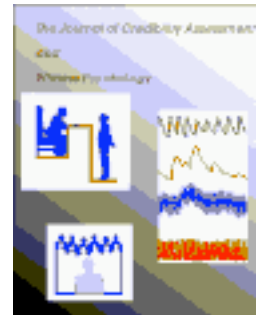


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## **Issues In The Study Of Polygraph Screening Techniques**

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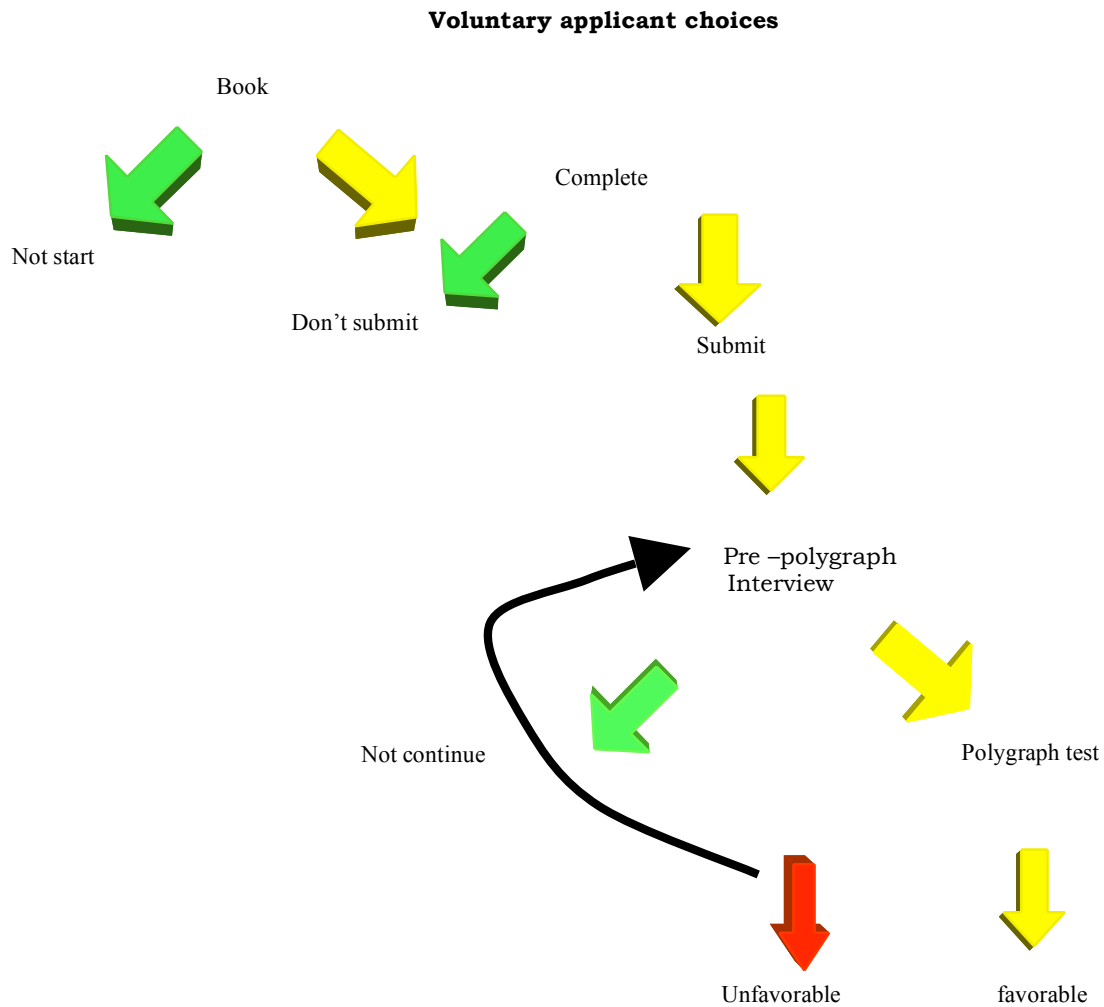
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## Issues In The Study Of Polygraph Screening Techniques

