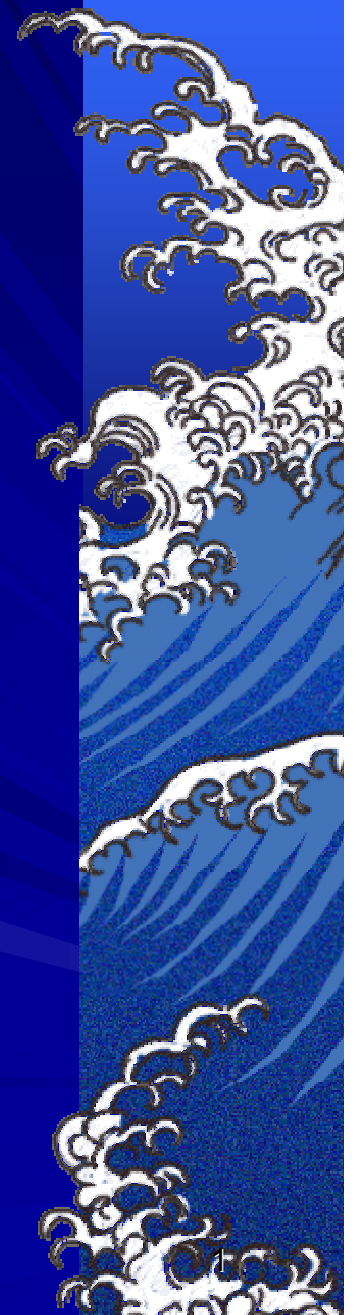# The new trends in cognitive behavior therapy for anxiety disorders: Acceptance and Commitment Therapy

Hiroaki Harai, M.D.

Nagoya Mental Clinic

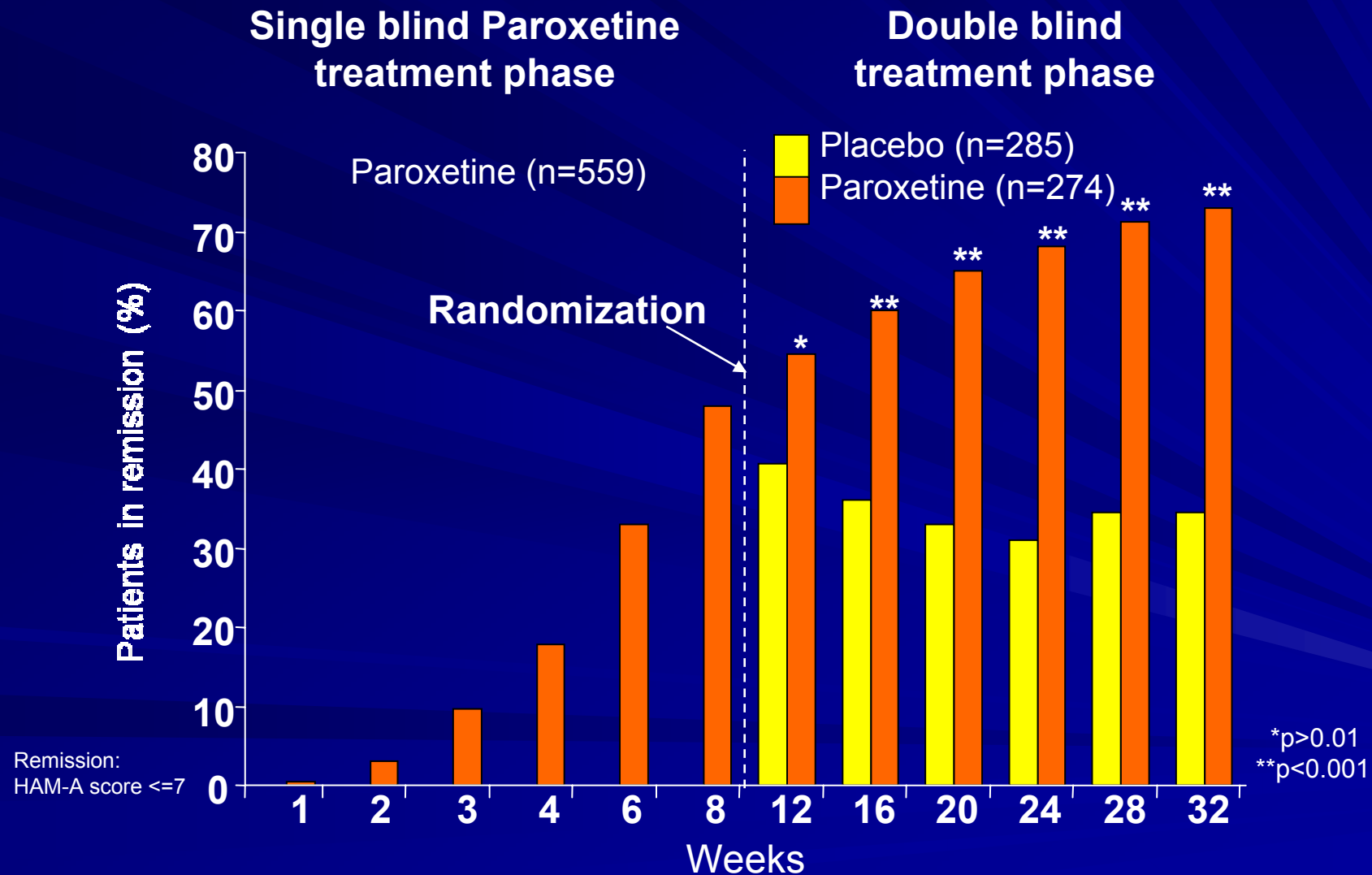Kikuchi National Hospital, Division of Clinical Research

Declaration of interest

■ The speaker's has/had research contracts with Fujimoto, GSK, Janssen, Lily, Mochida, Shinogi, Solvey, Suntory, UCB, Wyth, for last 5 years.

  – Have been involved in around two dozen antidepressant trials.

■ This is a Luncheon seminar sponsored by GSK.

Warning
This presentation may cause disgust

Efficacy of paroxetine for the long term treatment of Generalized Anxiety Disorder

Single blind Paroxetine treatment phase

Double blind treatment phase

Paroxetine (n=559)

Placebo (n=285)
Paroxetine (n=274)

Randomization

Patients in remission (%)

Remission: HAM-A score <=7

Weeks

*p>0.01
**p<0.001

Stocchi F et al. J Clin Psychiatry 2003,64;250-258

Acceptance and Commitment Therapy

- Steven C. Hays, Kelly G. Wilson
  - Acceptance and commitment therapy: Altering the verbal support for experiential avoidance.
  - Behavior Analyst Vol.17, No.2, 1994
- Steven C. Hays, Kirk D. Strosahl Kelly G. Wilson
  - Acceptance and commitment therapy: An experiential approach to behavior change
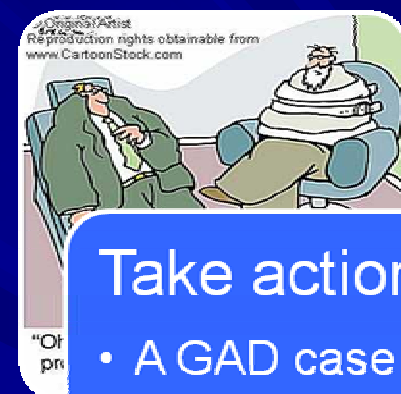 - Guilford Press 1999

