

Issues to be Investigated

- What response rates are being achieved in the best surveys today by the news media and government contractors?
- When lower response rates occur, why?
- What can be done to elevate response rates?
- How accurate are the best surveys in terms of unweighted demographics?
- How much can demographic accuracy be increased by increasing response rates?

Outline of Today's Presentation

Part I: What Response Rates Are Being Obtained?

Part II: Are Response Rates Related to Survey Characteristics

Part III: Are Response Rates Related to the Demographic Representativeness of National Samples?

Our Data Collection

- We contacted 11 top organizations
 - News media
 - Government contractors
- Requested information:
 - National and state-wide surveys
 - General population, RDD
 - Frequencies for AAPOR disposition codes
 - Unweighted demographic frequencies
 - Information about survey administration

Data Received

- 60 surveys
- 53 suitable for AAPOR response rate calculator
 - 4 surveys - special populations
 - 1 survey - disposition information not provided
 - 2 surveys - list samples

- Organization
 - 56% from media organizations
 - 44% from government contractors
- Geographic area
 - National: 55.5%
 - One state: 22.2%
 - Region: 18.5%
 - City: 1.9%

Calculating Response Rates

<u>Denominator</u>	<u>Numerator</u>	Completes + Partial
Known eligible + Unknown eligibility	RR1	RR2
Known eligible + e(Unknown eligibility)	RR3	RR4
Known eligible	RR5	RR6

Estimating e

- AAPOR Response Rate Calculator:

$$\frac{\text{Known eligible}}{\text{Known eligible} + \text{Known ineligible}}$$

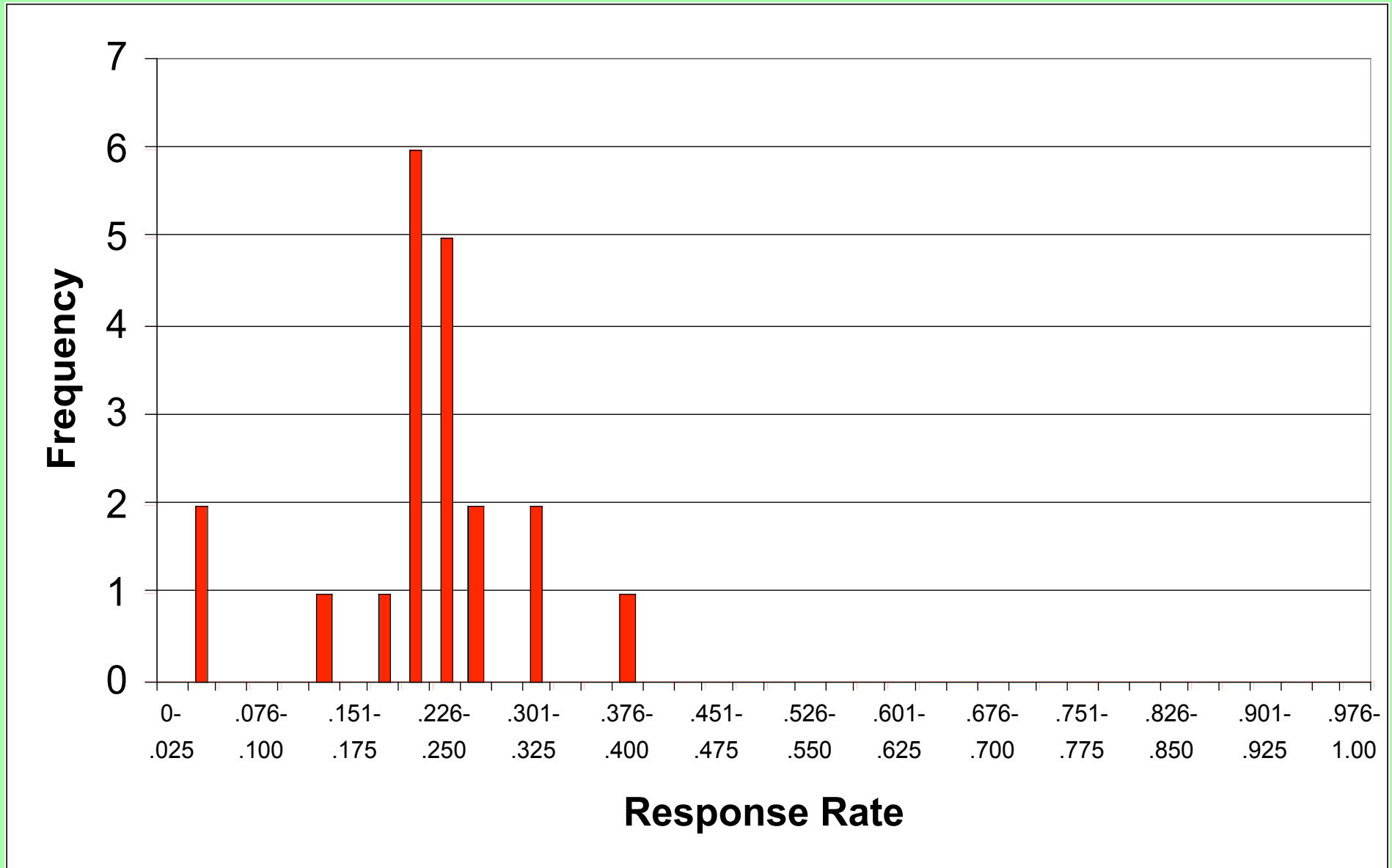
- A conservative estimate of e
- Keeter et al.: .2

