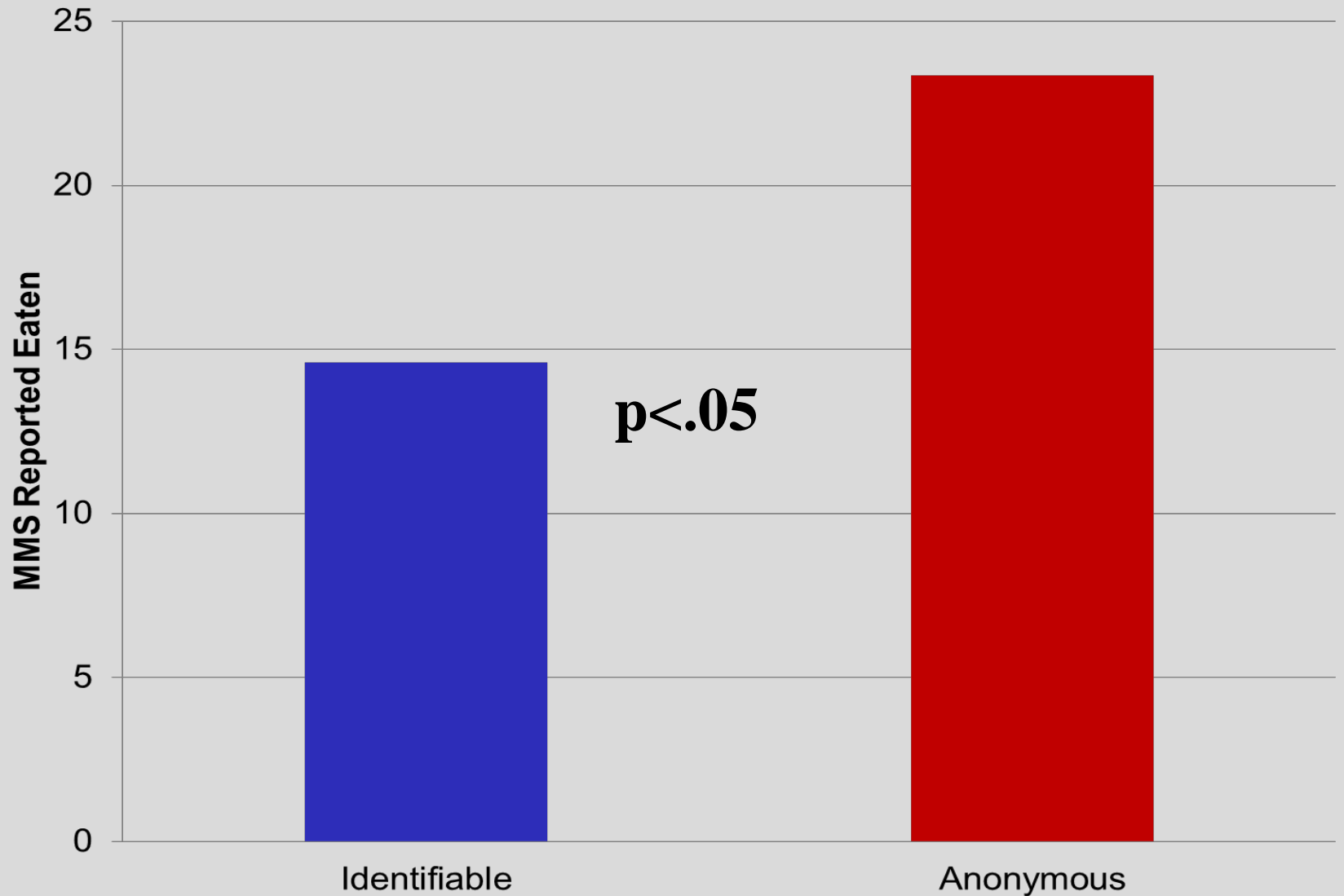
Gluttony



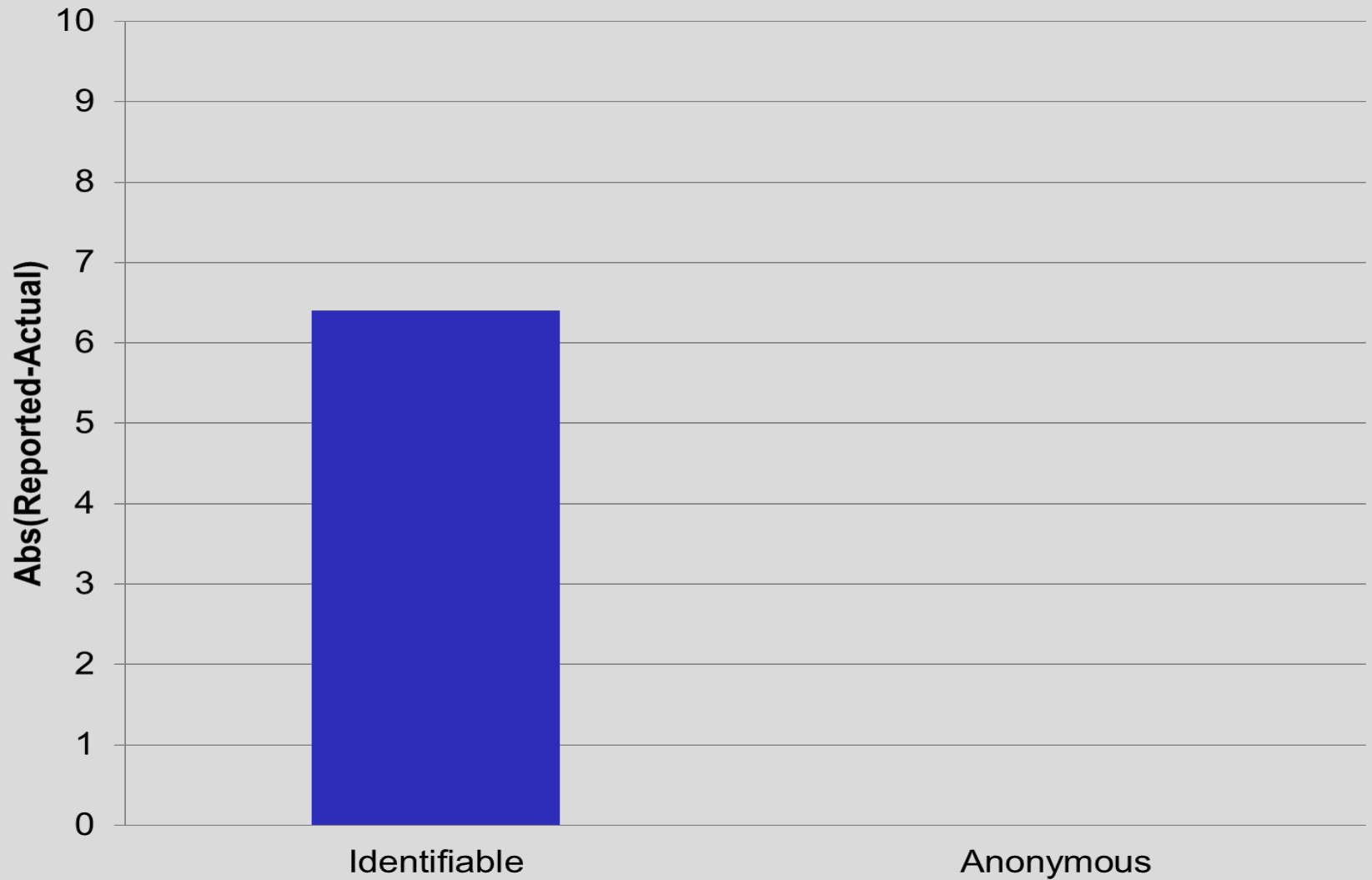
Gluttony



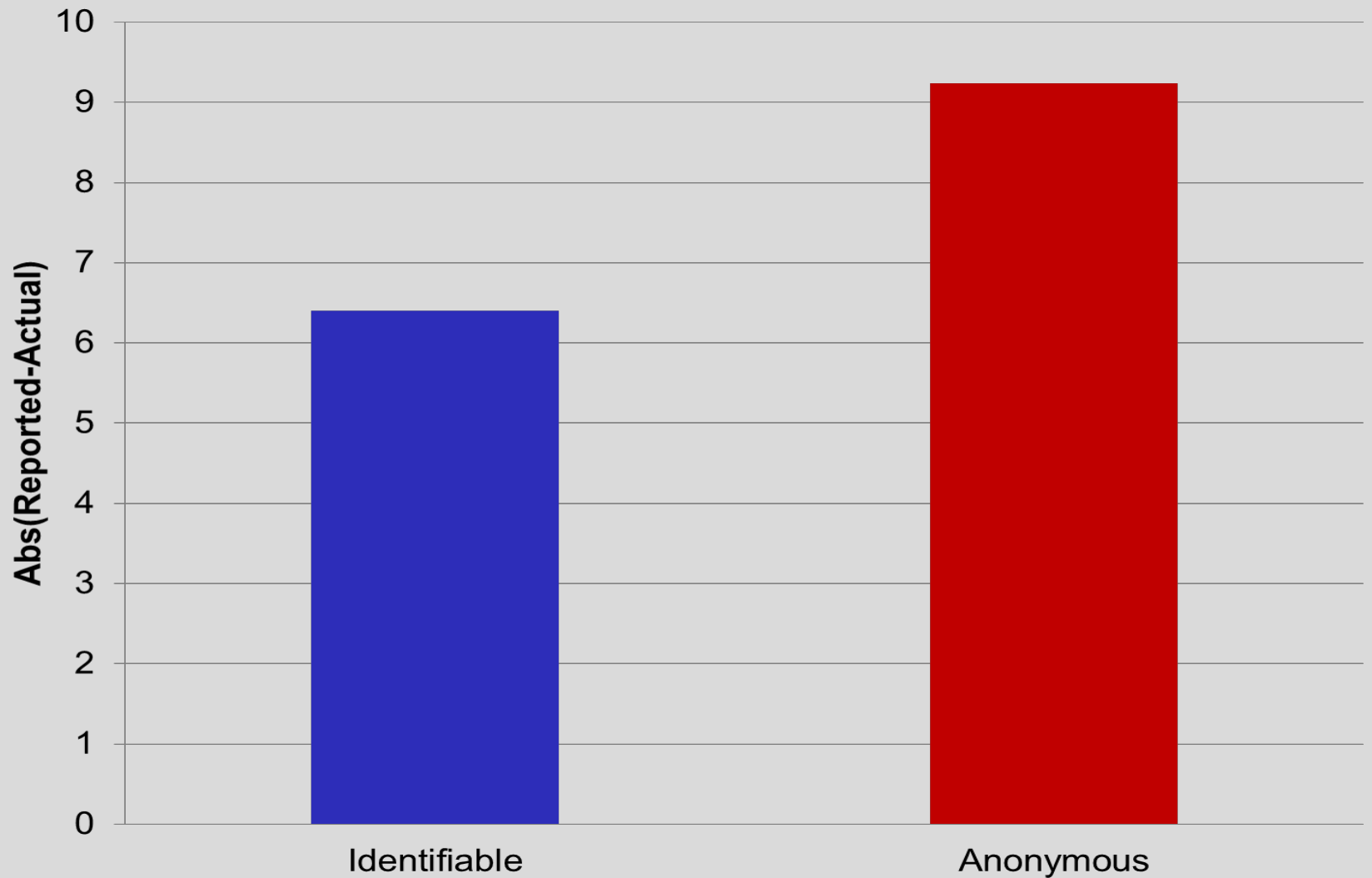
Gluttony