Accept
- Unwanted research evidences
- Undesirable health care outcomes
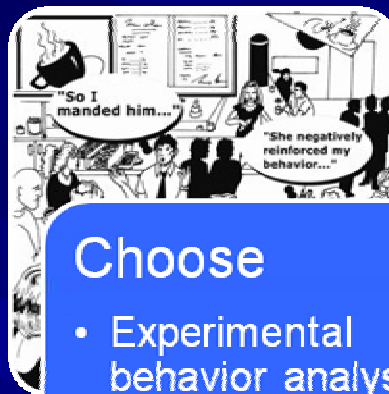
Choose
- Experimental behavior analysis
- Rule governed behavior / contingency shaped behavior

Take action
- A GAD case
- After ACT
- Why placebo works
- Future

Scientists are optimistic

- Cumulative record of my presentations
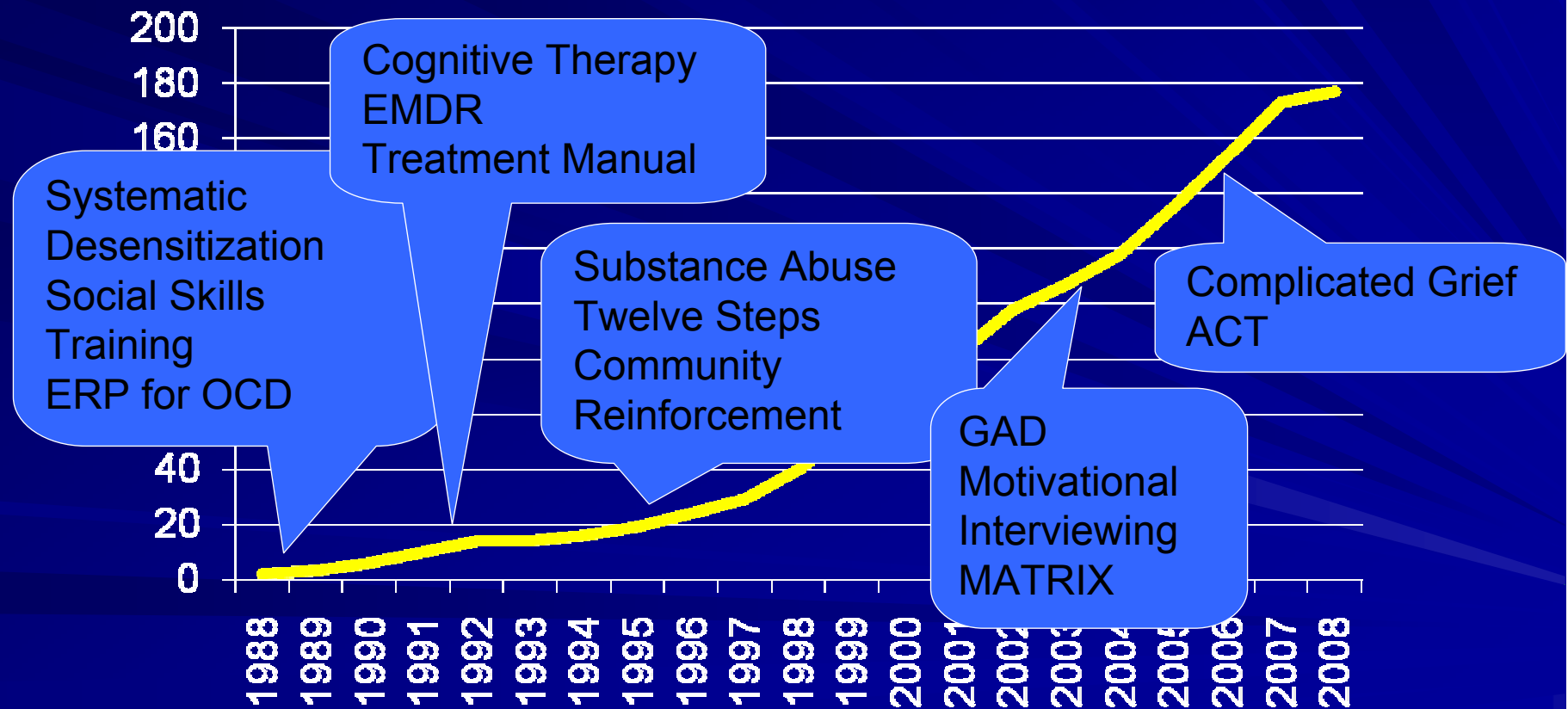
Big pharmas are too

種類別向精神薬の市場規模

億円

参考資料:
医療用医薬品データブック
(富士経済、2006年No.2)

凡例:
- (抗不安薬・睡眠導入剤)
- (抗うつ剤)
- (統合失調症治療剤)
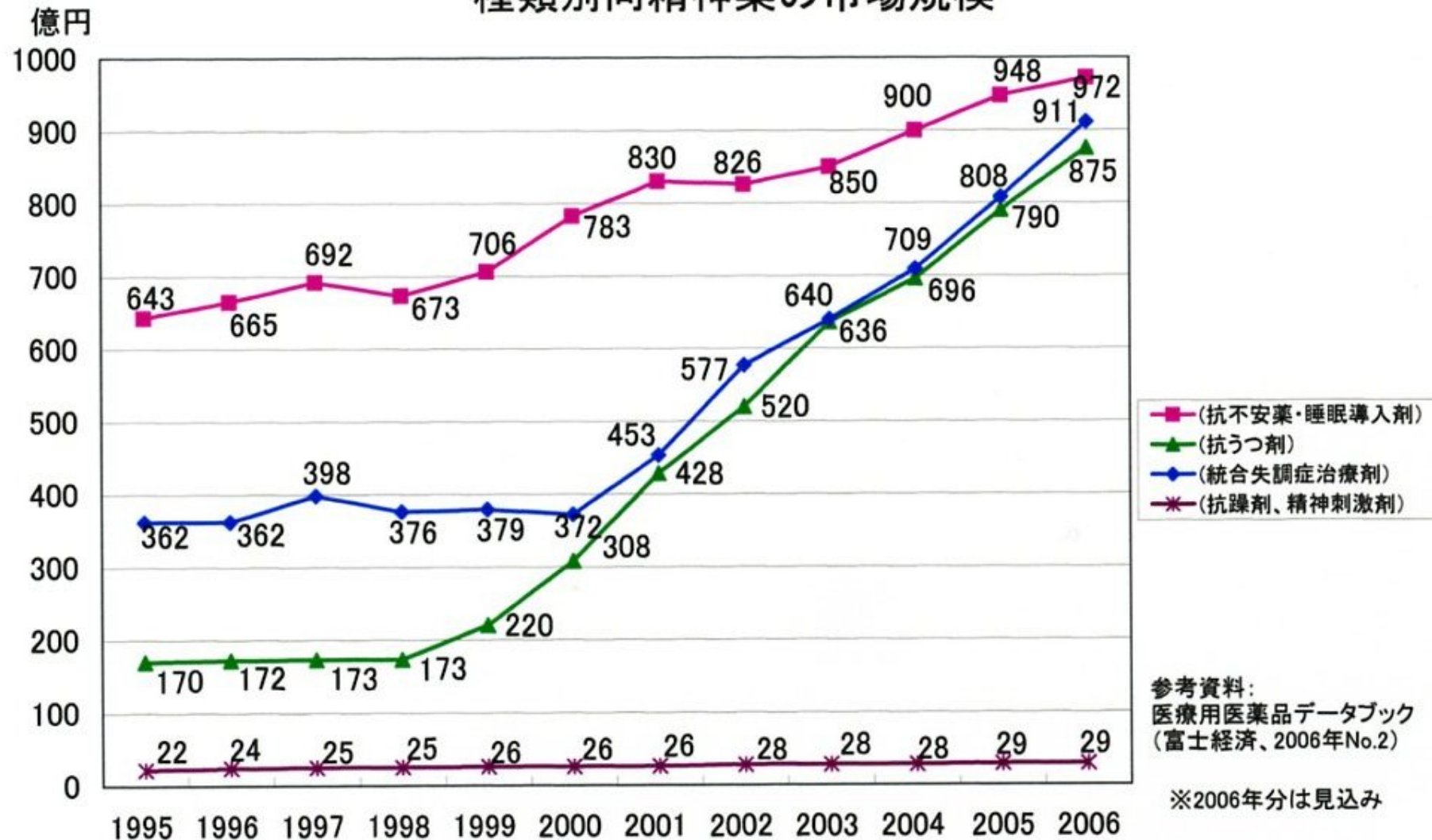- (抗躁剤、精神刺激剤)

