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Making "Nudges" Work: The Role of Trust in Health Incentives

1. Executive Summary: The Feynman Analogy

In public health, we often use financial incentives as "nudges" to encourage preventive care, like blood pressure screenings. Standard economics assumes people are just calculators: if the reward is higher than the cost, they'll go. But human behavior is messier. This study explores how the *timing* and *delivery* of an incentive—whether you get it before or after the visit—changes the way people perceive the offer. While many experts believe people are driven by "Loss Aversion" (the fear of losing something they already own), this research suggests that in high-stress, low-income environments, the real driver is **Trust**. Before someone will cross the bridge to the clinic, they need to know the bridge won't collapse under them.

ELI5 Summary

- **The Problem:** Many low-income residents skip free health screenings because the "transaction costs"—the effort of taking an afternoon off work or the price of a tank of

gas—feel higher than a vague future health benefit.

- **The Treatment:** Researchers handed out \$50 incentives in two ways: a physical, inactive Visa gift card given upfront (Ex Ante) versus a paper reminder promising a card *after* the visit (Ex Post).
- **The Discovery:** The upfront gift card was significantly more effective, but not because people were afraid of losing it. It worked because the physical card acted as a "down payment" of trust, proving the organization was serious about its promise.

The Bridge of Trust

Imagine a bridge made of paper. If I promise you \$50 to cross it, you'll stay on your side because you don't trust the bridge to hold or the promise to be kept. The physical gift card is like replacing those paper planks with solid oak.

graph LR

A[Resident] -- "Suspicion" --> B{Paper Bridge: Promise Card}

B -- "No Cross" --> C[Goal: Clinic]

D[Resident] -- "Sturdy Foundation: Gift Card" --> E{Oak Bridge: Tangible Proof}

E -- "Safe Cross" --> F[Goal: Clinic]

To understand why this foundation matters, we must examine how the study was built in the real-world streets of Michigan.

2. Study Design & Participant Flow

Laboratory studies are like controlled greenhouses, but field experiments in Dearborn and Detroit provide "ground truth." This study engaged an Arabic-speaking, low-income community where historical skepticism of institutions is a real-world variable that a lab simply cannot replicate.

Study Setup

- **Total Participants:** 2,004 individuals across three distinct study waves.
- **Study Duration:** 3 years (Conducted from 2013 through 2015).
- **Inclusion Rules:** Residents aged 18–64 living in Census tracts within 5.5km of the ACCESS clinic with a poverty rate $\geq 20\%$.
- **Community Context:** Primarily Arabic-speaking immigrant populations; all materials provided in both English and Arabic.
- **The Ex Ante Group (Gift Card):** Received an inactive \$10 or \$50 Visa gift card immediately, which "unlocked" only upon visiting the clinic.

- **The Ex Post Group (Reminder):** Received a reminder card of the same size/color, promising a gift card *after* the visit was completed.

Participant Flow Funnel

Moving from thousands of addresses to a final data set required a rigorous recruitment funnel.

graph TD

A[Total Addresses Targeted] --> B[Residents who Answered: 36%]

B --> C[Eligible: Age 18-64 + English/Arabic Fluency: 88%]

C --> D[Participated: 46% of Eligible]

D --> E[Final Participation Rate: 12% of Total Addresses]

This structured flow leads directly to the behavioral data: did the "foundation" of the gift card actually change their minds?

3. Key Results: What the Numbers Actually Mean

In behavioral science, we distinguish between **Loss Aversion** (the pain of losing something you already "own") and **Credibility** (the belief that a promise will be kept). If you think a promise is fake, you don't feel like you "own" the reward, so Loss Aversion never even kicks in.

