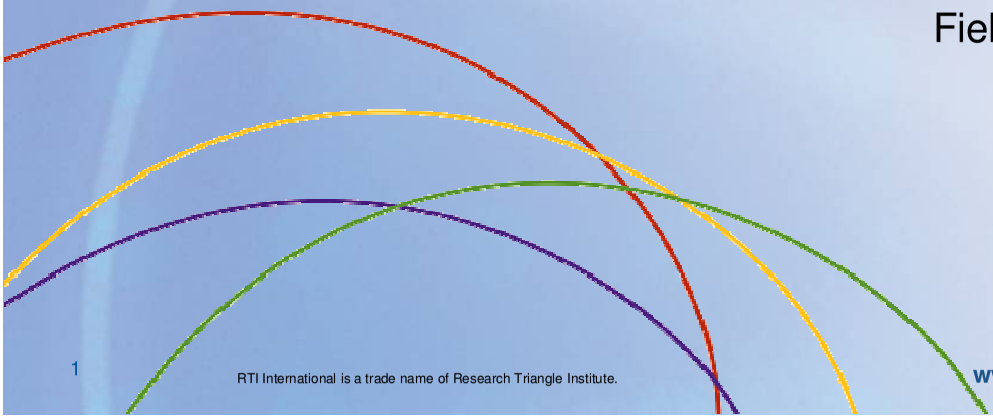
2008-12 Baccalaureate and Beyond Longitudinal Study

Selected Results of the B&B:08/12 Field Test



Propensity Modeling Design

- Model development used variables from NPSAS:08 to predict response to B&B:08/09
- A list of candidate variables was developed based on the propensity modeling literature and previous experience with this population
- Bivariate analyses were used to narrow candidate list
- Regression analyses were conducted to confirm multivariate relationships
- C&RT analysis was done to check for interaction effects in the initial list of candidate variables

Propensity Modeling Design (continued)

Data from the base year study (NPSAS:08)

- Age
- **Interview response status (responded/did not respond) ***
- Responded during early completion period indicator
- **Responded before prompting started indicator ***
- Case received a prompting letter indicator
- Ever refused indicator
- **Call count ***
- Located for NPSAS:08 indicator
- NCOA match indicator
- ACCURINT match indicator
- **NSLDS match indicator ***
- Federal aid amount received
- CPS match indicator
- **TELEMATCH match indicator ***
- Institution control
- **Parents' education ***

 *** Significant at p < .05**

Propensity Modeling Design (continued)

Contact data available at the start of the first follow-up (B&B:08/09)

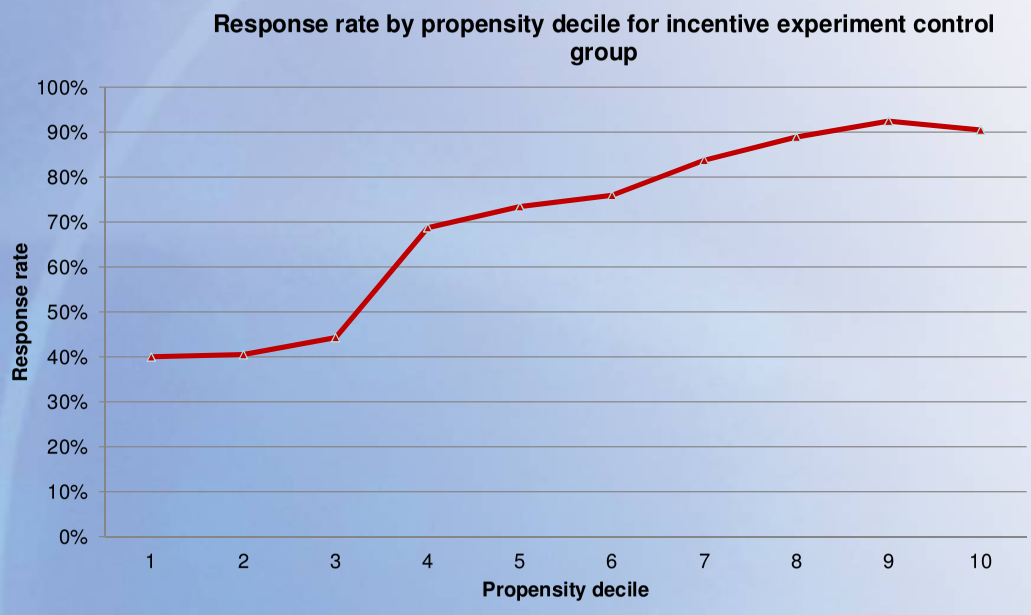
- Student address on file indicator
- Parent address on file indicator
- **"Other" address on file indicator ***
- Email address on file indicator
- Student phone number on file indicator
- Parent phone number on file indicator
- "Other" phone number on file indicator