※2006年分は見込み

日本の自殺者数と自殺率

FACTS ARE
DEPRESSIVE

警察庁統計「平成17年中における自殺の概要資料」より作成

9

DO MED WORK?

Slight >=35%
Response >=50%
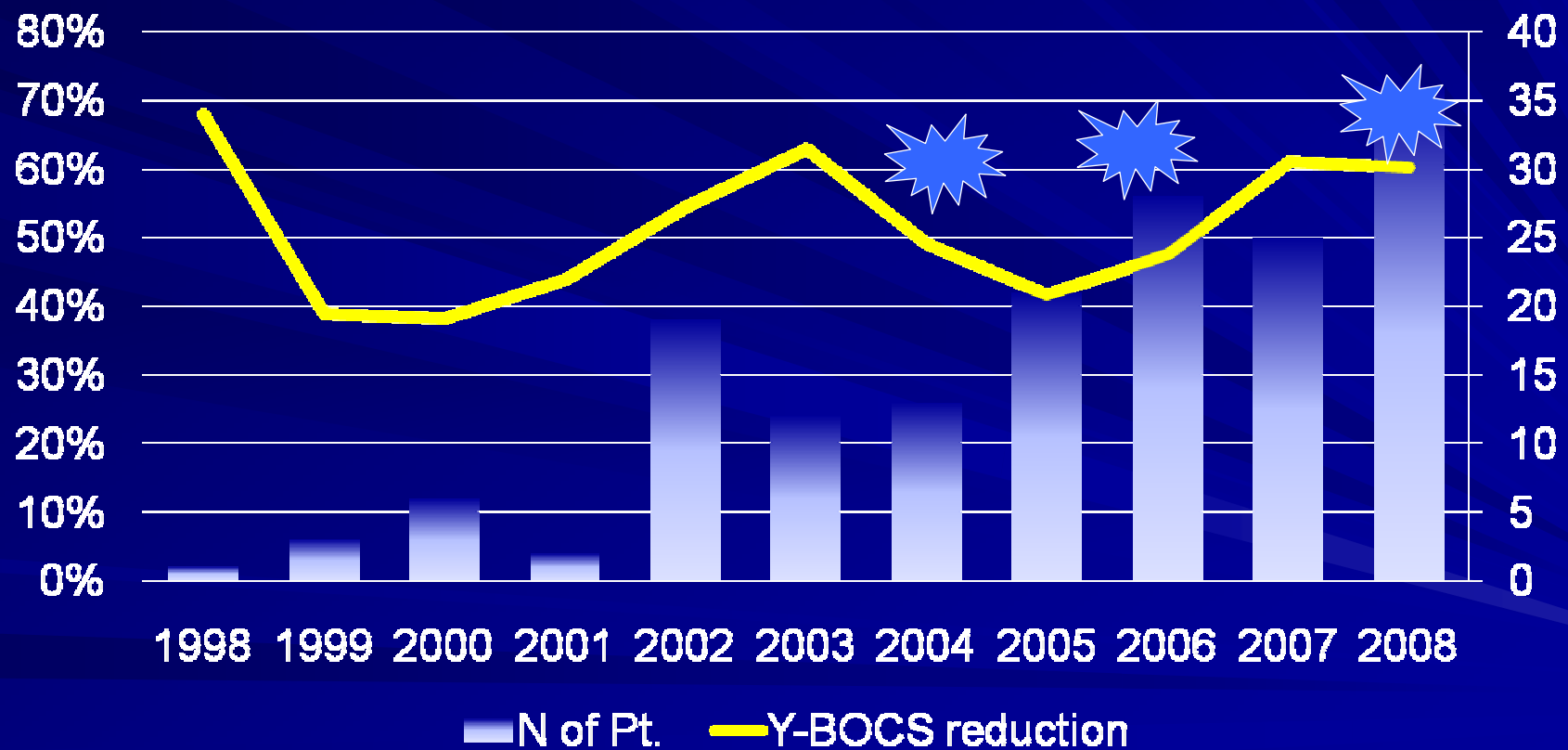Recover >=65%