Primary & Secondary Outcomes

- ****\$50 vs 10 Impact:**** 21 percentage point difference. ****So What?**** Small incentives (10) failed to cover the "transaction costs"—the real-world friction of child care or transportation. \$50 was the "sweet spot" that made the trip worth the effort.
- **Gift Card vs Reminder Card (Overall):** Significant at $p = 0.056$ (only when including statistical controls). **So What?** The upfront delivery had a clear edge, but the effect was nuanced and required accounting for demographic variables.
- **The "Non-Truster" Effect:** 9.1 percentage point jump for those who did not trust ACCESS at baseline. **So What?** If a resident already trusts the clinic, a paper promise is enough. If they don't, the physical Visa card—with its professional logo and tangible weight—provides the missing credibility.
- **Loss Aversion Correlation:** Coefficient of 1.78 (measured via a lottery choice task). **So What?** While participants were naturally loss-averse, this trait did **not** predict clinic take-up. This proves the "Trust Effect" was the engine, not the "Endowment Effect."

The Take-Up Gap

The following logic illustrates why the gift card was a targeted solution for a specific problem: Lack of Trust.

```
graph LR
    A[Trust Level] --> B[High Trust Group]
    A --> C[Low Trust Group]
    B --> D[Promise = Card: High Take-up]
    C --> E[Reminder Card: Low Take-up]
    C --> F[Gift Card: Significant Take-up Spike]
```

While these results were positive, the field reality of urban research introduced significant friction.

4. Safety, Attrition & Field Realities

The "Safety" of a behavioral study isn't just about data privacy; it's about the physical safety of the researchers and the environmental risks that cause participants to drop out of the funnel.

Side Effects & Dropout Breakdown

- **Recruitment Attrition:** 46% participation rate among eligible residents. **So What?** More than half of the eligible community was unreachable or unwilling to engage, suggesting a high "trust barrier" before the study even began.
- **Field Safety Events:** Researchers witnessed nearby gunfire and experienced harassment during Wave 1. **So What?** This led to the **exclusion of specific tracts** in later waves to protect staff, which limits the findings to "safer" low-income areas.
- **Redemption Odds:** 30% take-up for the \$50 incentive. **So What?** Even with a high-value reward, only **1 out of every 3.3 people** followed through, showing that incentives are not a magic wand for changing health habits.

Participant Attrition Map

Where did the potential participants go? The "leakage" in the study funnel was driven by access and environment.

```
graph TD
    A[Initial Address Pool] -- "Vacant Homes / No-Soliciting" --> B[Excluded: 13%]
```

```
A -- "Not Home / No Answer" --> C[Availability Barrier: 64%]  
A -- "Refused Participation" --> D[Trust Barrier: 54% of Contacts]  
D --> E[Final Sample: 2,004 Residents]
```

Scaling these nudges requires precise definitions and an understanding of the study's boundaries.

5. Jargon Translator & Study Limitations

Academic precision ensures that when we scale a "nudge" from Dearborn to another city, we aren't misinterpreting why it worked.

Glossary

- **Endowment Effect:** The psychological "glue" that makes you value an object more just because you are holding it.
- **Ex Ante vs. Ex Post:** *Ex Ante* is "before the event" (handing the card over first); *Ex Post* is "after the event" (promising the card later).
- **Loss Aversion:** The principle that the "sting" of losing \$50 is twice as powerful as the "joy" of gaining \$50.
- **Reference-Dependent Utility:** The idea that your satisfaction is based on your starting point. If you start with a card in hand, your "reference point" is ownership.

Study Quality & Logic

```
graph LR  
  A[Study Quality] --> B[Strengths]  
  A --> C[Limitations]  
  B --> D[Real-world setting]  
  B --> E[Visa Logo Credibility]  
  C --> F[Context-specific Trust]  
  C --> G[High Field Attrition]
```

Strategic Insight: The "Visa" logo itself likely acted as a nudge. It signaled that the incentive was backed by a global financial system, not just a local non-profit the resident may not have heard of.

6. Study Credit

Source study: Do Ex Ante Incentives Generate Endowment Effects or Trust? Evidence from a Randomised Field Experiment Promoting Preventive Health Care — Emily A. Beam et al. (2019)