Response Rates (National Surveys)

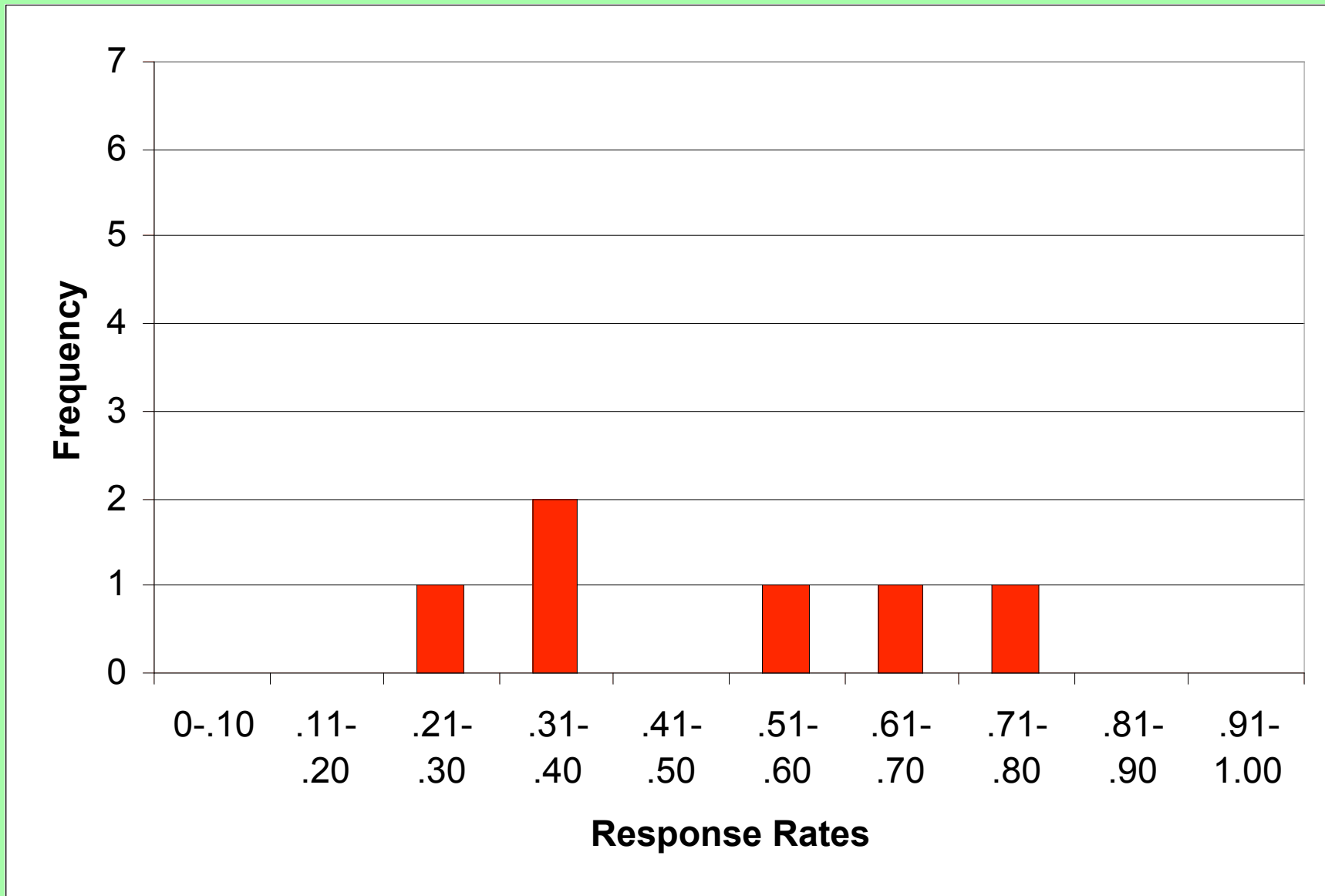
	<u>Media</u>			<u>Government Contractors</u>		
	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>
RR1	.04	.37	.17	.19	.64	.36
RR2	.04	.38	.17	.20	.53	.36
RR3	.05	.39	.22	.28	.70	.46
RR4	.05	.40	.22	.29	.70	.46
RR5	.09	.51	.32	.38	.77	.60
RR6	.09	.51	.33	.39	.87	.62
e	.26	.83	.52	.32	.48	.42

