



Thinking Differently About Clinician Engagement: Lessons Learned from AD for the Tobacco Epidemic

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1-888-PENN-STOP



Disclosure

| | |
|--------------------------|--|
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Objectives

- Review the “state of affairs” regarding PA physician engagement in tobacco dependence treatment.
- Identify the behavioral economic obstacles to management in complex patients who use tobacco.
- Discuss the impact of AD in creating change in our community.
- Discuss the integration of AD into future training approach.

The Archetypal Complicated Patient

“Mary”



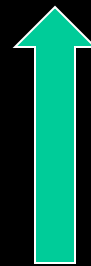
- 65 yo female
- COPD
- HTN
- Past NSTEMI
- DM II
- Current smoker

The Problem



Endorsement rates

- Importance
- Impact
- Interest.



Engagement rates

- Prescriptions
- Counseling
- Referrals
- Follow-up

So what is the process by which physicians make decisions regarding these two competing priorities?

Reported Obstacles to Change?

- Tobacco treatment takes too much time
- Don't get reimbursed
- Too many other priorities
- Dealing with reluctance to quit smoking

A Sense of Helplessness





- 57% (49-64%) felt counseling “often falls on deaf ears.”
- 46% (39-53%) frustrated by smokers who do not readily want to quit.
- 42% (35-49%) reported high risk of “offending” patients.
- Helplessness and Taboo scores not correlated with age, gender, specialty, or smoking status.

FAILURE

“You are only a Failure when you refuse to try again”

Batra. Nic & Tob Res. 2001

Buy-Sell Price Preference Reversal

| | Odds | Payout | Buy Price "Self" preference | Sell Price "Other" preference |
|--|------|--------|-----------------------------------|-------------------------------------|
|  | 1/10 | \$40 | | ↑ |
|  | 9/10 | \$4 | ↑ | |

Preference Reversal



The perceived **value** to the community (other) of tobacco use treatment is high because of the large anticipated return (i.e. morbidity & mortality)



The **utility** of focusing on tobacco treatments (self) may be low based on low perceived likelihood of a successful interaction (e.g. pt follows advice?, adherent with medications?, insurance pays for Rx?, etc).

Bias

| Heuristic | Description | Example |
|-----------------------------|--|---|
| Availability Bias | Recent or memorable events hold exceptional sway in decision-making | A prior frustration with a patient, reluctant to quit despite significant tobacco-related morbidity, influences the clinician's subsequent assessment of patients' likelihood of quitting. |
| Focusing Effect Bias | Decisions are influenced more by short-term concerns than by long-term goals | A patient with a history of active smoking and poorly controlled hypertension requires an adjustment to his medication regimen. Initiation of tobacco dependence treatment is forgone in favor of ensuring proper understanding and adherence to anti-hypertensive medications. |
| Impact Bias | Decisions are unduly influenced by inaccurate projections of future states | A discussion of available tobacco dependence treatments is avoided out of concern over the potential time commitment required, or because of the perceived risk of alienating the patient. |
| Omission Bias | Tendency to prefer inaction in an effort to avoid harm, even when inaction may cause greater harm than action. | Treatment with tobacco dependence pharmacotherapy is avoided because of concerns for possible depressed mood side effects. |

Reframing Bias

- Directly increase the perceived likelihood of a successful interaction by systematically addressing each of these predictable biases within the familiar context of chronic disease management.

Is Buy-sell Operant?



“Mary”

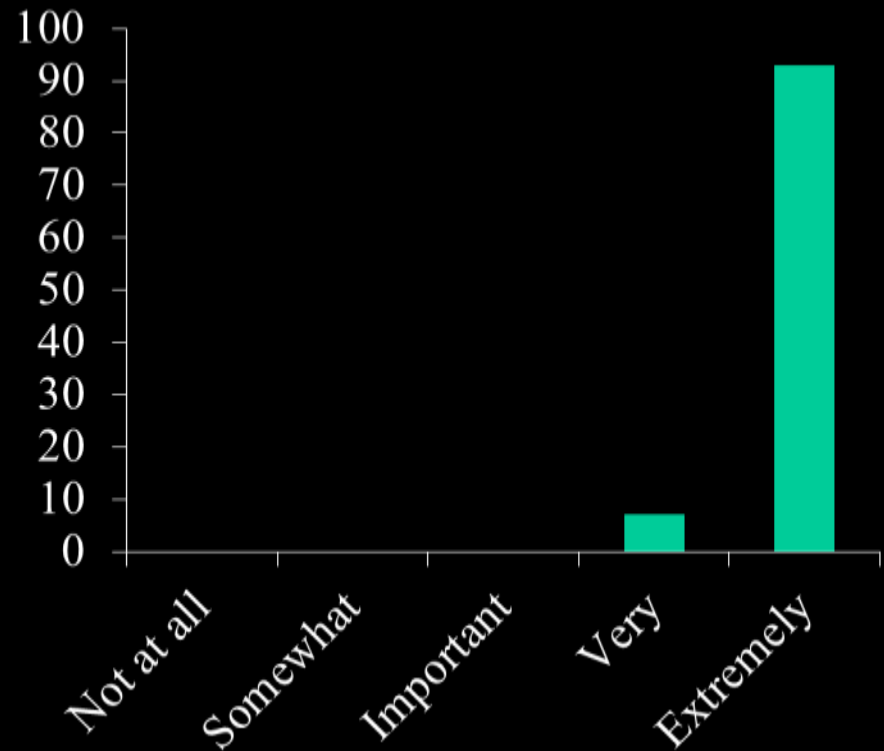
- 65 yo female
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Is Buy-sell Operant?



Stanford University
N=42

How important is it for Mary to stop smoking?