 *** Significant at p < .05**

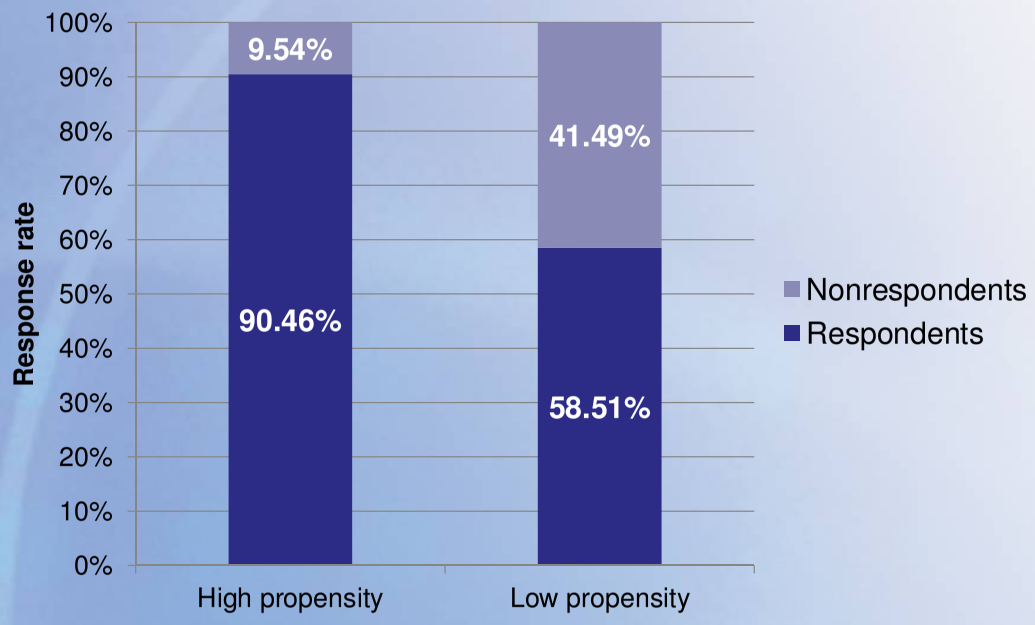
Propensity Modeling Design (continued)

- B&B:08/12 sample was scored using B&B:08/09 variables and parameter estimates from the development model
- Predicted propensity scores were reviewed and a cut point determined
- Final distribution was 65% low propensity, 35% high propensity
- Propensity scores ranged from .36 to .96 with a mean of .77

Can We Predict Response?



Did The Model Predict Participation?



Note: Control cases only. $\chi^2 = 88.34$; $p < .001$

Unit Level Bias Analysis – B&B:08/12 FT

Group	Mean relative bias
Overall	
All	4.17
All with low propensity cases treated as nonrespondents	6.84
High propensity	7.29
Low propensity	3.94
Low propensity only	
Incentive amount same as offered in B&B:08/09 (control)	4.08
Incentive amount $15 more than offered in B&B:08/09 (treatment)	7.01
High propensity with….	
Low propensity control	4.22
Low propensity treatment	7.05