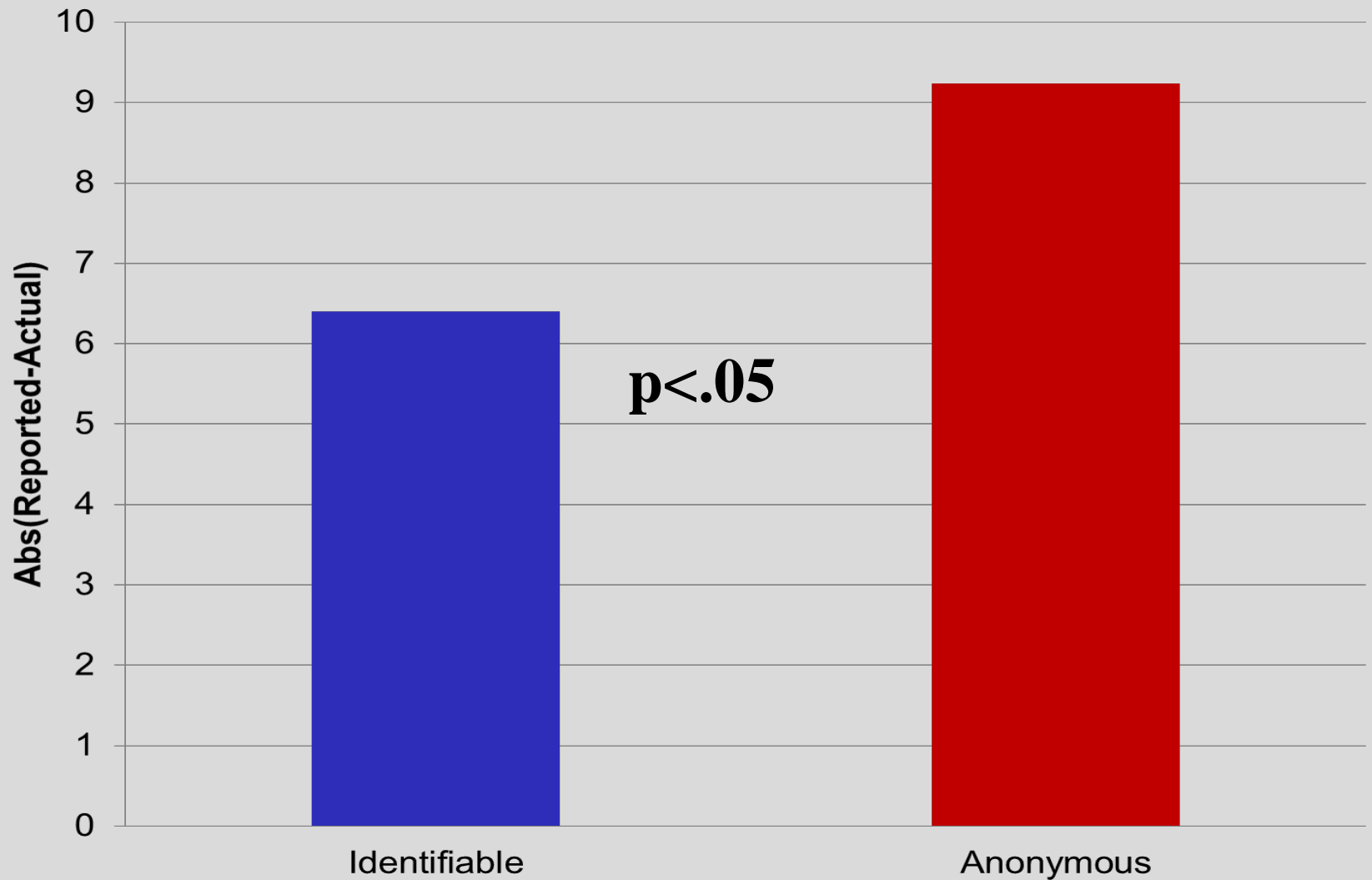
Error



Error



Error





Study 3

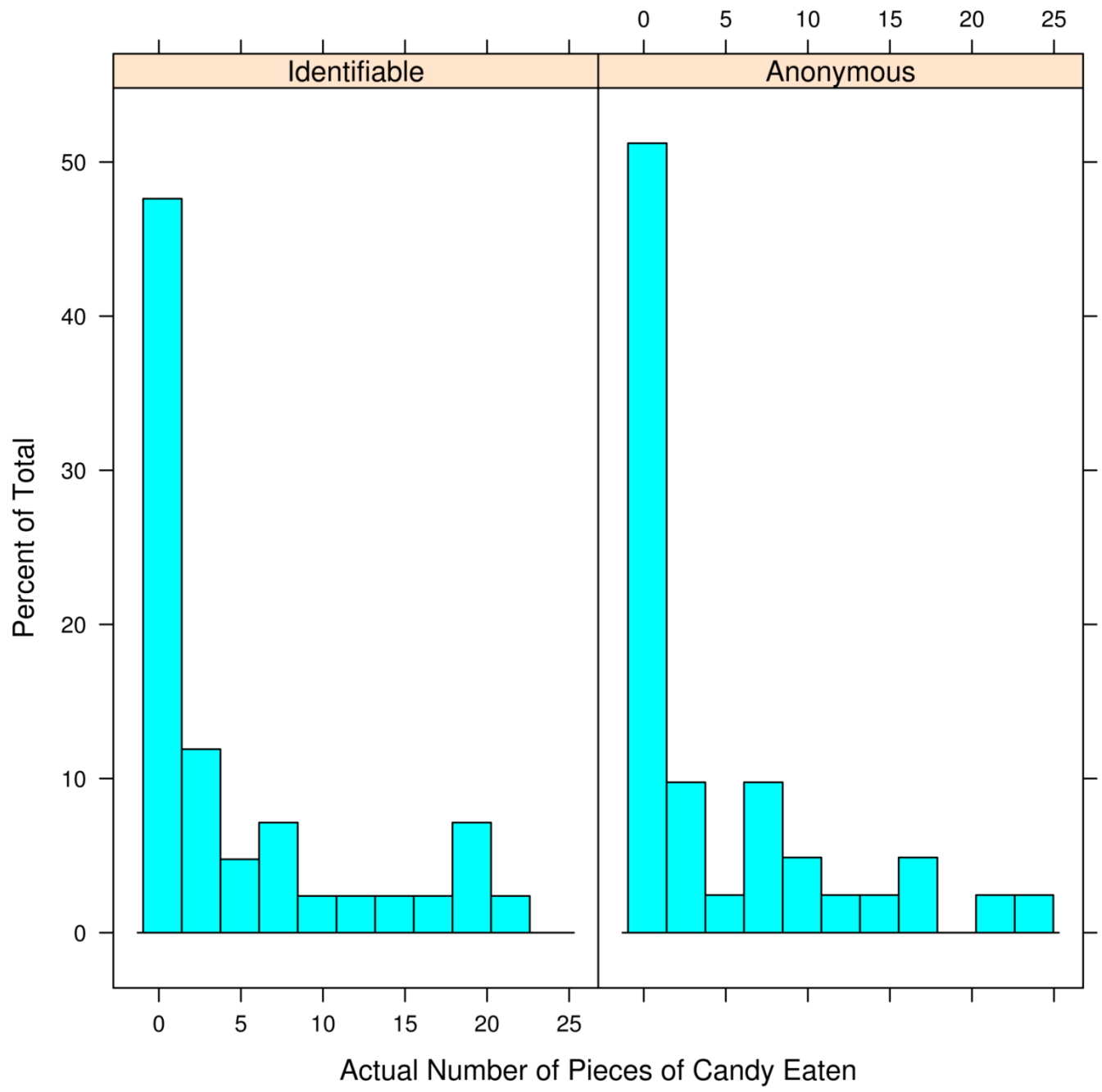
Methods and Measures

- **Subjects: 80 “Summer at Stanford” Students**
- **Given questionnaire #1, a bowl of M&Ms and a bowl of Jelly Beans**
- **Once done with questionnaire #1, candy removed and completed questionnaire #2.**
- **Random assignment: completely anonymous or identifiable**
 - **Asked about consumption**
 - **Solve anagrams**

Methods and Measures

- **Lots of people ate no candy.**
- **Zero-inflated Negative Binomial Regression**
- **Two processes:**
 - **Generating the zeros**
 - “Should I eat any?”
 - **Generating the positive numbers**
 - “Should I eat one more?”