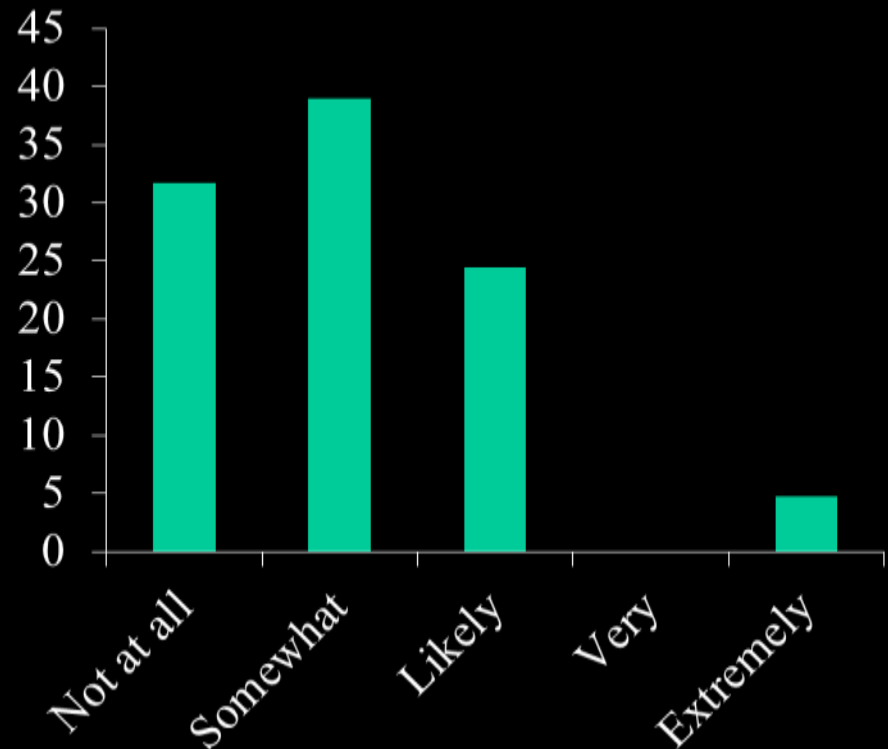
Is Buy-sell Operant?



Stanford University
N=42

$p=0.03$

How likely is it that you will have a successful smoking-related interaction during this visit?

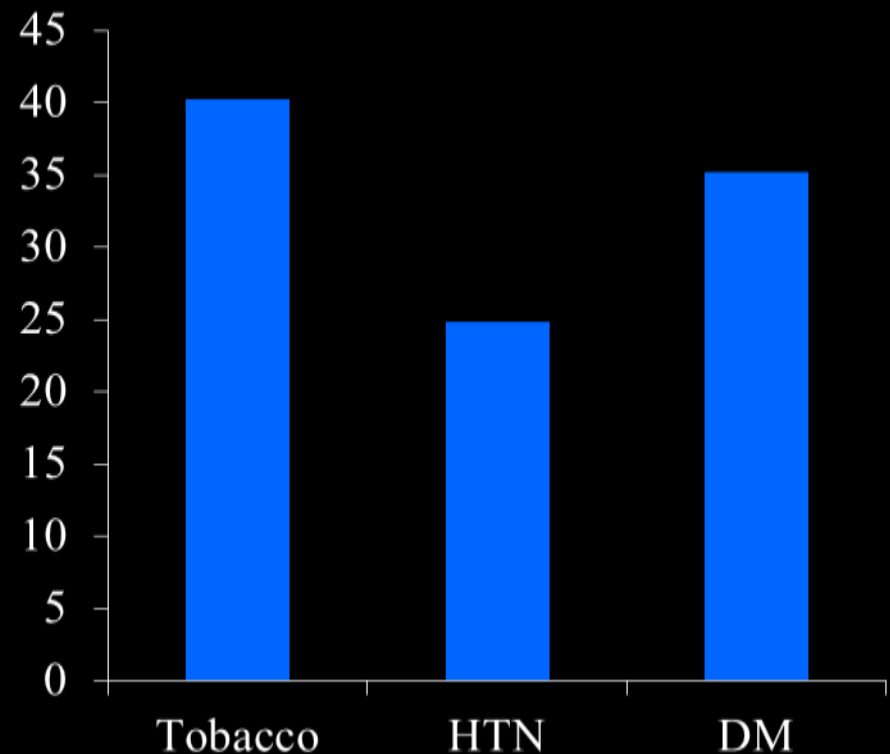


Is Buy-sell operant for all medical conditions?

Imagine you have \$100,000 to spend on healthcare resources. How would you distribute the money among each of the following problems to make the *biggest impact* on your community?



American College of Physicians
N=63

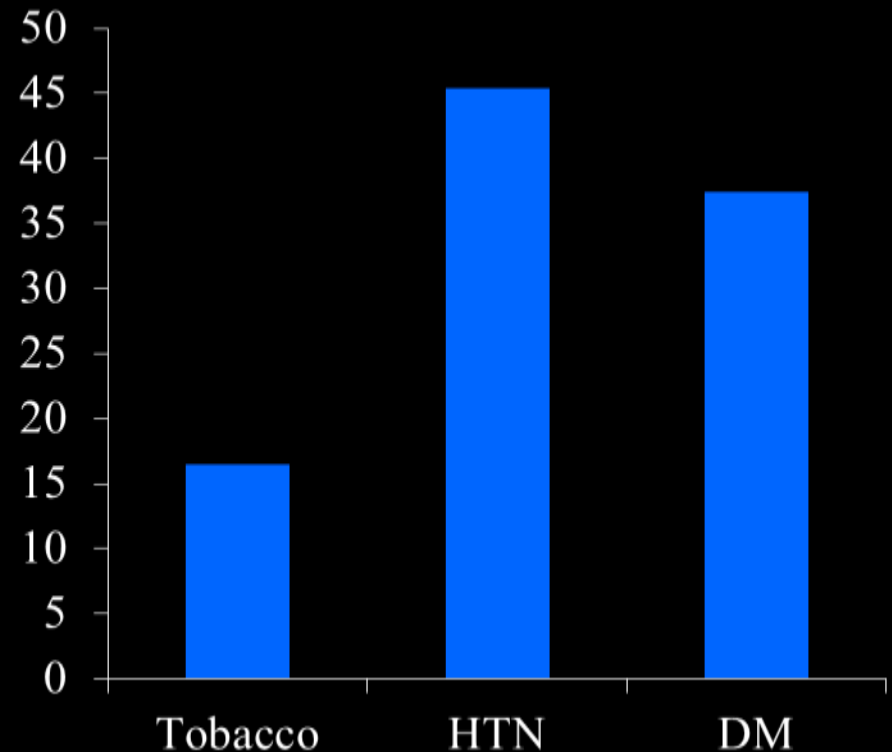


Is Buy-sell operant for all medical conditions?