Unit Level Bias Analysis – B&B:08/09 FS

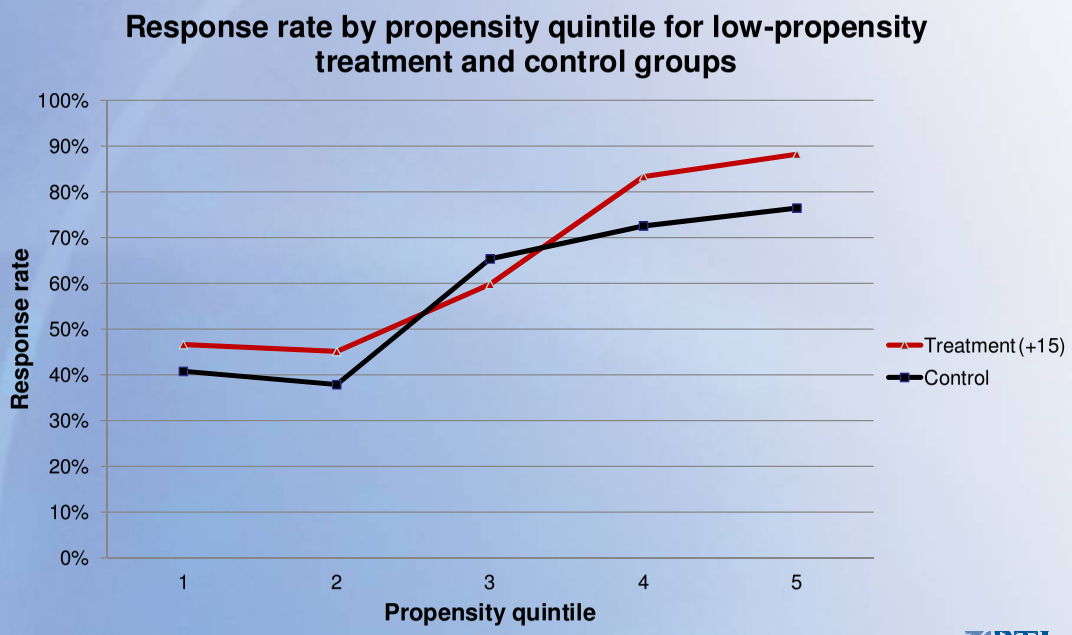
Group	Mean relative bias
Overall	
All	3.90
All with low propensity cases treated as nonrespondents	9.40
All with low and medium propensity cases treated as nonrespondents	17.89
All with NPSAS:08 respondents who were B&B:08/09 nonrespondents excluded	3.72
All with NPSAS:08 respondents who were B&B:08/09 nonrespondents treated as respondents and double nonrespondents treated as nonrespondents	12.39