Media N=20; Government Contractors N=7

RR3 (Media) (National)



RR3 (Government Contractors) (National)



Estimating Contact Rates

- Contact rate 1:

Successful contacts (interviews and noninterviews)

Successful contacts + Non-contacted households + Unknown eligibility

- Contact rate 2:

Successful contacts (interviews and noninterviews)

Successful contacts + Non-contacted households + e(Unknown eligibility)

- Contact rate 3:

Successful contacts (interviews and noninterviews)

Successful contacts + Non-contacted households

Estimating Cooperation Rates

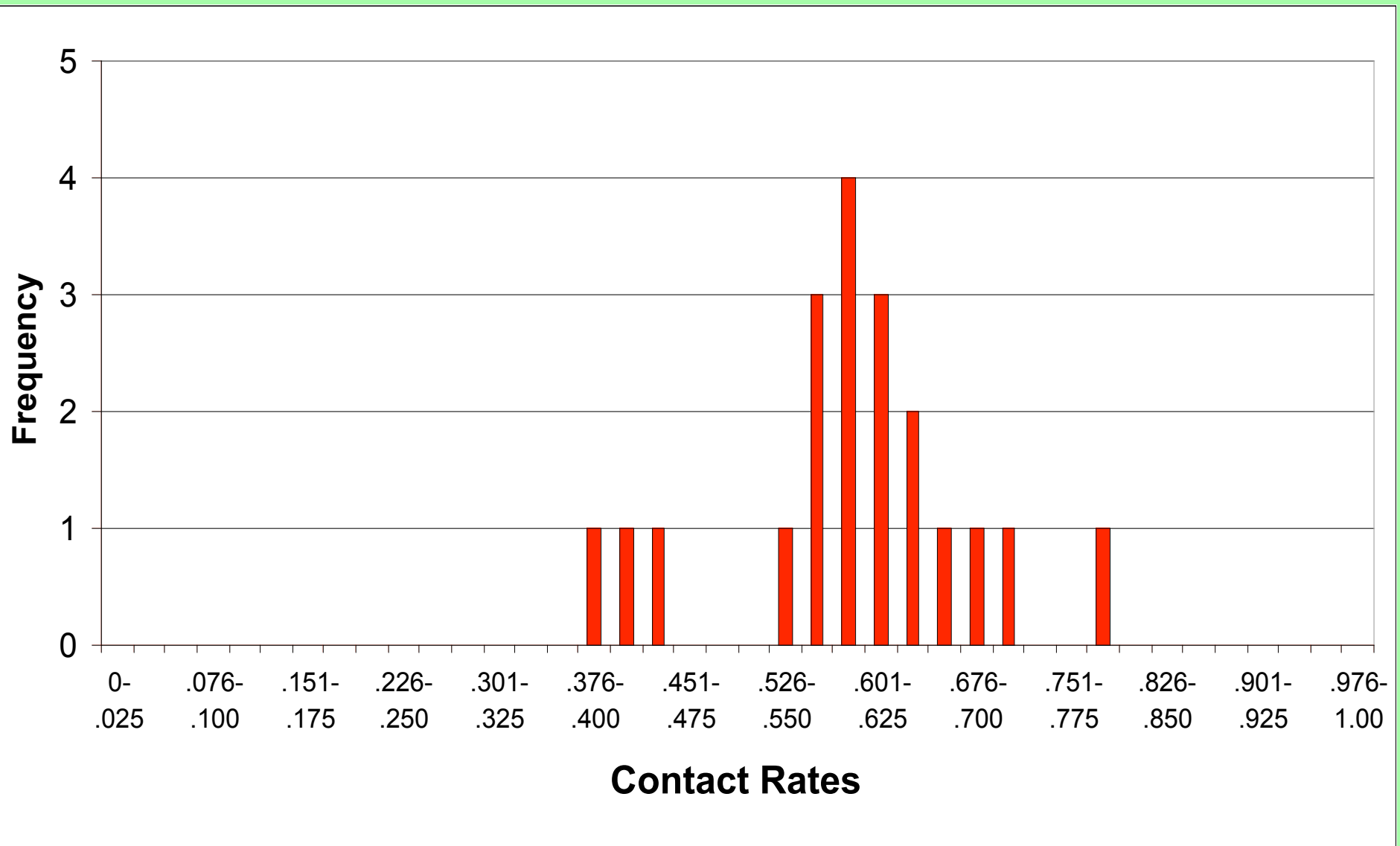
- Cooperation rate 1:
$$\frac{\text{Completed interviews}}{\text{Successful contacts}}$$
- Cooperation rate 2:
$$\frac{\text{Completed interviews} + \text{Partials}}{\text{Successful contacts}}$$
- Cooperation rate 3:
$$\frac{\text{Completed interviews}}{\text{Completed interviews} + \text{Partials} + \text{Refusals}}$$
- Cooperation rate 4:
$$\frac{\text{Completed interviews} + \text{Partials}}{\text{Completed interviews} + \text{Partials} + \text{Refusals}}$$

