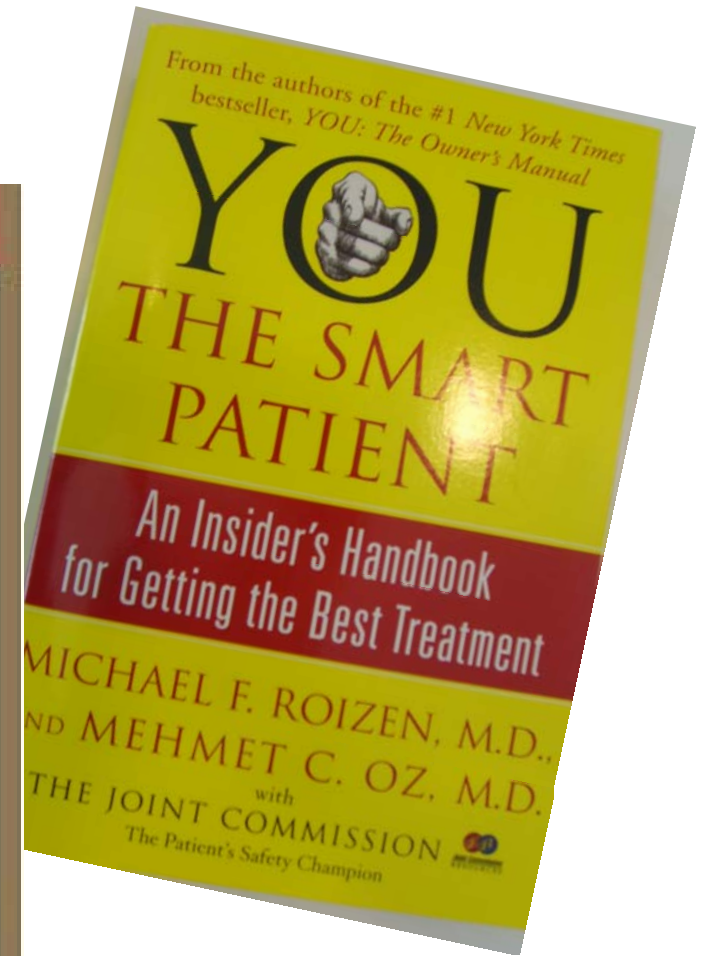
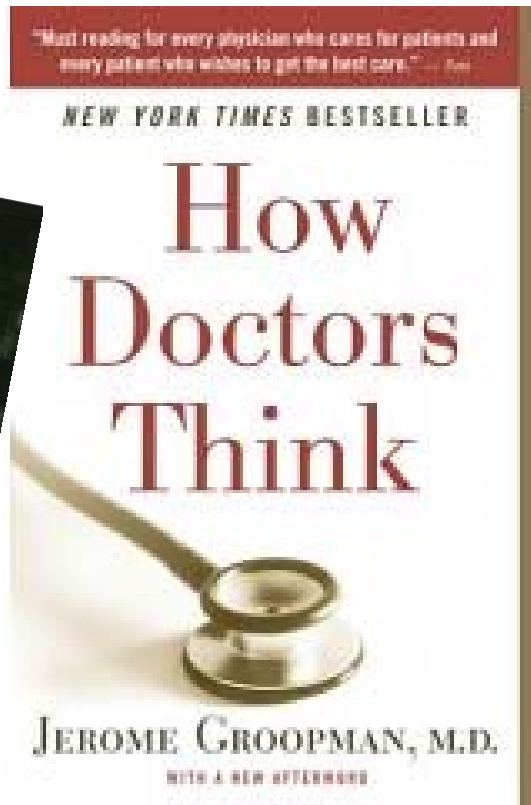
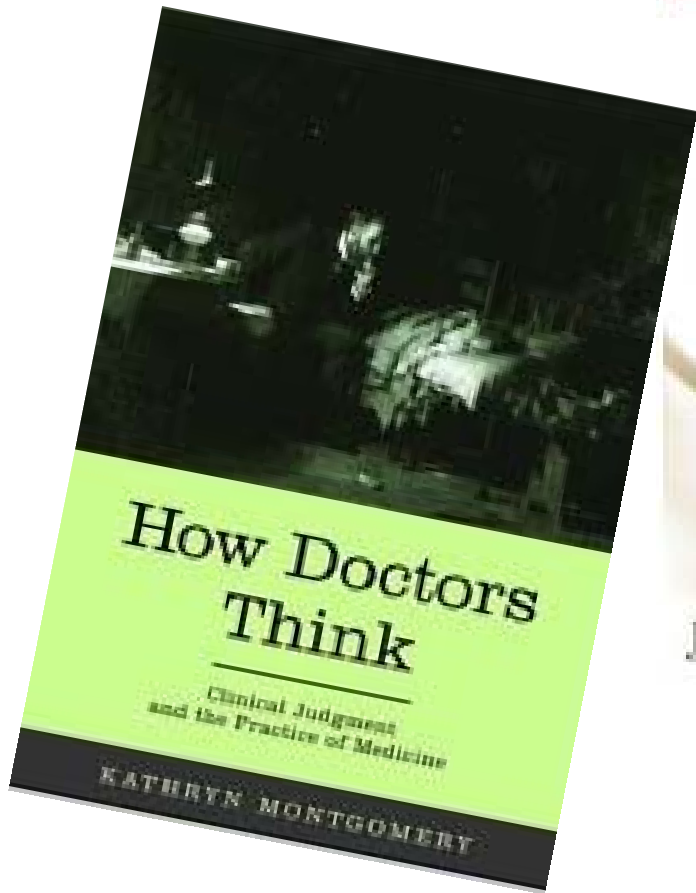