**Did the two groups
eat the same
amount?**



0 5 10 15 20 25

Identifiable

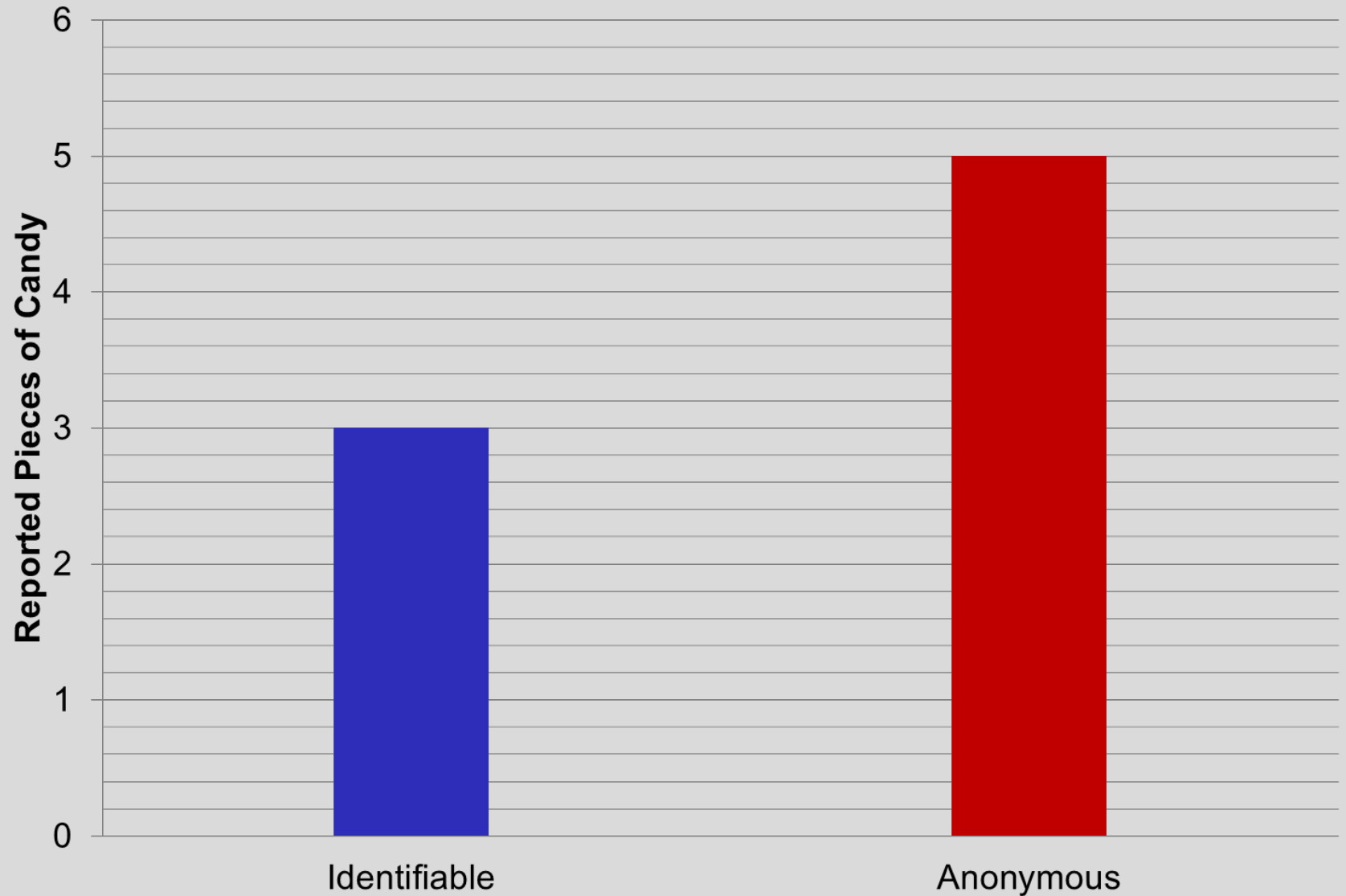
Anonymous

Percent of Total

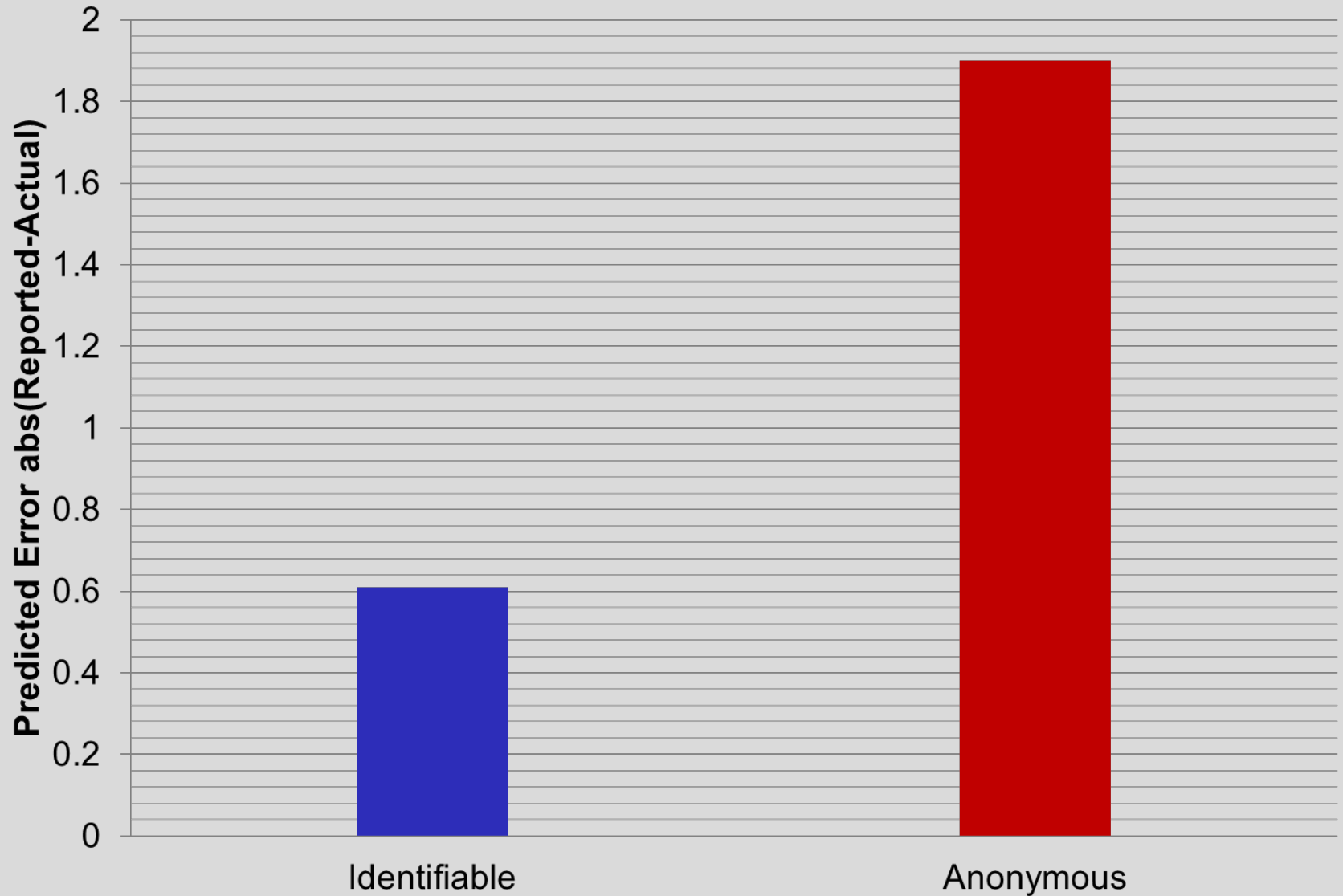
Actual Number of Pieces of Candy Eaten

**Did anonymity allow
people to be more
honest in admitting
gluttony?**

Gluttony



Error



Conclusions

- **Complete anonymity led participants to “disclose” more embarrassing information about themselves.**
- **Complete anonymity did not cause people to provide more honest answers**
- **Complete anonymity enhances satisfying**
 - **Non-differentiation**
 - **Completion time**

Returning to Better Solutions

Anonymity

Mode (no interviewer)

Bona Fide Pipeline

The Item Count Technique

But ...

Costs:

Added data collection time and expense

Lack of accountability (self-administered)

**No validation of these techniques
at the individual level.**

So ...

First check:

Is social desirability bias present?

If yes, then:

Use a technique to minimize it.

Self-Deception Bias

The Bottom Lines

- **Don't lose (much) sleep over self-presentational social desirability bias.**
- **Maybe lose sleep over self-deception bias.**
- **Don't blame lying respondents for inaccurate (or implausible) data.**
- **Check to see if it's your fault first.**
- **Check to see if lying is happening.**
- **If so, then use a technique to minimize it.**



Attitude Recall

Studying Change Over Time

- **Repeated Cross-Sections**
 - Can't track individuals - may underestimate change

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 - Interviewing changes attitudes and behavior

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- **Attitude Recall**

Common Questions

- **Did the testimony make you more favorable toward the defendant?**
- **Did the pre-trial publicity change your opinion of the defendant?**
- **How did you feel about the defendant 6 months ago?**
- **What did you believe about the defendant's guilt or innocence at the beginning of the trial?**

How would you say this ad has impacted your overall opinion of Three Musketeers?