Contact and Cooperation Rates (National)

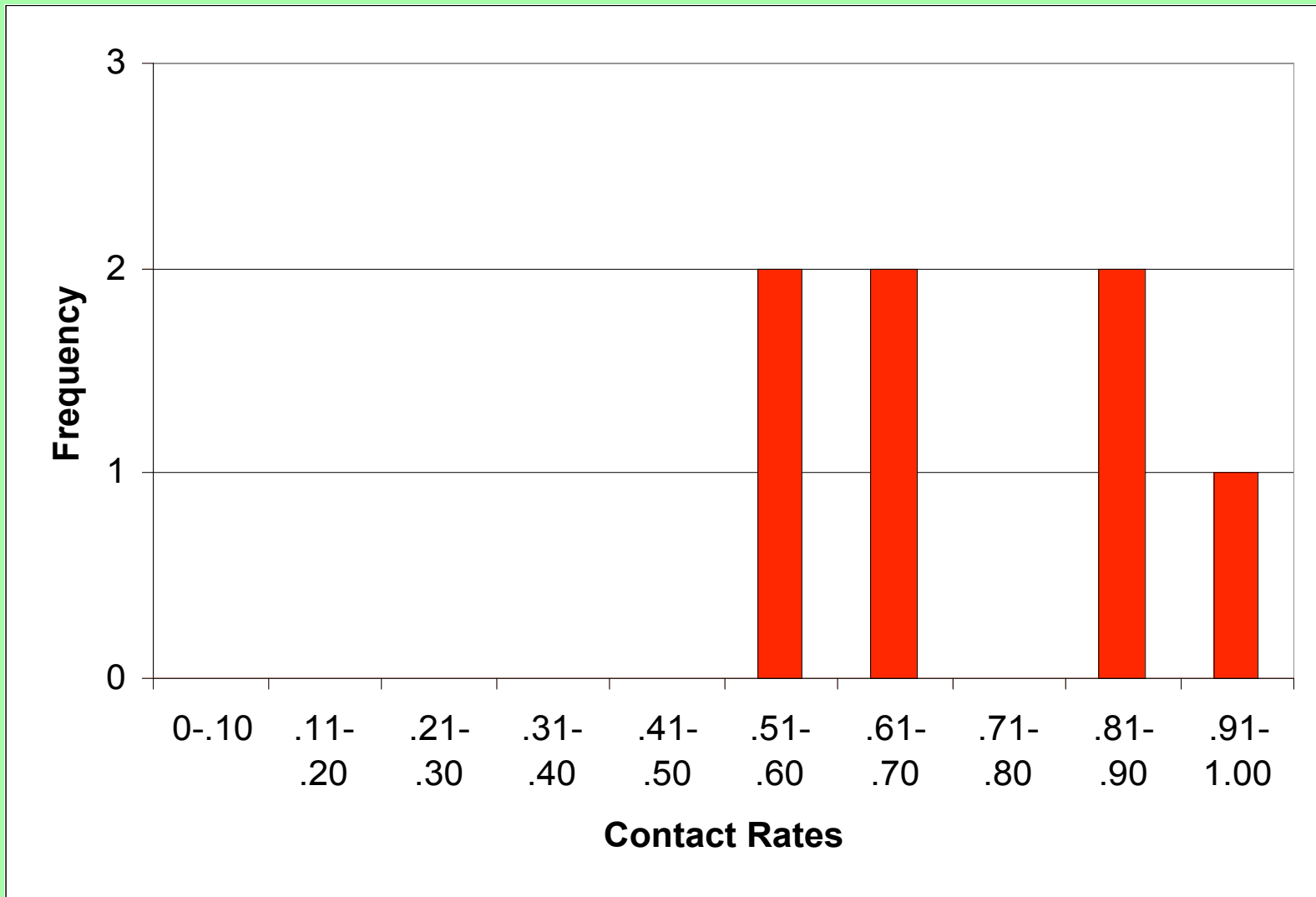
	<u>Media</u>			<u>Government Contractors</u>		
	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>
Contact Rate #2	.40	.79	.59	.55	.90	.70
Cooperation Rate #2	.11	.57	.37	.46	.85	.64