Imagine there are three new patients on your schedule. You are given \$100 to bet on the “likelihood of a successful interaction” during this visit. How much would you bet on each patient if the problem is...

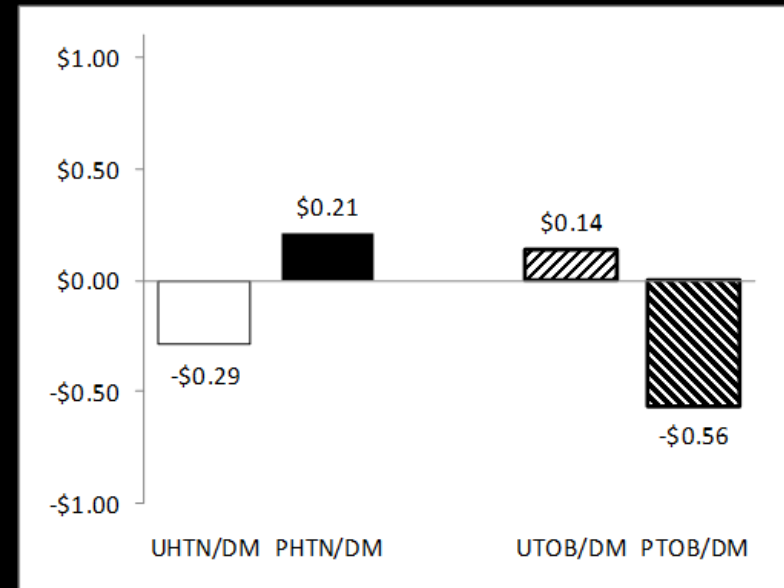


American College of Physicians
N=63



Is Buy-sell operant for all medical conditions?

Values standardized against Diabetes
(for every \$1 spent on diabetes...)



American College of Physicians
N=63

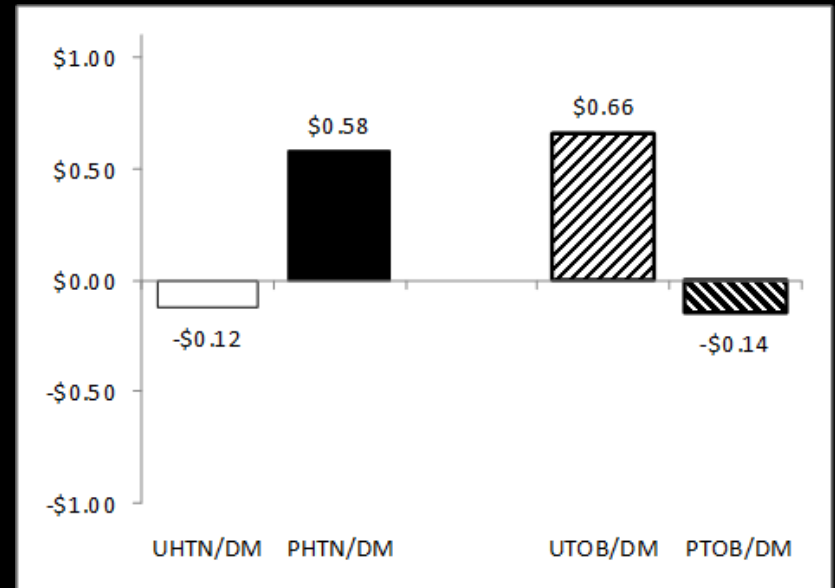
$p < 0.001$

Is Preference Reversal impacted by reframing biases?

Values standardized against Diabetes
(for every \$1 spent on diabetes...)



Tulane University
N=12



Pre-instruction

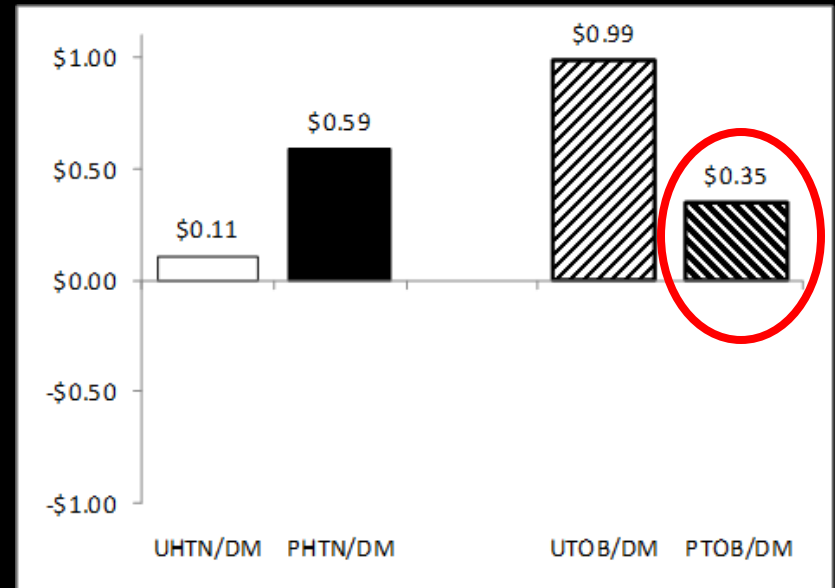
$p < 0.001$

Is Preference Reversal impacted by reframing biases?