10
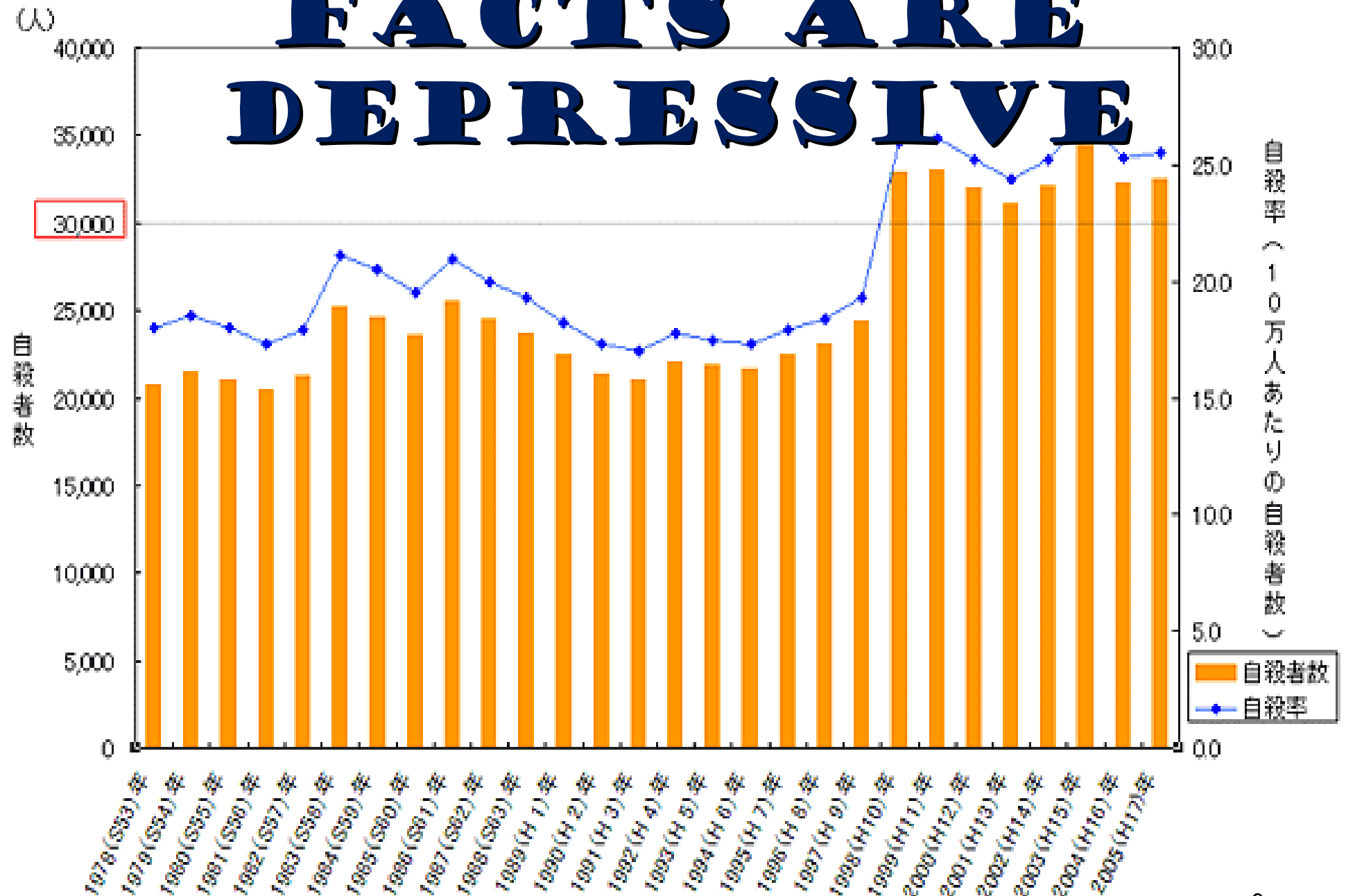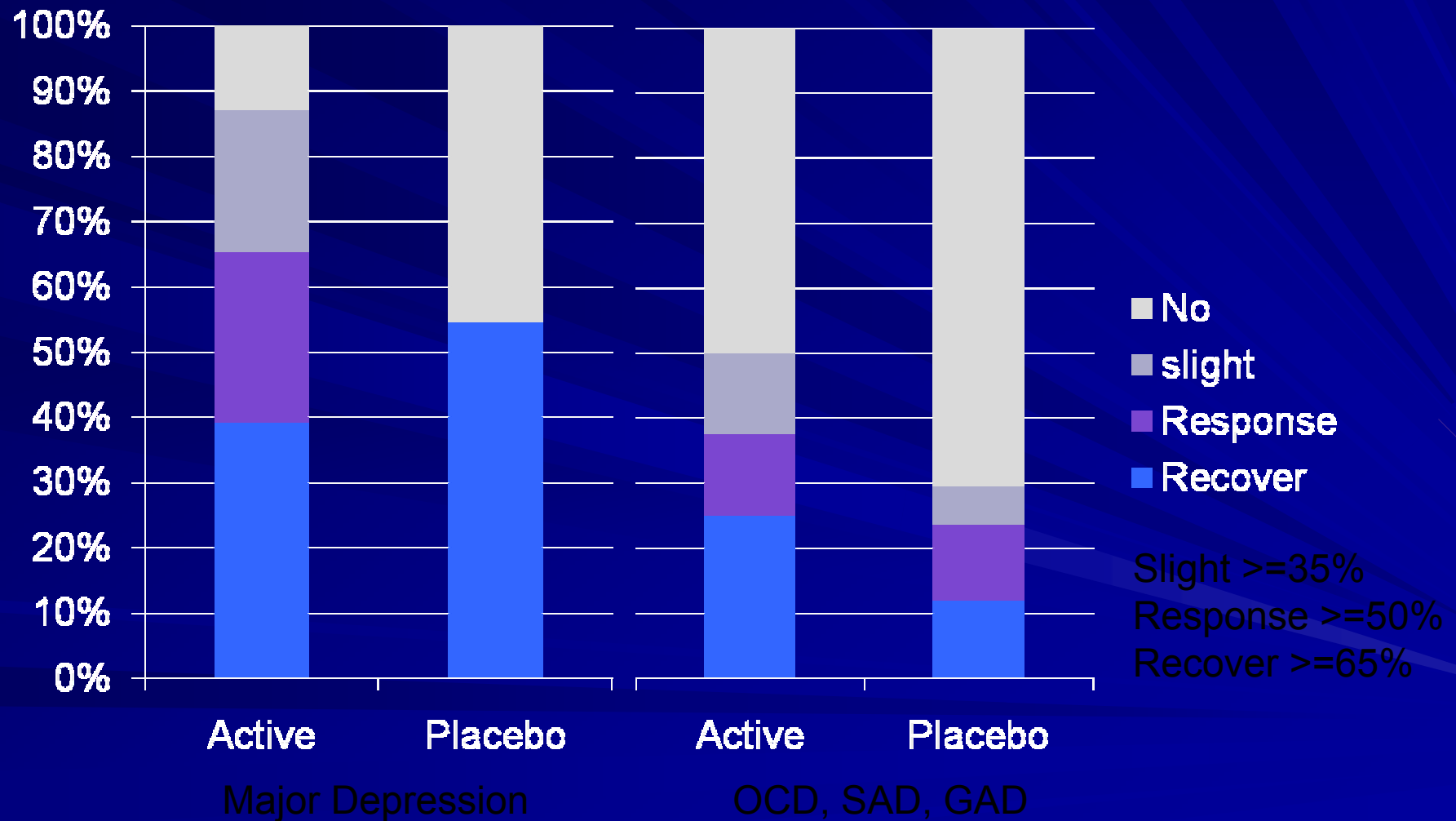
DO I IMPROVE?

- My treatment outcome on OCD

What are your thoughts?

■ Accept the facts?

■ Deny the facts?
  – My own clinical experience tells…
  – The subjects were not appropriate.
  – Dr. Harai is hostile to meds.

■ And start collecting supporting arguments, "Because, he is a behaviorist doing scary exposure to patients."

Accepting

LANGUAGE Scientific

- Number of
  - Mental disorders
  - Therapeutics; Drugs CBTs
  - Evidence

FACT Experienced

- Suicide : Increased
- Antidepressants
  - Placebo drift
- My CBT:
  - The same outcome
- Patients: Increased

So far we are not good at controlling the outcome by Science = Language

Categories		Methods
Rules		Knowledge
	Chemicals	

Verbal Behavior

- Behavior analysis sees function, not content of language

    MAND   *TACT*

    Order, command   describe, observe

- If you deny the previous slides;

    – Gee, shut up. I am not interested.

- If you accept;

    – I feel uneasy. He is testing me. Wonder the consequences.