Media N=20; Government Contractors N=7

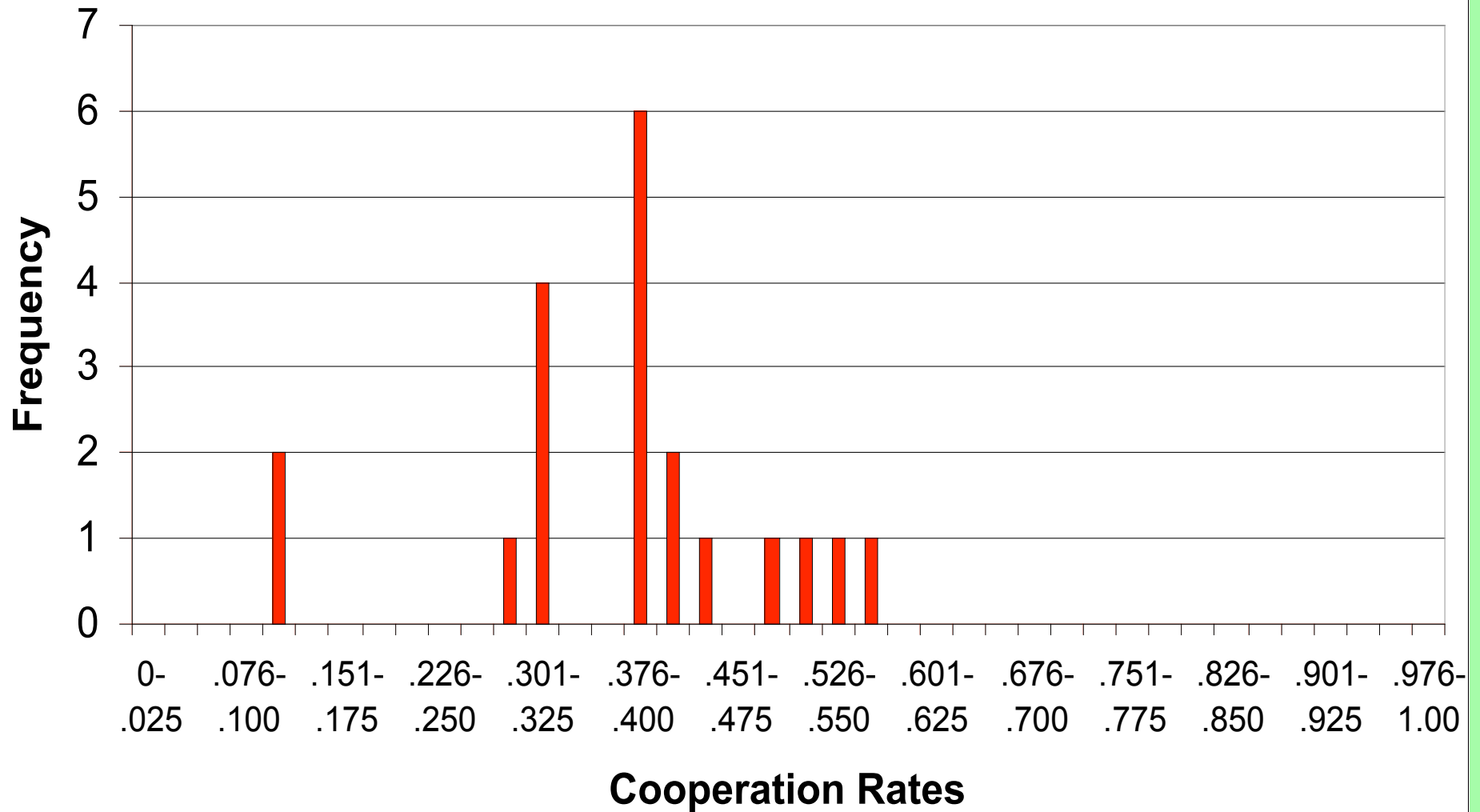
Contact Rate 2 (Media) (National)