Key Variables Analysis

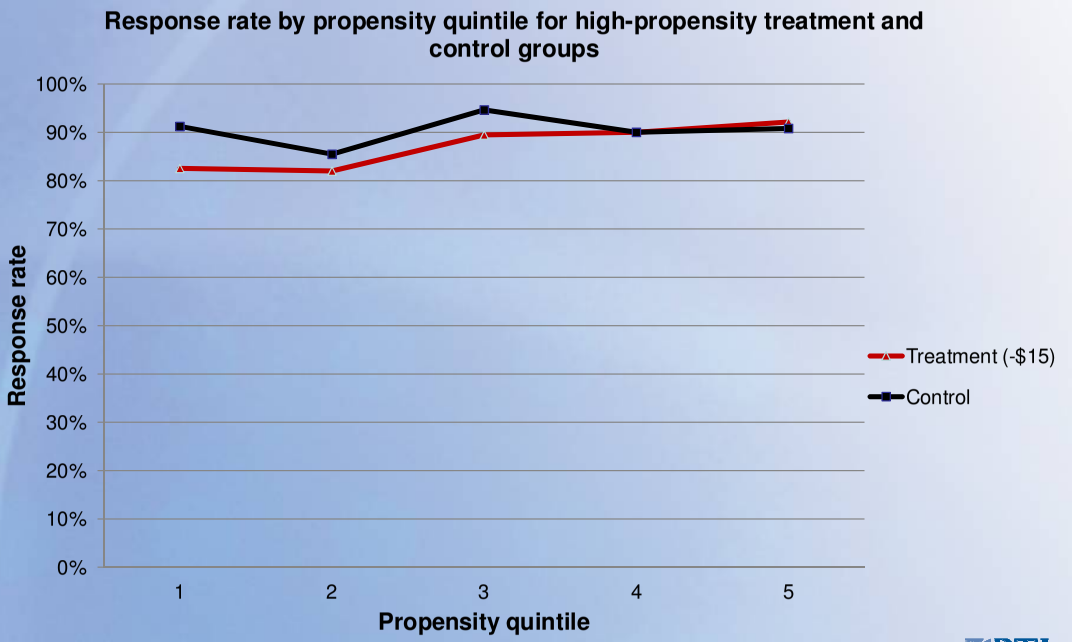
	High (Top 1/3)	Low (Bottom 2/3)	Low Control	Low Treatment
Earned graduate degree	22.7	18.4	18.4	18.5
Received industry certification or occupational license	26.1	32.8	32.8	29.0
Received vocational or technical certificate	12.4	12.9	12.9	15.8
Amount of private student loans since bachelor's degree	$18,839	$21,060	$21,060	$33,620
Worked for pay since earning bachelor's degree	98.8	97.3	97.3	97.2
Current employment: Salary	$32,271	$35,613	$35,612	$39,602
Current employment: Hours per week	37.6	40.9	41.0	41.5
Looking for a job	29.8	28.8	28.8	29.66
Has retirement account	67.5	69.6	69.6	66.9
Monthly rent or mortgage payment amount	$867	$877	$877	$926
Financial stress: Phone	6.3	8.6	8.6	7.7
Financial stress: Mortgage/rent/utility bill	14.6	15.5	15.5	13.0
Financial stress: Food	17.7	23.2	23.2	16.7
Married	42.3	40.6	40.6	43.6
Citizen	99.6	97.0	97.0	97.5
Number of dependent children	.3	.5	.5	.5

 Significant at p < .10 Significant at p < .05

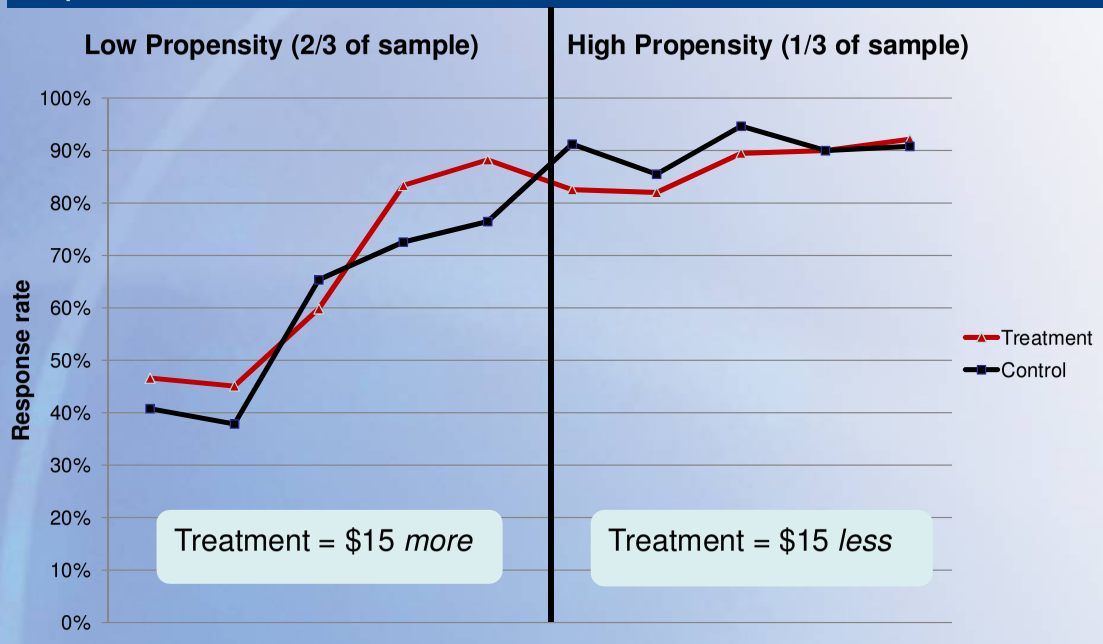
Can We Successfully Target Low-propensity Sample Members With Increased Monetary Incentives?