Why doctors make mistakes: The role of self-monitoring

Ronald M Epstein MD

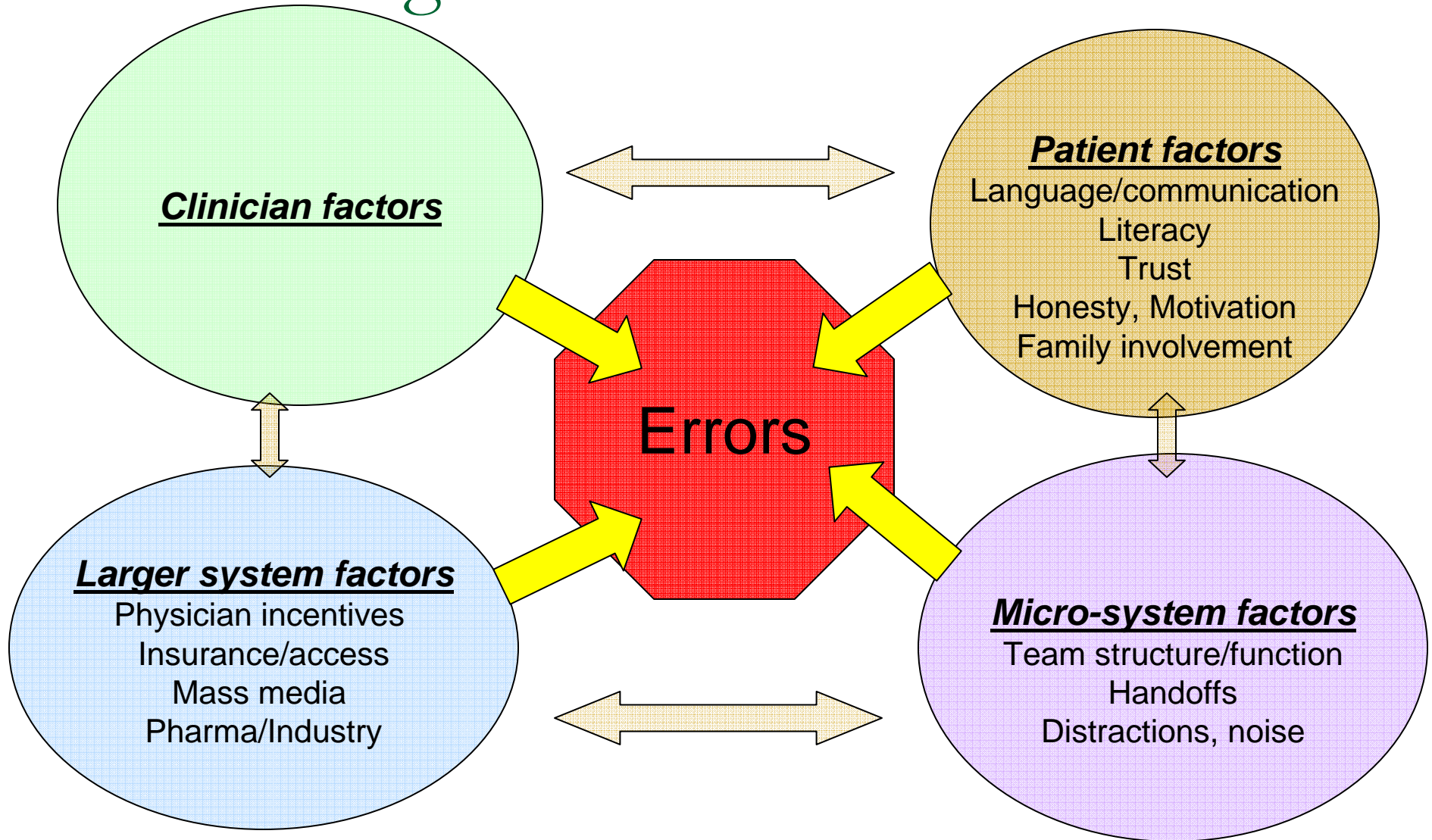
Professor of Family Medicine, Psychiatry and Oncology
Director, Rochester Center to Improve Communication in
Health Care

Associate Dean for Educational Evaluation and Research
University of Rochester School of Medicine and Dentistry,
New York, USA



He who knows not he knows
not...