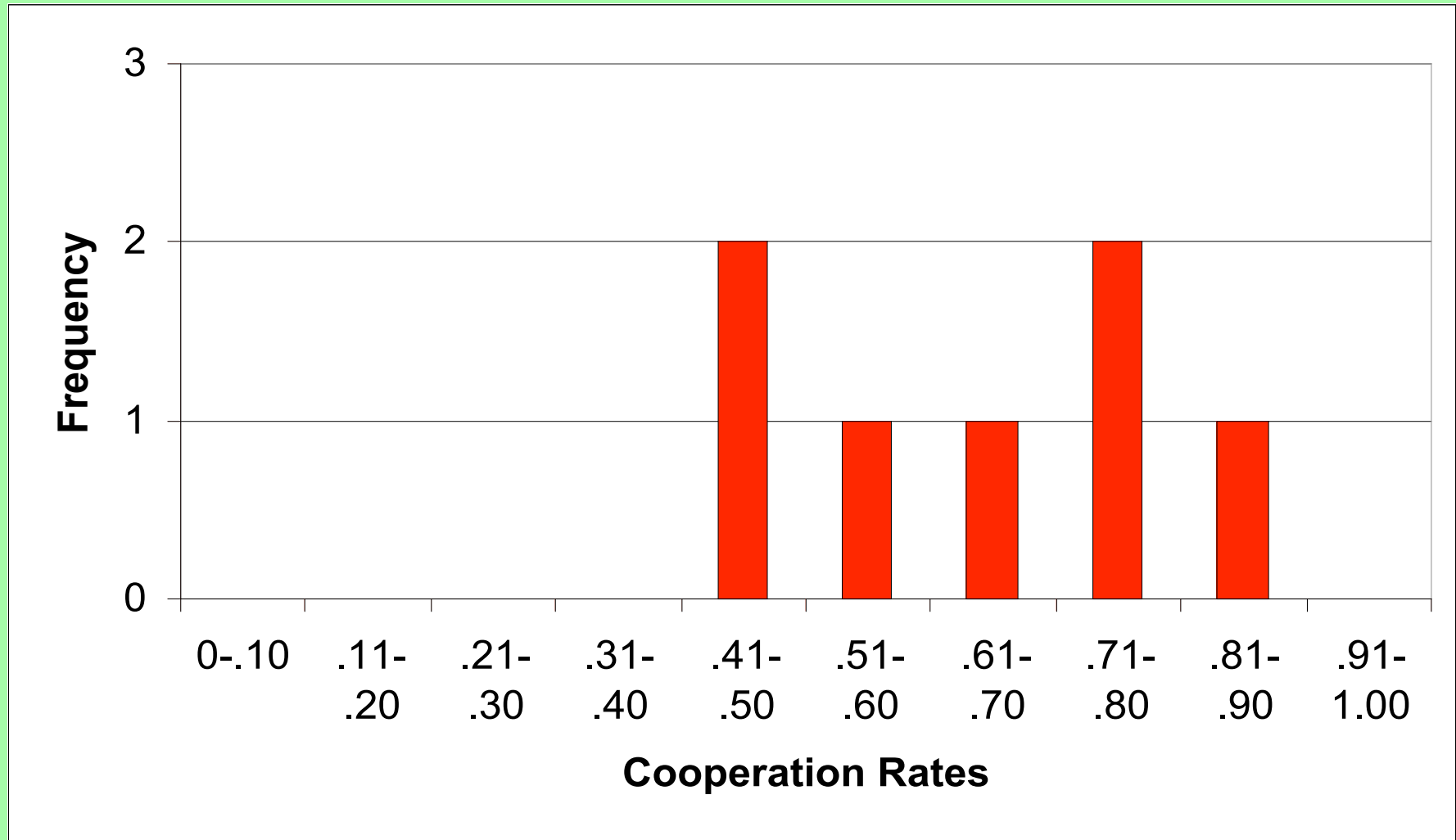
Contact Rate 2 (Government Contractors) (National)



Cooperation Rate 2 (Media) (National)



Cooperation Rate 2 (Government Contractors) (National)



Correlations Among Rates (Media and Government Contractors) (Media)

RR3 COOPR2 CONTR2

RR3

COOPR2

.90**

CONTR2

.37+

.31

N=27 **p<.01 +p<.10

Part II: Survey Characteristics

- Field period: 3 to 245 days; mean = 45 days
- Interview length: 3.5 to 34 minutes
mean = 17.5 minutes
- Advance letter sent: 9.3%
- Incentives offered: 7.4%
- Refusal conversions: 79.6%

- Messages left
 - Never: 72.2%
 - Sometimes: 9.3%
 - Always: 1.9%
- Blocks of telephone numbers used
 - All blocks: 11.1%
 - All working blocks: 13.0%
 - Blocks with at least 2 listed numbers: 44.4%
 - Blocks with at least 3 listed numbers: 13.0%

Correlations of Response Rate 3
with Survey Characteristics (All Surveys)

	<u>RR3</u>	<u>N</u>
Field period (days)	.37**	52
Interview length (minutes)	-.49**	43
Advance letter sent	.45**	53
Incentive Offered	.38**	53
Refusal conversions attempted	.02	53
When messages were left	.60**	45
Number of listed telephone numbers in block required for inclusion	.28+	44

Part III: Demographic Representativeness

- 21 National General Population Surveys of Adults 18+
 - Excluded surveys with oversamples
 - Excluded surveys of special populations
 - 19 media surveys and 3 government contractor surveys
- Unweighted Demographics vs. CPS Data
 - Gender
 - Age
 - Race
 - Education
 - Household Income
- Compute Average Absolute Difference

Gender

	<u>CPS</u>	<u>Sampling Error</u>	<u>Average Observed Discrepancy</u>
Male	48.1%	2.9%	1.4%
Female	51.9%		

Females over-represented in 68% of surveys.

Age

	<u>CPS</u>	<u>Sampling Error</u>	<u>Average Observed Discrepancy</u>
18-25	14.8%		
26-35	18.6%		
36-45	21.4%	2.2%	2.5%
46-55	18.4%		
56-65	11.7%		
66 +	15.1%		

18-25 under-represented in 86% of surveys.