My screening experience involved a police training program using:

1. A "Crime Issues Book" mailed to applicants
2. Return of book for interview
3. Interview
4. Polygraph test
5. Results & discussion



### Potential advantages of self selection

1. Crime book defines potential problem areas
2. Clear statement of polygraph test allows applicant to decide continue Yes / No
3. Pre-test interview allows participant to clarify issues & concerns – also applicant is told that if unresolved criminal issues are discovered these may be pursued
4. Review of questions
5. Polygraph test
6. Results and discussion

### Possible studies

Test formats – all relevant questions or topic controls for key issues

Value of crime book – measure desire to continue process for group sent crime book vs those not (ie sent later)

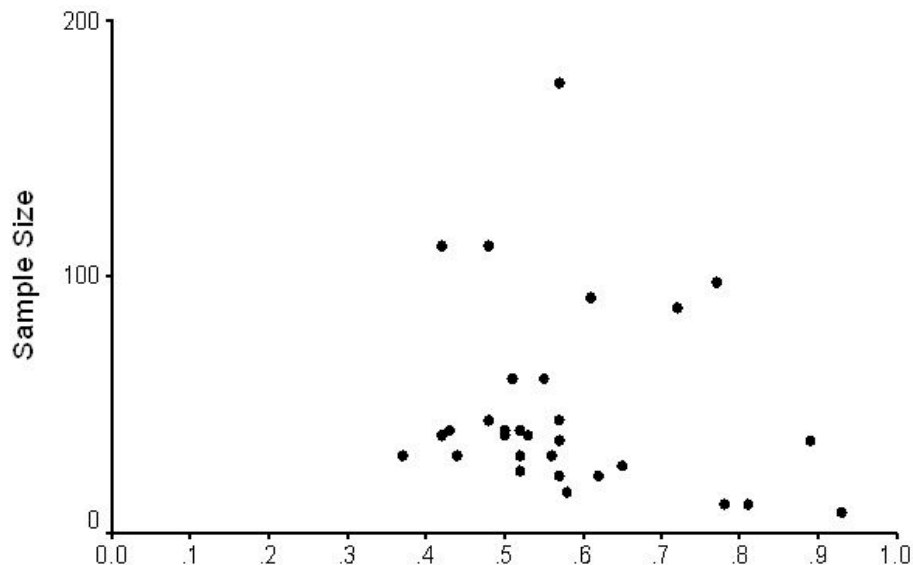
Establish more base rate information

### 2 cautionary issues from lab research

1. Laboratory tests often treat the polygraph test in isolation of larger context
  - a. Look at the list of events in the screening program / the polygraph test is anti-climatic/ the fact that it is in the interview is crucial for the interview but not the test itself
  - b. –no other science looks at instruments in isolation – even a ruler has to be oriented in the proper direction for meaningful measurement
2. Studies results are reported in isolation or with selected comparisons from other studies –this is not an adequate way to proceed – a meta-analytic approach must be used **and the meta-analysis must be done considering various possible strategies.** (This point requires terms: effect size (eta) & number of measures (n))

### 2. continued: studies in isolation

GSR/ SCR & the CQT



Skin resistance response etas for Control Question Tests

Mean eta = 0.58, SD = .14

r = -.16, obs = 30

### **Implications**

- No one study is definitive
- The funnel graph shows CQT laboratory studies create a family of estimates that has a mean and standard deviation
- High and low estimates are expected with the imprecision that comes from small sample sizes

### **Implications for screening research**

- Future lab studies will probably be done with small sample sizes – *ergo* : the results will be variable (those getting unfavorable results may suggest that screening is problematic whereas those getting favorable results will claim the technique is excellent)
- The argument is false - the truth will be in the middle

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