Values standardized against Diabetes
(for every \$1 spent on diabetes...)



Tulane University
N=12



Post-instruction

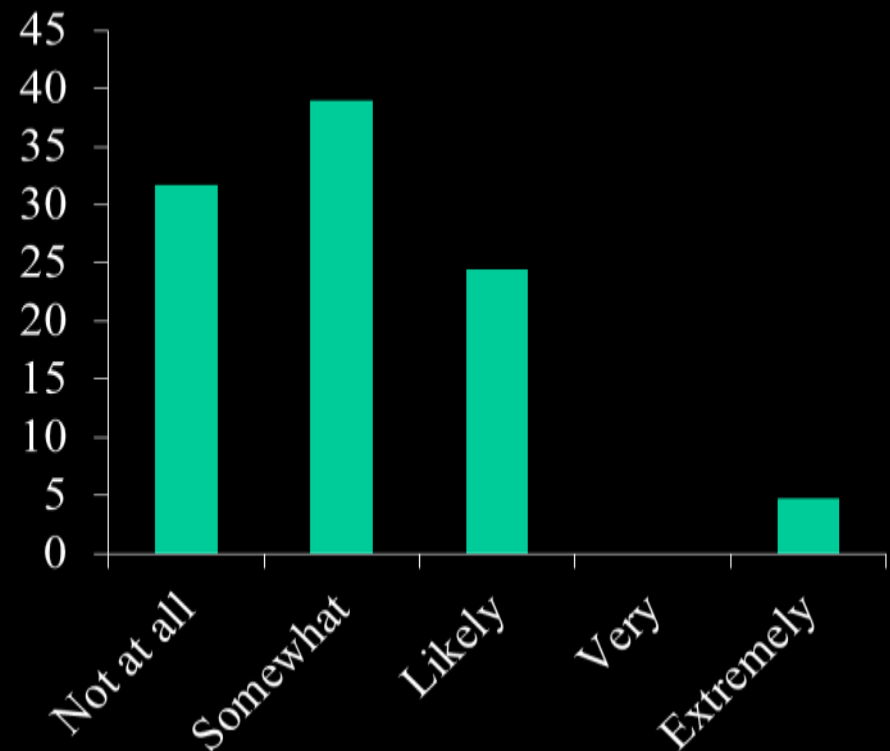
$p=0.66$

Remember Stanford Pessimism?



Stanford University
N=42

How likely is it that you will have a successful smoking-related interaction during this visit?



Pessimists?

2 months later...

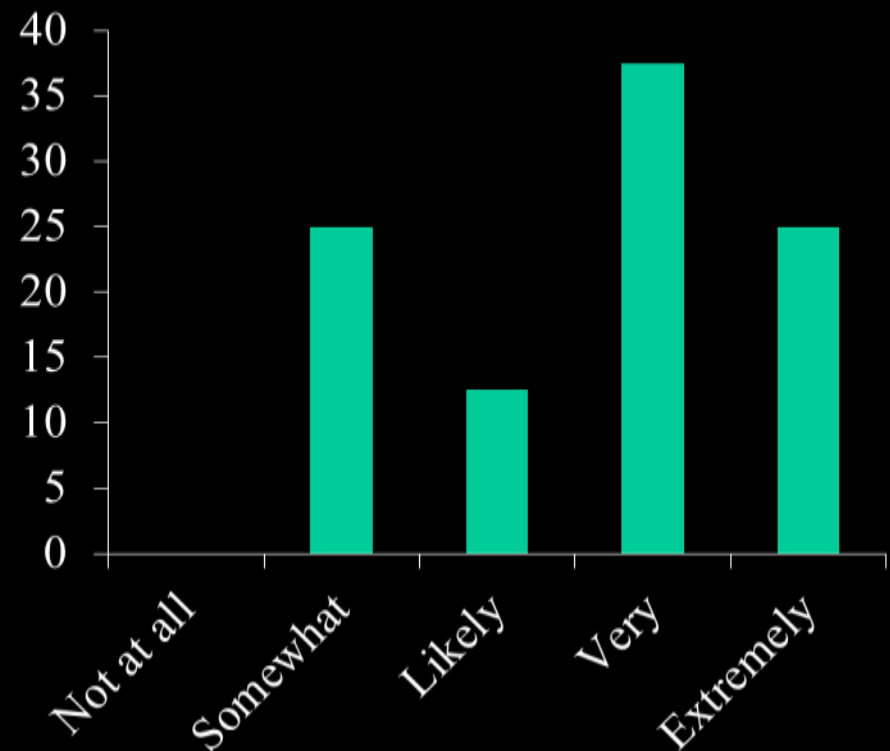


Stanford University


N=28

$p = 0.007$

How likely is it that you will have a successful smoking-related interaction during this visit?

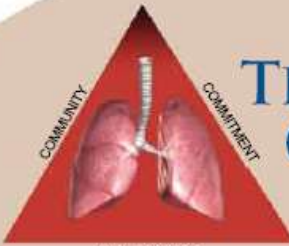


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Sources of Bias – AD points

- Dealing with reluctance to quit smoking
- Smoking treatment takes too much time
- Don't get reimbursed

Structure – Durable Materials

- Intro Brochure
- Monograph
- Website
- Quitline Information
- USPHS Guideline
- Pre / Post Tests
- NRT “What’s a doctor to do?” review
- Un-Ads
- Slide Presentations

Ever feel that you'd *like* to talk to your patient about quitting tobacco, but a few other pressing problems keep getting in the way?