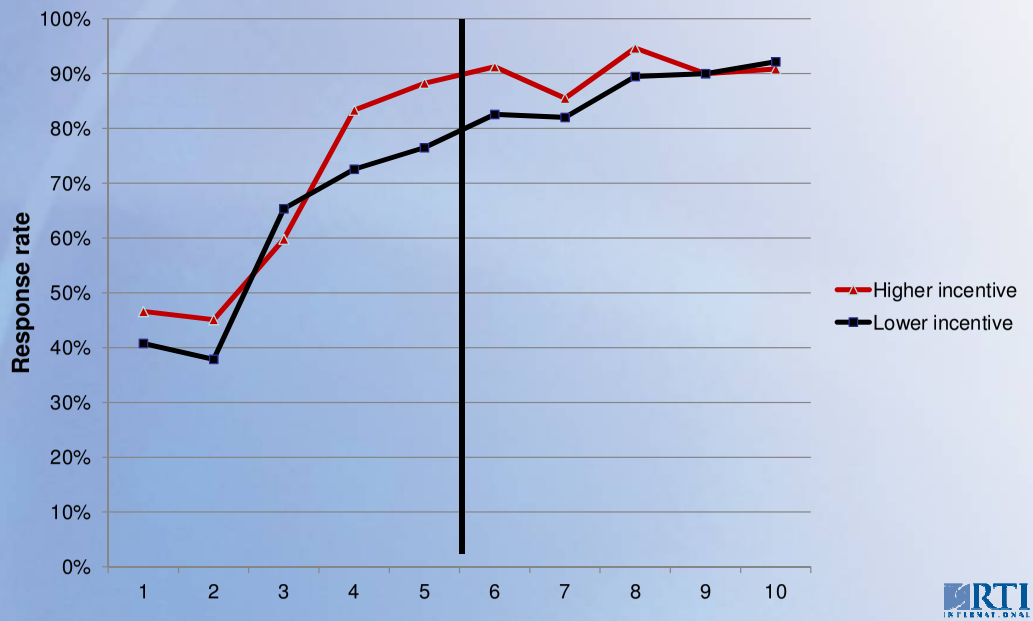
Can We Lower Monetary Incentives for the High-propensity Cases Without Affecting Response Rates?



B&B:08/12 Field Test Response Rates, by Propensity Level and Experimental Condition



B&B:08/12 Field Test Response Rates, by Incentive Amount and Propensity Level



Propensity Experiment Conclusions

- We can predict propensity to respond well
- Low-propensity cases contributed a small amount to overall unit level bias but did not change parameter estimates significantly
- Higher monetary incentives are one way of targeting cases at the high end of the of the low-propensity group, but this may not reduce nonresponse error
- Higher monetary incentives are not very effective at increasing response among cases at the lowest end of the propensity continuum
- Overall response rates in the high-propensity group are not affected by a decrease in monetary incentives. However, the average call count (a measure of "level of effort" to obtain a complete interview) was significantly higher among the treatment group

Full-Scale Recommendations – Incentives

Propensity Level	Percent of Full-scale Sample	Incentive Offer
Low	Lowest 30%	$55
Medium	Middle 40%	$35
High	Highest 30%	$20

Full-Scale Recommendations – Survey Methods

- Locating
  - Pre-Intensive tracing
  - New tracing sources (Spokeo, Fast Data's Premium Address Service, etc.)
  - Consider increased use of the more costly interactive tracing searches, such as Choice Point
  - Revisit the utility of social network contacting/locating (has not been very effective in the past, but revisiting Facebook/LinkedIn, etc.)
  - $10 incentive for address update prior to data collection

Survey Methods (continued)

- Communication
  - More frequent contacts
  - Contact parents
  - More tailored messages

Survey Methods (continued)

- Offering alternate data collection methods
  - CATI Strategy
    - Select pool of highly skilled interviewers
    - Closer monitoring of low-propensity cases
  - Consider targeted field effort
  - Abbreviated interview, after unsuccessful attempts to obtain a complete interview

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