RULE

- A kind of *TACT* which describes contingency.
  - If you listen, your GAD pt will get better.
- *RULE* following behaviors
  - *PLIANCE :* compliance to established rules given from our language community
  - *TRACKING :* following one's arbitrary rules
  - *AUGMENTING :* enhance the valence of future reinforcer or punisher

RULEs in medical language community

- You should do this, if not, you would be punished.

    Informed consent, GCP, EBM, Guidelines

- You should not do this, if you did, you would be punished.

    Ethical codes, Risk managers, Law suits,

    Defensive Medicine

Describing
Negative Contingency

Reality is

- Most of the rules produced everyday are descriptions of negative contingency.
- And language cause conditioned emotional response. (CER)

Not to me

Only to Poor Colleagues in US

The patient is exceptional

I am in mental Health, not surgery

Budget Cut

It is my spouse Who manages

My area is OK

Ho Uninsured

911

Shrinker

It is not my fault

We learn from

#1 *RULE*

– Rule governed behavior

– You can avoid disappointment, surprise, variability like "Try and Error"

#2 Direct experience

– Contingency shaped behavior

– You expect disappointment, surprise, unexpected variability

■ Our emotional resilience on which?

Which is your choice as a lover?

Rule governed

- read all literature about ...

Do you have high level of oxytocin? The hormone associated with the ability to maintain healthy interpersonal relationships.

Contingency shaped

- Read only your journals, ...

Willing to be rejected, I don't care about what would happen to me tomorrow. I know love is unpredictable . I just can not resist saying I love you.

Language is two-edged

Based on arbitrary learned within relational frames

Relational Frame Theory

- stimulus equivalence
- bi-directional relations
- rule governed behaviors
- transformation of functions

- Evolutionary advantage

- Expands the ability to feel, predict, categorize & evaluate

- Makes behavioral avoidance possible and cognitive dominance

- Experiential avoidance and cognitive fusion

- Amplified by culture

Stimulus Equivalence

- A computer worm is a self-replicating computer program. It uses a network to send copies of itself to other nodes (computer terminals on the network) and it may do so without any user intervention.

- Worms almost always cause harm to the network.
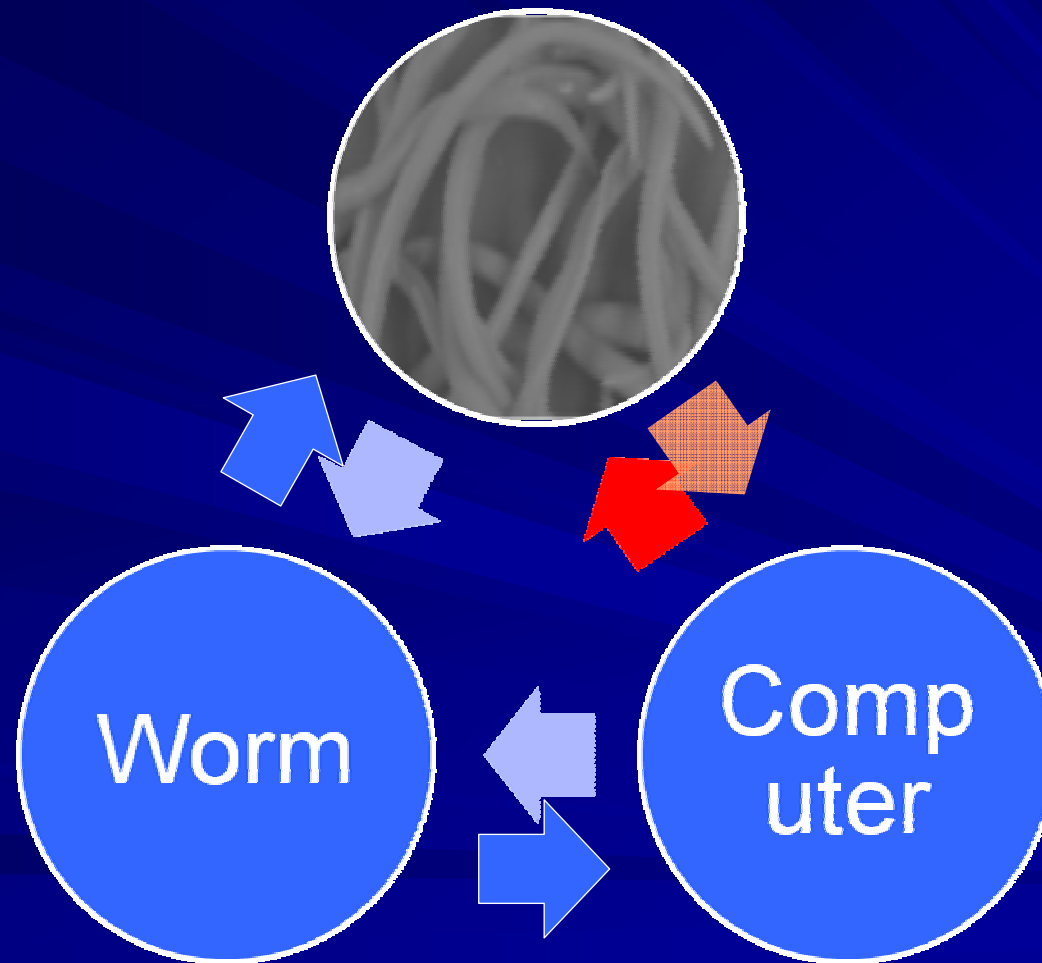
How do you feel?

How do you feel now?

- A computer worm is a self-replicating computer program. It uses a network to send copies of itself to other nodes (computer terminals on the network) and it may do so without any user intervention.

- Worms almost always cause harm to the network.

With this ability

- We can make a warning against a new cyber attack in a efficient way.

- Also, our emotions, love, danger, anxiety, depression, obsessions, worries.

<div align="center">However</div>

- I feel sorry for Ascaris lumbricoides. They are never responsible for spams, Trojan horses, and phishing.

RULES in language

 spread by exploiting vulnerabilities in OS. Install regular security updates, then the majority of are unable to spread.

I love you tricks you into running a malicious code. The use of a firewall is recommended.

Dominance of emotionally charged *RULES* cause

- **Fusion with your thoughts**
  - Language cause emotional response. You avoid word. Euphemism in your mind.
- **Evaluation of experience**
  - Judge by rules. Language loves dichotomy
- **Avoidance of your experience**
  - Human is good at avoiding direct experience
- **Reason giving for your behavior**
  - Most skilled are politician, administrators

Even a worm will turn

"Oh, now I get it. So, you don't have a problem. You're not crazy; everyone else is. Is that how you see it?"

Clinical Case

39 yrs old female, divorced, works full time as a psychiatric nurse

CC :Worry if I were a schizophrenic. Feel depressed and tense. Want to take Cognitive therapy

PH: Post partum depression

Clinical Case (cont.)

History of PI : Age 35, promoted to a supervisor. Started to worry about criticism in work place, and her child. Visited a local psychiatrist, prescribed various drugs. No change.

Diagnostic Considerations: Generalized Anxiety Disorder

HAM-A 22

Generalized Anxiety Disorder

- Persistent worrying, anxiety symptoms, and tension
- The most frequent anxiety disorder in primary care, 22% patients who complain anxiety
- Natural course is characterized as chronic with few complete remissions.
- Substantial comorbidity particularly with depression.
- It has been acknowledged for centuries, and the oldest among anxiety disorders.
  The nature and treatment for GAD is less clear than other anxiety disorders(Kessler, 2000).