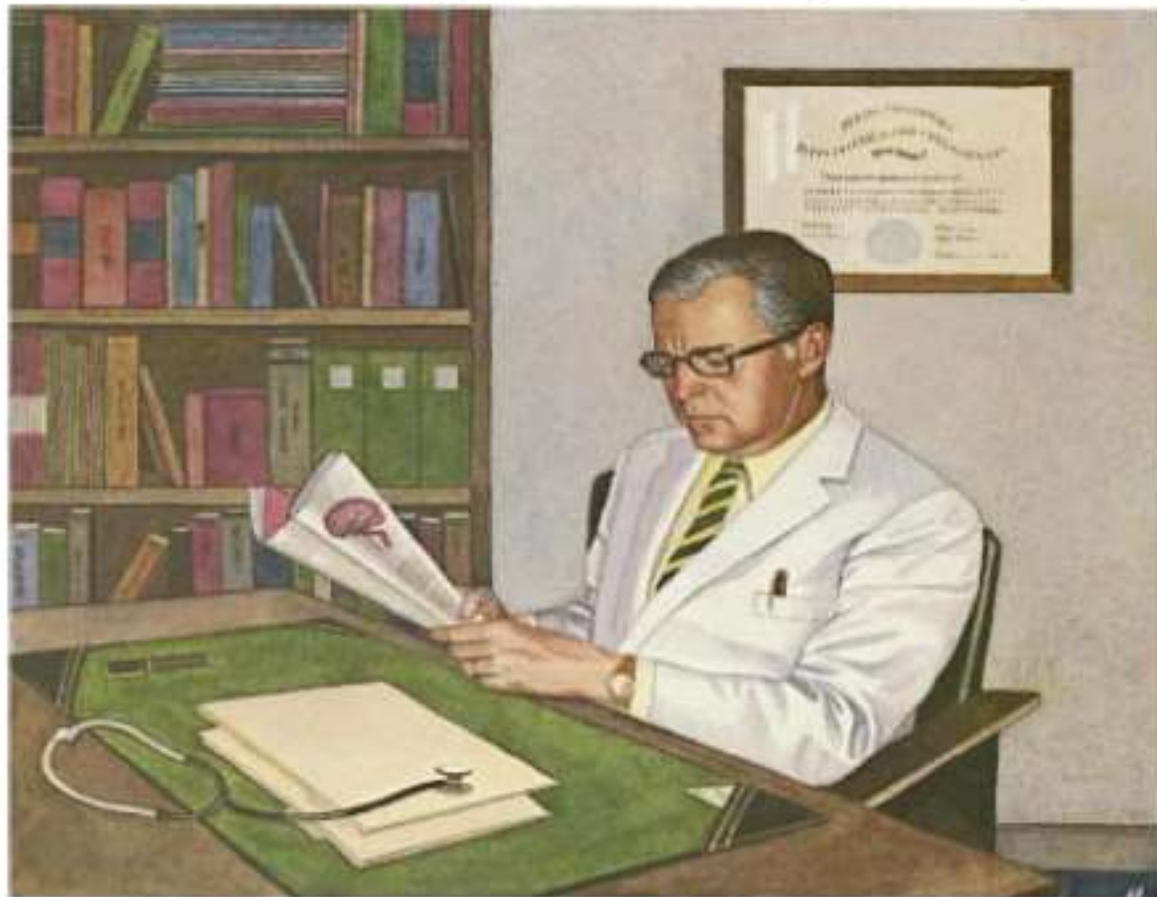
You can't ignore the problems right in front of you. Don't ignore the problem sneaking up behind you.

Years ago, doctors felt that they had more time to address problems in a holistic way. As the pace of healthcare gets more frenetic, it's not uncommon to feel like our job is to put out the fires in front of us. Ben Franklin said "A small leak can sink a great ship." Tobacco

Just the facts...

- The CDC estimates that over 440,000 people die of a smoking-attributable illness each year, with 5.6 million years of potential life lost. 8.6 million people in the United States have an estimated 12.7 million smoking-attributable conditions, most commonly chronic bronchitis and emphysema. (1,2)
- Clinicians are in a powerful position to effect change. Physician advice to quit more than doubles the likelihood that the patient will make a quit attempt. (3)
- A 2011 study published in *Thorax* found that patients who received the "5 A's" of cessation (1) were

Some would have you avoid the problems associated with prescribing smoking cessation medications rather than avoid the problem with not prescribing them.



Don't be misled into thinking your patients are safer without pharmacologic help.

Years ago, most people believed that smoking was a bad habit, and that the best a doctor could do was hope to encourage their patients to make better decisions. Of course, our current understanding is that

Just the facts...

- The CDC estimates that over 440,000 people die of a smoking-attributable illness each year, with 5.6 million years of potential life lost. 8.6 million people in the United States have an estimated 12.7 million smoking-attributable conditions, most commonly chronic bronchitis and emphysema. (1,2)
- Several analyses have documented the lack of association between nicotine patch use and acute cardiovascular events, even in patients who continue to smoke during treatment. (3)

Is Bias operant for all medical conditions?

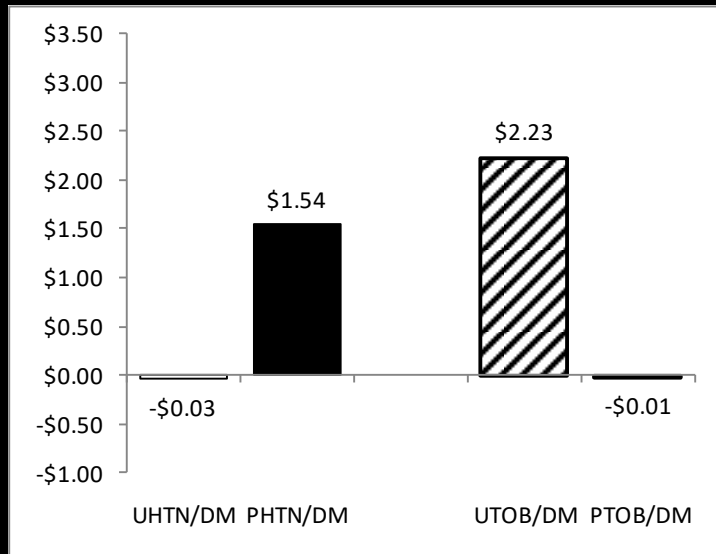


“Mary”