It has made my opinion more favorable

It has had made no difference

It has made my opinion less favorable

How to Recall an Attitude

- 1) Assess present attitude; see if any intervening event might have changed it.**
- 2) Recall behaviors performed at that time and infer attitude from them.**
- 3) Recall the general type of person you were and infer attitude.**

Biases to be Expected

- **Forget change-inducing behaviors**
- **Present attitude and personality biases recollections of the past**
- **Assimilate memory to the present**

Correlations Assessing Accuracy of Attitude Recollection

Study	Recall Interval	Total Sample	Accuracy Correlation	
			Respondents who did not change	Respondents who did change
Alwin, Cohen, & Newcomb (1991)	44 yrs.	.68		
	24 yrs.	.71		
	20 yrs.	.72		
Powers, Goudy, & Keith (1978)	10 yrs.	.27		
Markus (1986)	9 yrs.	.41		
Haggard, Breksted, & Stark (1960)	1-7 yrs.	.35		
Lyons & Dickinson (1973)	2-3 yrs.	.41		
Breksted (1966)	6 mos.	.56		
Hardin (1965)	6 mos.	.28		
Berent & Krosnick (1990)	1 mo.	.75	.89	.57
Bem & McConell (1970)	1 hr.		.75	.26
Shaffer (1975a)	1 hr.			.30

Proportions of Respondents Accurately Recalling Their Prior Attitudes

Proportion Recalling Accurately

Study	Recall Interval	Total Sample	Respondents	
			who did not change	who did change
Alwin, Cohen, & Newcomb (1991) ^a	24 yrs.	79%	99%	55%
Newcomb, Koenig, Flacks, & Warwick (1967) ^b	20-22 yrs.	52%	56%	43%
Powers, Goudy, & Keith (1978)	10 yrs.	48%		
Markus (1986) ^c	9 yrs.	32%	69%	34%
Katz, Niemi, & Newman (1980) ^d	7 yrs.	82%	92%	62%
Niemi, Katz, & Newman (1980)	2-4 yrs.	73%	96%	9%
Lyons & Dickinson (1973)	2-3 yrs.	43%		
Fink (1960)	2 yrs.	40%	42%	38%
Wanous & Reichers (1992)	1.75 yrs.	41%	50%	24%
Dakin & Tennant (1968)	1 yr.	60%		
Hardin (1965) ^e	6 mos.	37%	40%	28%
Bain (1931)	2.5 mos.	76%		
Berent & Krosnick (1990)	1 mo.	53%	75%	27%
Average		55%	69%	36%

Recall Accuracy for Subjects in Attitude Change Experiments

<u>Study</u>	<u>Units of Attitude Change</u>	<u>Units of Recall Error</u>	<u>Percent Under- estimation of Attitude Change</u>	<u>Length of Attitude Scale</u>
Bem & McConnell (1970)	9	10	100%	61 pts.
Ross & Shulman (1973)	13	10	77%	72 pts.
Goethals & Reckman (1973)	12	13	100%	31 pts.
Shaffer (1975a)	21	13	62%	61 pts.
Shaffer (1975b)	27	11	41%	61 pts.
Aderman & Brehm (1976)		11		61 pts.
<u>Wixon & Laird (1976)</u>	6	6	100%	20 pts.
<u>Average</u>	15	11	71%	

Dangerous Questions

- **In 1980, did you favor legalized abortion, oppose it, or neither favor nor oppose it?**
- **Did the testimony make you more favorable toward the defendant?**
- **Did the ad change your opinion of the product?**
- **How did you feel about the product 30 minutes ago?**
- **What did you believe about the defendant's guilt or innocence at the beginning of the trial?**

Don't ask them!

- **Never**
- **Ever!**

(unless you want to sabotage your project)

- **“We’ll just ask the question but take the answers with a grain of salt.”**
- **No way!**
The temptation to interpret the results will be irresistible.

So ...

Don't ask them!