Treatment strategy

- **CBT**

- **Pharmacotherapy**
  - Paroxetine
  - And/Or Scheduled use of long acting benzodiazepine

- **For patients abusing prn short acting agents**

  "Benzodiazepine control therapy"
  - BZ is effective to suppress autonomic hyperactivities, whereas it has anti-exposure property and no effect on worry.
  - However, patients often use BZ when they feel anxious, that is when they have a worry.
  - Prevent private event contingent use of BZ.
  - Facilitate scheduled use of long acting BZ.

Behavior Therapy

- Daily self monitoring of worry and physical symptoms
- Activity scheduling
- Clinical interviewing focusing accepting uncertainty in life, choosing personal goals, and taking action.
- Etiological models of GAD (Ladouceur 1998) were explained.
  - Intolerance of uncertainty, Beliefs about worry, Poor problem orientation, Cognitive avoidance.
- During the interview, interviewer intentionally overly reflects the worry contents of the patient.
- This conversation is based on the skills of Motivational Interviewing. It is intended to conduct worry exposure with an empathic atmosphere.

Course of HAM-A
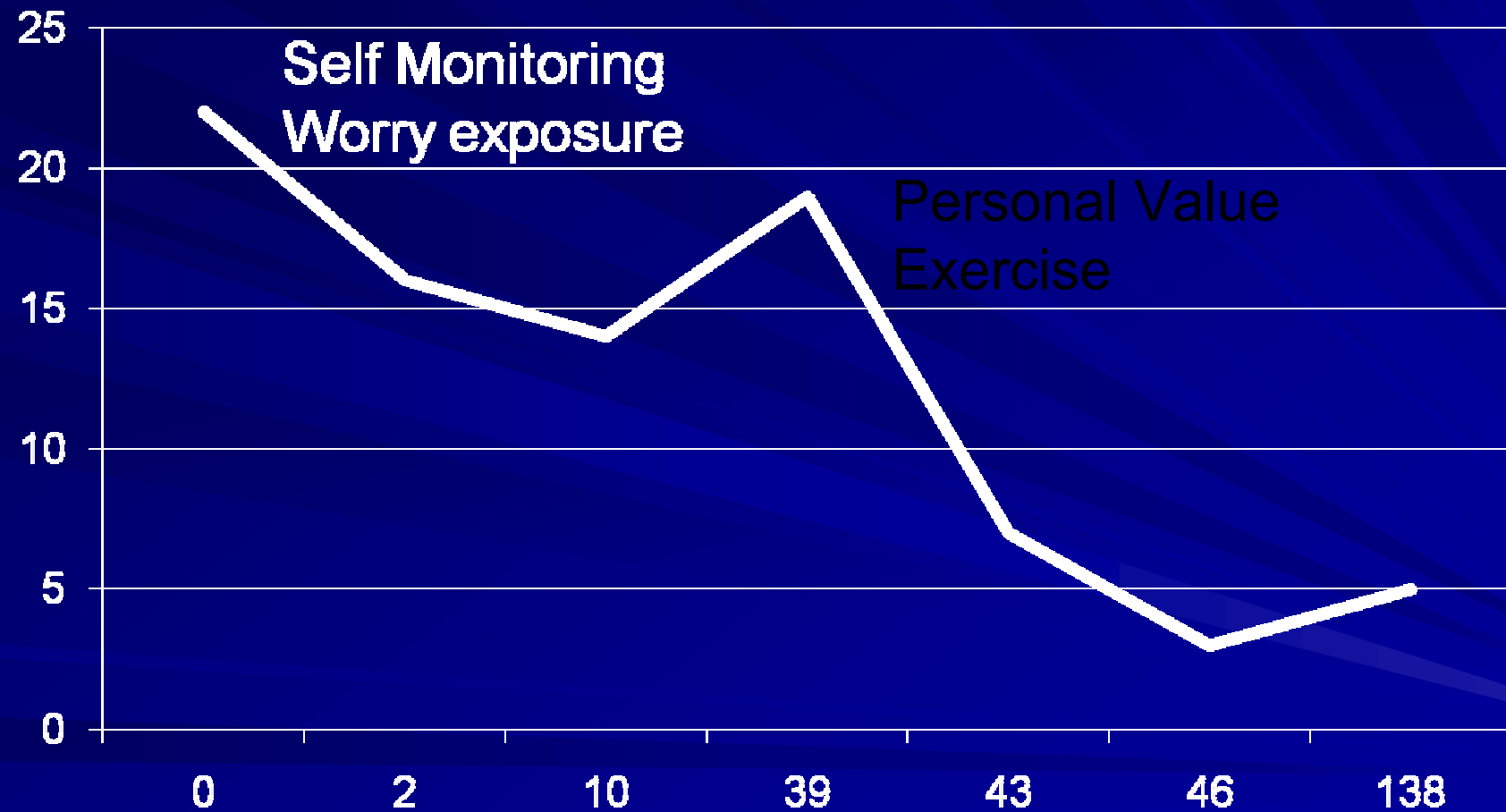
Attending your own funeral

Her ideal condolence

- Socialized and active for 24 hours a day, 7 days a week.
- Sleep less than 6 hours, personal time is minimal, never idle away a second.
- Understand the most complicated order in a second, never needs other's help.
- Others always admire and respect her.
- A true role model for our entire society.

A week later

- Now I see what my friends have told me for 10 years.

- I am no longer obsessed my ideal.

- I can have more realistic goals. I can appreciate small achievements I made for these months.

- Doc, give me more advice. You are a great therapist.

Behavior Analysis of Worry

- A *TACT* describes unwanted events in the future.