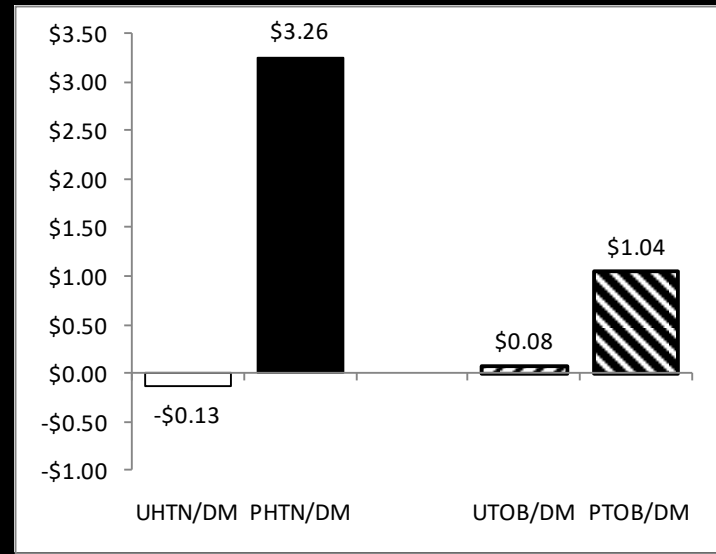
- 65 yo female
- COPD
- HTN
- DM
- Current smoker

Values standardized against Diabetes (for every \$1 spent on diabetes...)

Pre-instruction



Post-instruction



P=0.039

Indicators of Behavior Change

| | Baseline Comparison | | | | | | |
|----------------|-----------------------------------|--------------------|-----------|-----------|--------------------|----------|---------|
| | Simple | | | Complex | | | |
| | Score | Categorical Median | % 4 or 5* | Score | Categorical Median | % 4 or 5 | |
| | 3.98 | “Almost Always” | 70% | 2.63 | “Almost Never” | 29% | p<0.001 |
| | | | | | | | |
| | Baseline to Follow-up Comparisons | | | | | | |
| | Baseline | | | Follow-up | | | |
| | Score | Categorical Median | % 4 or 5 | Score | Categorical Median | % 4 or 5 | |
| Simple | 3.98 | “Almost Always” | 70% | 4.13 | “Almost Always” | 78% | p=0.035 |
| Complex | 2.63 | “Almost Never” | 29% | 2.92 | “Sometimes” | 38% | p<0.001 |

Single Word Associations

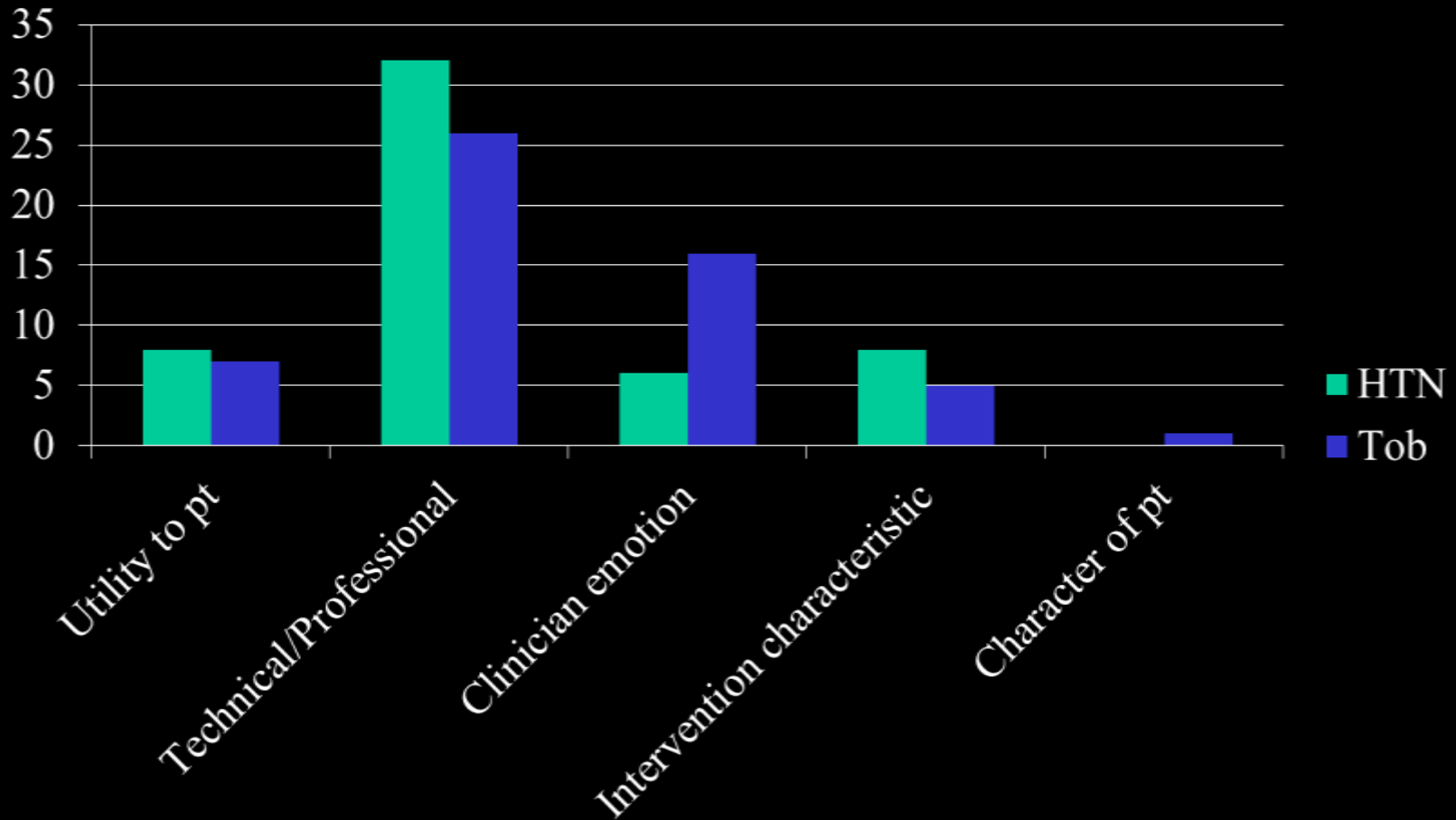
Better control of HTN will keep pt out of hospital and off of my schedule.