Race

	<u>CPS</u>	<u>Sampling Error</u>	<u>Average Observed Discrepancy</u>
White	82.9%	2.0%	3.1%
African- American	11.6%		

African-Americans under-represented in 95% of surveys.

Education

	<u>CPS</u>	<u>Sampling Error</u>	Average Observed <u>Discrepancy</u>
Less than high school	16.9%		
High school graduate	31.8%		
Some college	27.0%	2.2%	5.6%
College graduate	16.4%		
Post-graduate degree	7.9%		

Less than HS under-represented in 100% of surveys,
Post-graduate over-represented in 100% of surveys.

Household Income

	<u>CPS</u>	<u>Sampling Error</u>	<u>Average Observed Discrepancy</u>
Less than \$30,000	28.1%		
\$30,000—50,000	21.2%	2.5%	3.7%
\$50,000—75,000	20.2%		
Over \$75,000	30.5%		

Over \$75,000 under-represented in 94% of surveys.

Correlation of Response Rate 3
with Demographic Discrepancies

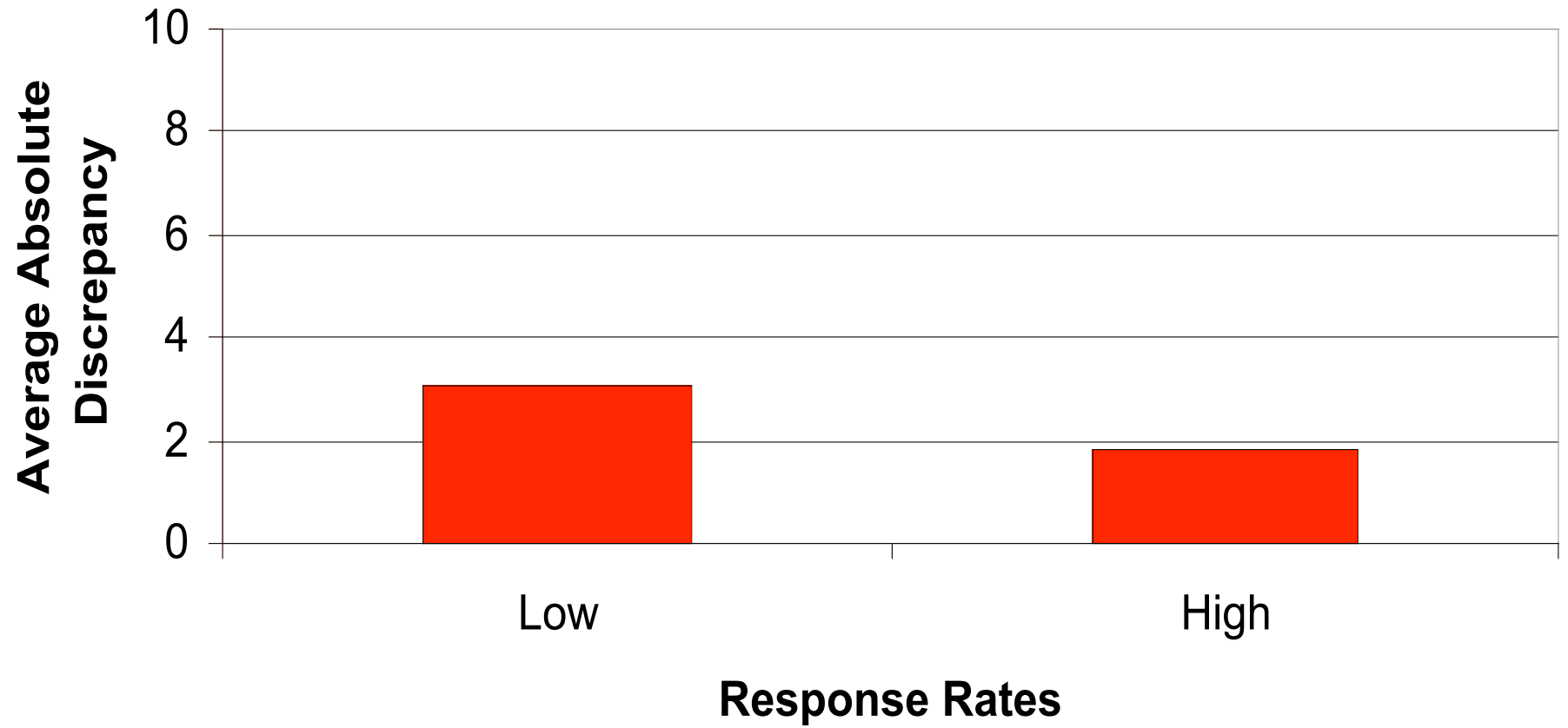
Demographic Discrepancy in Terms of:

Race Age Gender Education Income

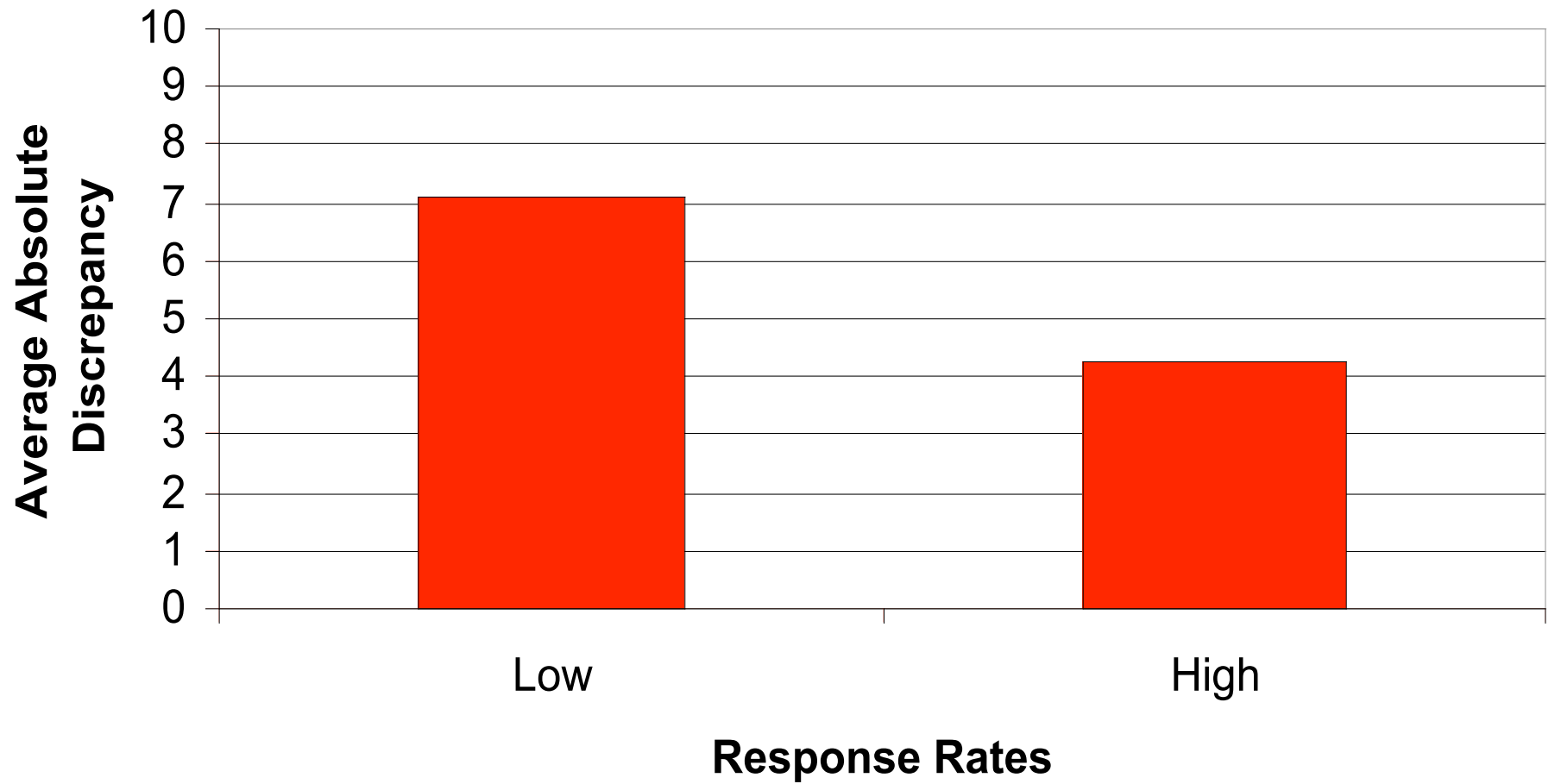
RR3 .01 -.80** -.05 -.74** -.16

N 21 22 20 22 18

Average Absolute Age Discrepancy



Average Absolute Education Discrepancy



Conclusions

- Response Rates varied a great deal
 - Media: .05 to .51
 - Government Contractors: .19 to .87
- Contact Rates: .6 to .7 on average
- Cooperation Rates: .4 to .6 on average

What Causes Higher Response Rates?

- Response rate strongly correlated with cooperation rate
- Response rate more weakly correlated with contact rate

Higher Response Rates for

- Longer field period
- Shorter interview
- Sending an advance letter
- Offering an incentive
- Leaving messages
- Using blocks with more listed phone numbers

- Gender and age discrepancies in the range of sampling error.
- Slightly larger error for race and income than would be expected based on sampling error only.
- More error for education than sampling error alone.

Higher Response Rate Yields

- Smaller discrepancies for education and age
- No impact on discrepancies for gender, race, and income

The Bottom Line

- Higher response rates can be achieved by spending considerably more money and time on data collection.
- Even surveys with relatively low response rates have excellent demographic representativeness.
- Achieving higher response rates will only improve demographic representativeness slightly.