Trigger	Emotion	Worry: Thinking about	Rule seeking
• Bad news in media • Bodily sensation • Mediocre dull life	• I don't want this • Desire, Anxiety	• How "I don't want this" • Why "I don't want this" • What else "I don't want"	• Doc, give me more advice
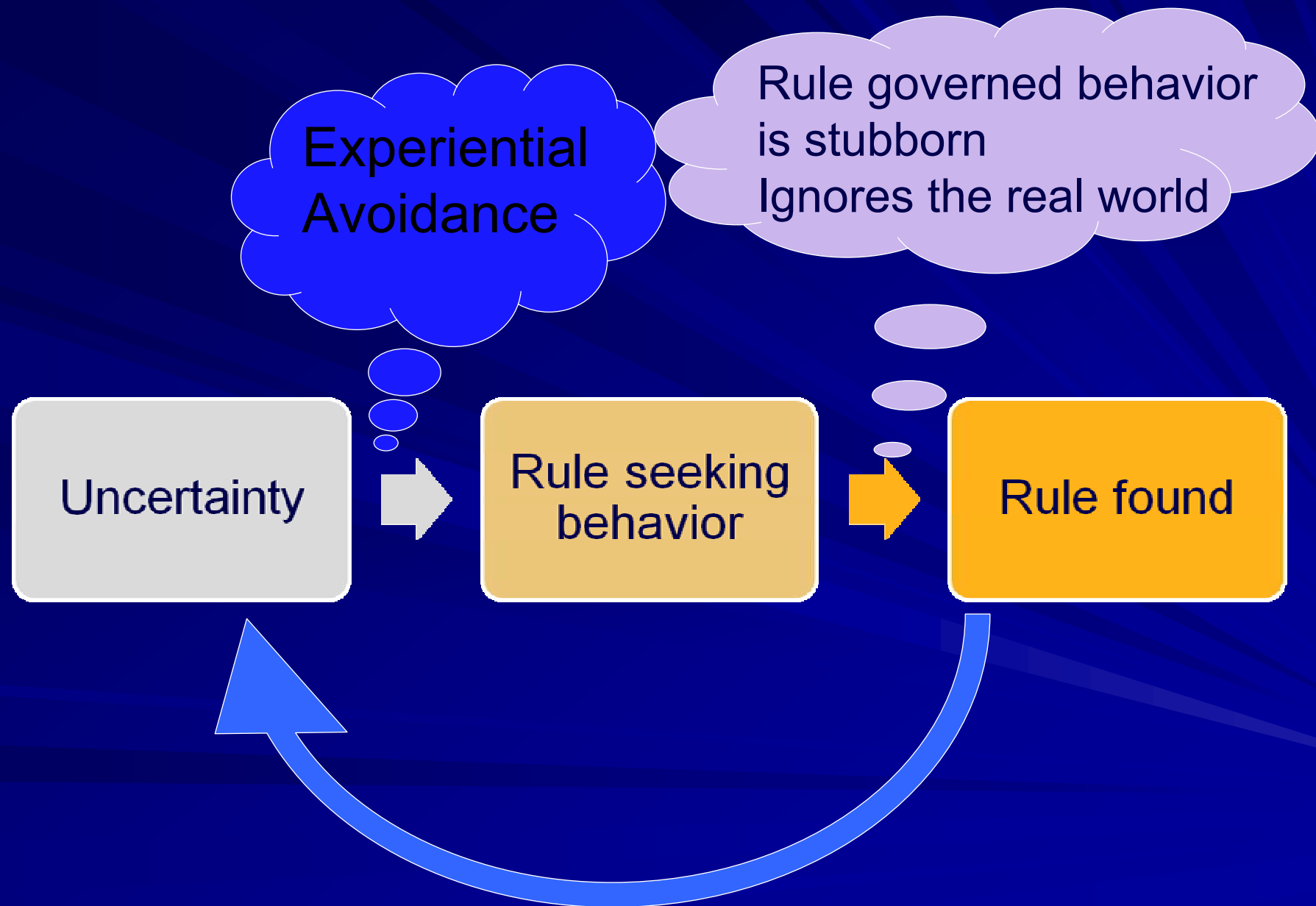
Even a worm will turn

Even a worry will turn you down

You are suffering from leukemia

You only have 2 months before death
Choose one

Many issues to solve
- If unsolved, I will regret
- If left as it is, I will depressed.
- If exacerbate, I will be inept.
- If no key to solve, I will die.

Future
- Don't know
- Now is important.

What is important
- Find the best, certain predictable rules

Today's goal
- Willingly experience worry, future mishaps

Future goal
- Take care of my kids.
- Eat, sex, move,
- Consume two months.
- Look back the past.

What is not important
- Advice, rules, certainty

Her personal accounts after tx

- I was convinced that I was schizophrenic.
- Reading CT books changed nothing.
- Tx was self monitoring, worry exposure, listing personal values. Accepting symptoms and worrying willingly were a goal, but it was painstaking.
- Now, I realized that there is a place in the society even for me. Accept what I am.

http://homepage1.nifty.com/hharai/gad&pd/gad1.html

Other cases of GAD

	Age	Medication	HAM-A		
			Baseline	After	Reduction
F	**38**	**Px**	**22**	**5**	**0.77**
F	44	Px+BZ	32	4	0.88
F	47	Px	23	6	0.74
F	30	Px	32	6	0.81
F	68	BZ	16	6	0.63
M	36	Px	23	5	0.78

Px: Paroxetine BZ: Benzodiazepine

Discussion

- As the table show our treatment program accepted and worked well for GAD patients.
- This study indicates some evidence to support the efficacy of our therapy. This is preliminary research, and we need further research to confirm our findings.

Core ACT Processes

- Six Processes identified by Hayes, Strosahl, Bunting, Twohig, & Wilson (2004):
  - ❖ Acceptance
  - ❖ Defusion
  - ❖ Self as context
  - ❖ Values
  - ❖ Committed action
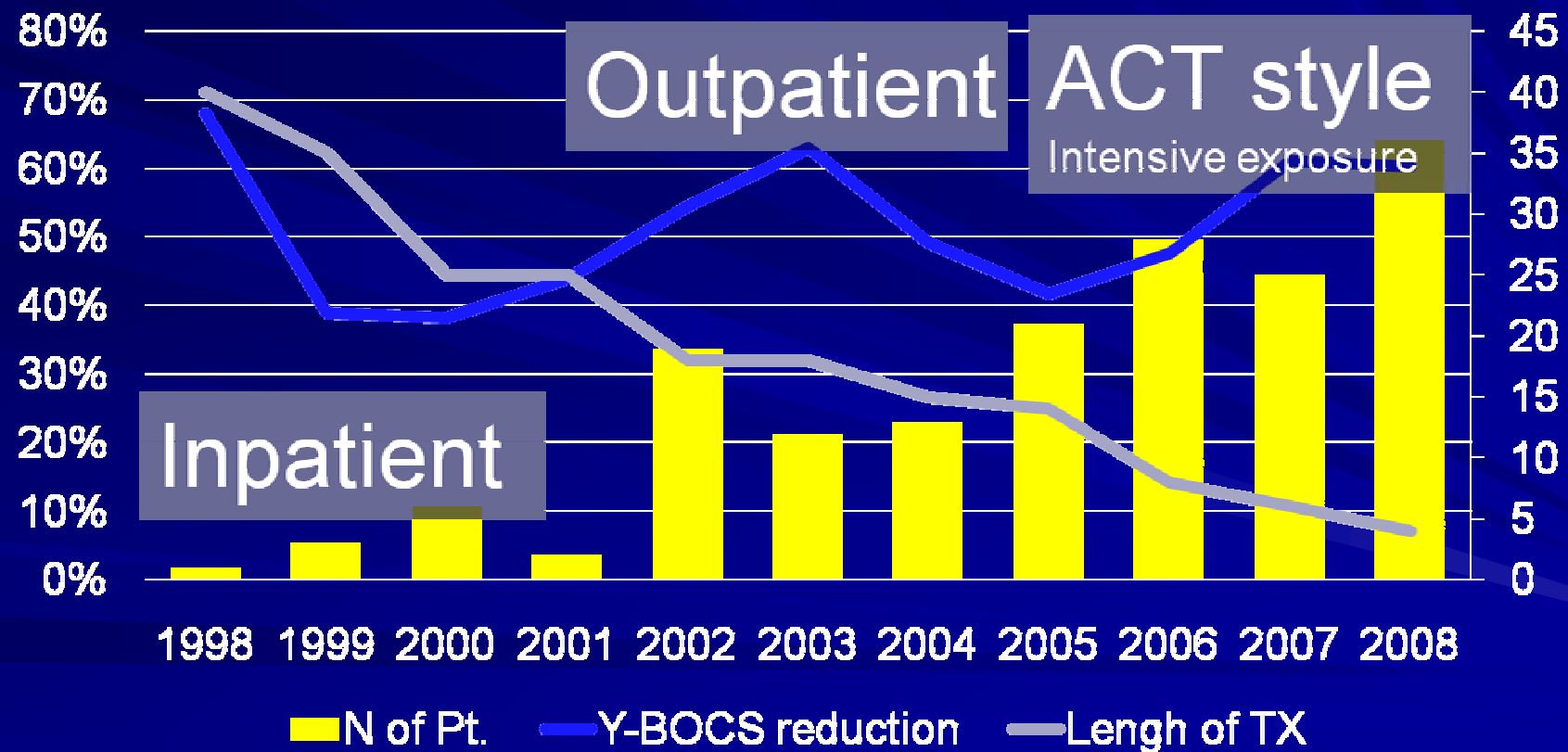 - ❖ Contact with the present moment