| | |
|----------------------|---------------------------|
| Utility to patient | <i>Important</i> |
| | <i>Priority</i> |
| | <i>Beneficial</i> |
| Tech/Professional | <i>Challenging</i> |
| | <i>Routine / Frequent</i> |
| | <i>Easy</i> |
| | <i>Pharmacology</i> |
| | <i>Time consuming</i> |
| Character of patient | <i>Stubborn</i> |

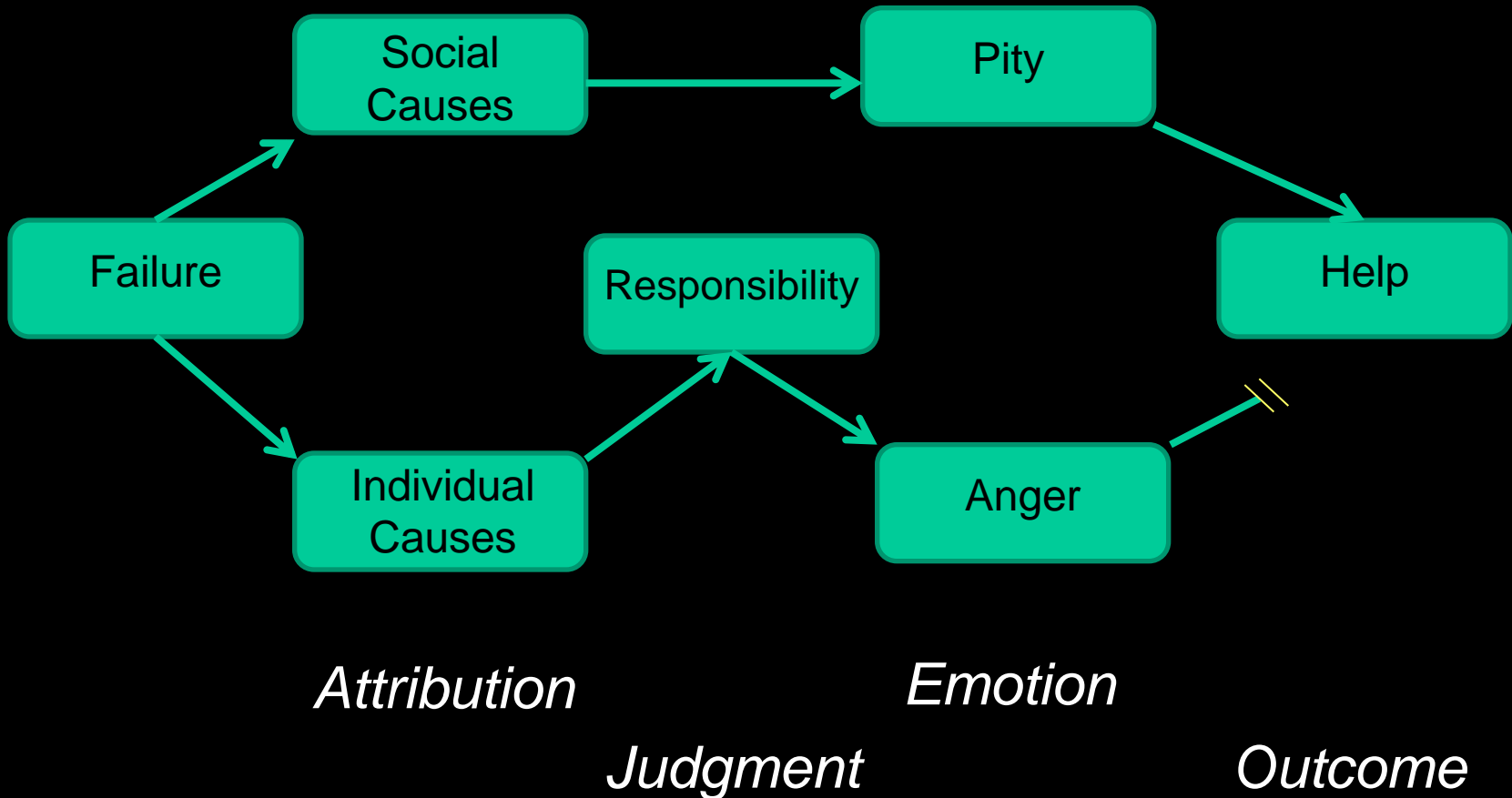
| | |
|--------------------------------|------------------------------|
| Clinician emotion | <i>Unfulfilling / Boring</i> |
| | <i>Frustrating</i> ** |
| | <i>Rewarding / great</i> |
| | <i>Successful</i> |
| | <i>Relentless</i> |
| Characteristic of intervention | <i>Education</i> |
| | <i>Longitudinal</i> |
| | <i>Mathematical</i> |

n=100 National sample of primary care clinicians

Single Word Associations



A Special Case of Framing: Causal Controllability



Sin or Sickness?

Welcome to UPenn's Tobacco IAT page. It is well known that people don't always 'speak their minds', and it is suspected that people don't always 'know their minds'. Understanding such divergences is important to scientific psychology. This web site presents a method that demonstrates the conscious-unconscious divergences much more convincingly than has been possible with previous methods. This new method is called the Implicit Association Test, or IAT for short.
Have fun!

Start



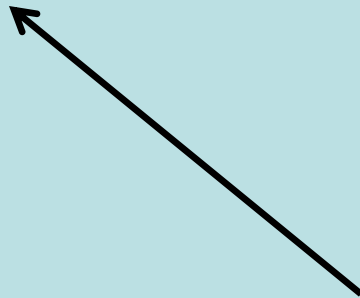
Having trouble starting?
Try the [Mozilla Plugin version](#).

A Sorting Task...first emotions

Kind

Mean

Helpful
Pleasant
Harsh
Hurtful



A Sorting Task...then objects

Mother Theresa

Bin Laden



A Sorting Task...compatible ideas

Kind

or

Mother Theresa



Helpful
Pleasant
Harsh
Hurtful

Mean

or

Bin Laden



A Sorting Task...incompatible???

Kind
or
Bin Laden



Mean
or
Mother Theresa

Helpful
Pleasant
Harsh
Hurtful



A Sorting Task...time delay

Kind
or
Bin Laden

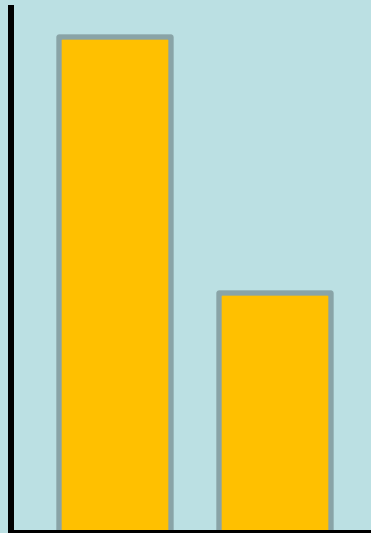


Incompatible

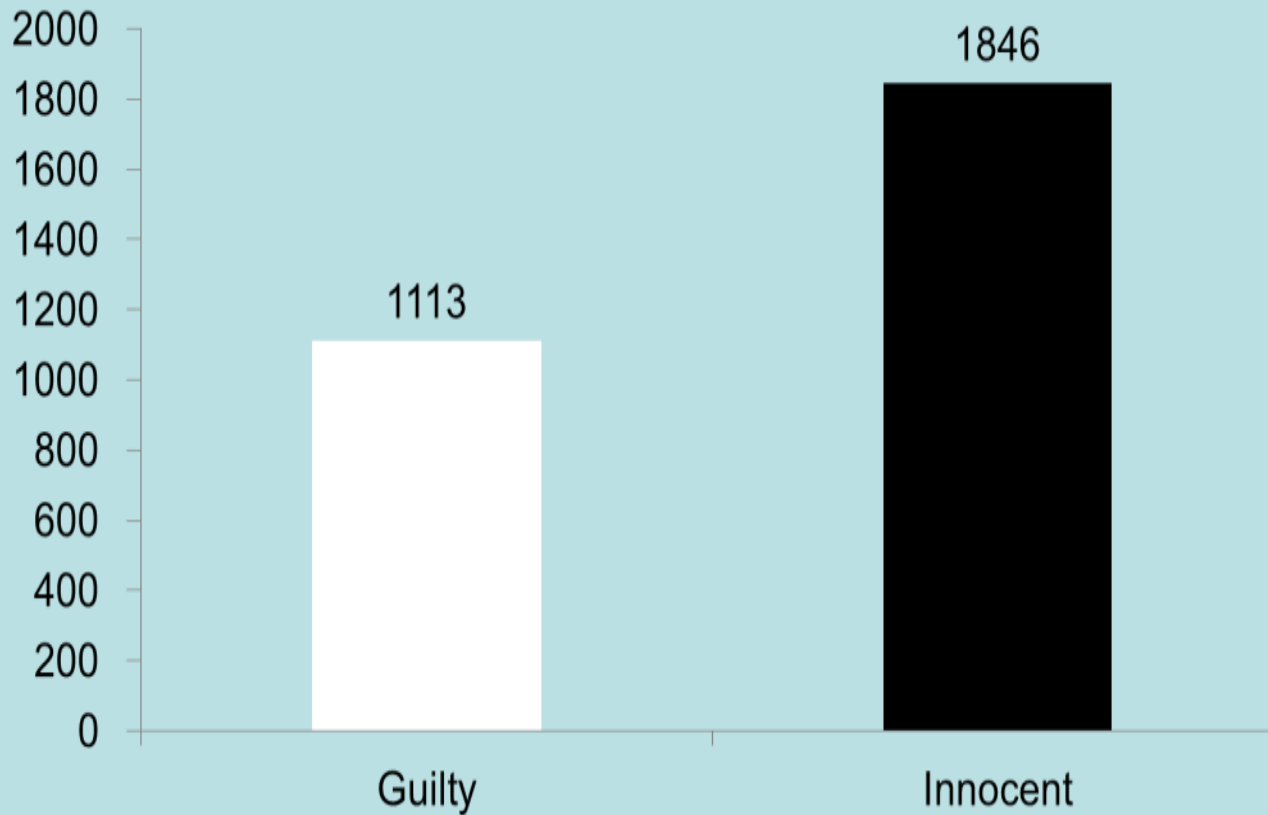
Mean
or
Bin Laden



Compatible



Smokers...Guilty or Innocent?



Points to Remember

- Inaction among clinicians is not because of misunderstanding regarding importance of tobacco to public health.
- Low *a priori* estimation of success probability appears to influence willingness to invest (preference reversal).
- Relative poor rates of “complex” clinical behaviors appear modifiable through focused interventions → reframing bias
- Implicit association with “guilt” may explain frustration and willingness to give help.

Useful Web Resources

- www.pennmedicine.org/pennstop
- pennmedicine.org/tobaccotraining
- [@pennmedtobacco](https://twitter.com/pennmedtobacco)



“If we always do what we’ve always done, we’ll always get what we’ve always gotten.”

- Anonymous

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