What makes me to use ACT

- I said
  - My treatment outcome has not improved for OCD even after I learned ACT
  - Behavior Analysis observes principle of parsimony

What makes me to use ACT

■ My treatment outcome on OCD

Why

Before ACT

- Motivation
  - Persuasion, Threat
- Exposure
  - Decrease anxiety
  - Graded to avoid too much
- Cognitive biases
  - Corrected by logic and evidence
- Maladaptive Behavior
  - Replaced with Skills training

After ACT

- Motivation
  - Elicited, Affirmed
- Exposure
  - Increase anxiety
  - Jump to surprise
- Cognitive biases
  - Accepted and defused
  - Exposure to emotion
- Maladaptive Behavior
  - Choose from behavior repertoire

Explaining placebo response

CBT and SSRIs

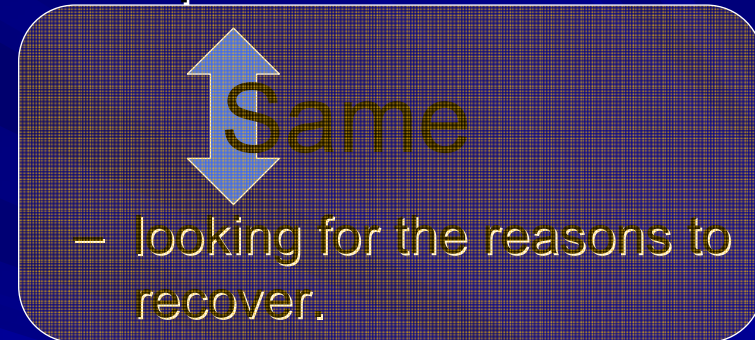Or other numerous txs

- The reason to cause depression

  ⬍ Same

- The reason to recover from depression

  ⬇

- You should correct the reason

ACT

- The problem is

  ⬍ Same
  - looking for the reasons to recover.

- Placebo is risk taking
  - No reason to be better
  - Just take it for good ends
- HAM-D is exposure
- What works is what works

My wishes

- Recent advances and application of Learning theory are remarkable.
- ACT is one of the accomplishments
  - Rule Governance, Relational Frame Theory
- There are more others which may influence
  - Context Conditioning, Behavior Economics
  - Adjunctive Behavior, Behavioral Pharmacology
  - Optimization, Org. Behavior Management

Conventional vs. ACT

Because I ha[...]
 I can not v[...]
  Doc, [...]

Because I am seeking fund,
 While avoid working,
  I have a budget cut.
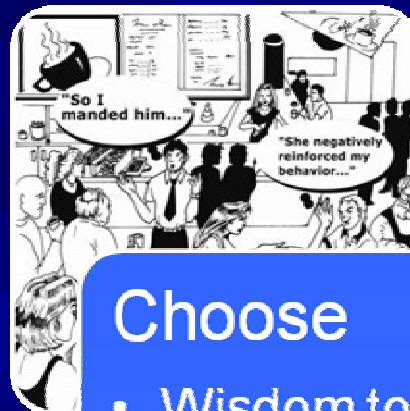
Because I have a budget cut,
 I can not work,
  Minister, give me a fund.

[...]ng help,
[...]king,
 I have a pain.

Accept
- Serenity to accept the things I can not change

Choose
- Wisdom to know the difference

Take action
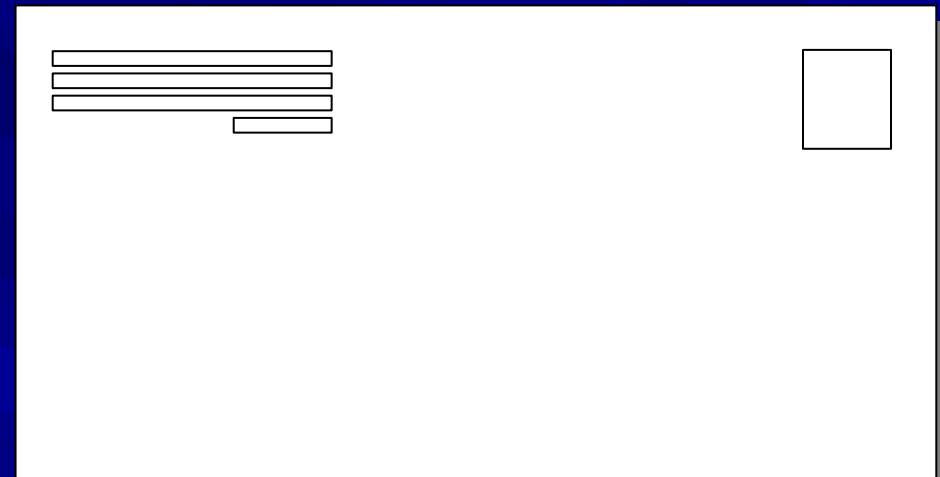- Courage to change the things I can

56

Final note

- Thanks Prof. Iyo
- Q & A

〈あなた〉の
人生を
はじめるための
ワークブック

「こころ」との新しいつきあい方
アクセプタンス＆コミットメント

S.C. ヘイズ with S. スミス 著

武藤　崇・原井宏明
吉岡昌子・岡嶋美代 訳

こころの「壁抜け」のコツ、あります

E-mail: hharai@cup.com

http://homepage1.nifty.com/hharai/

Treating private events

- Washing and Checking are *Public events*
- *Private events*
  - Pure obsession in OCD
  - Shame in SAD
  - Bodily sensation in PD
  - Regret in MDD
  - Worries, Thoughts suppressed in GAD
  - Memory in PTSD and Complicated Grief
  - Paranoia, Hallucinations in Psychosis

Many ways to describe thoughts

- **Obsession**
- **Cognitive bias**
- **Early maladaptive cognition**
- **Schema**
- **Traumatic memory**
- **Paranoia**
- **Belief**

Verbal behavior
in your Brain
you are
struggling with
The content of thought
is not the problem.
The feeling you are
avoiding
The control / coping
you are using and
seeking is the problem

Cognitive BT

■ Classify

– Matches to Medical Model

■ Explanatory

– Etiological Model

ACT

■ Extinction is also new learning as well as conditioning

– Violation of reinforcer expectation

■ You had NOE, experience PO, will have POE

■ You had only POE, experience PO, will have?