Interacting factors related to errors



Clinician factors

Inadequate data

Misinterpretation of findings

Premature closure

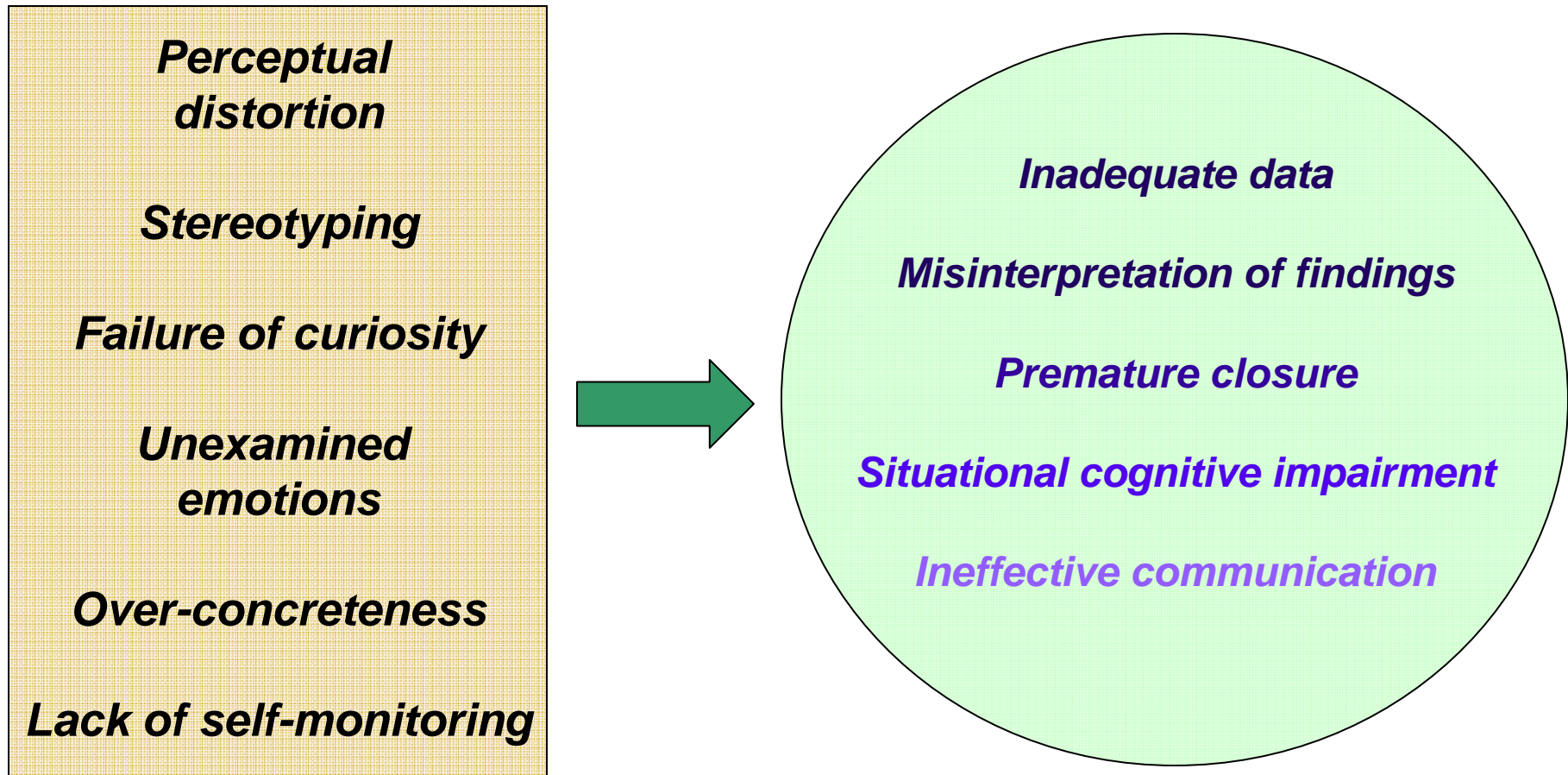
Situational cognitive impairment

Ineffective communication

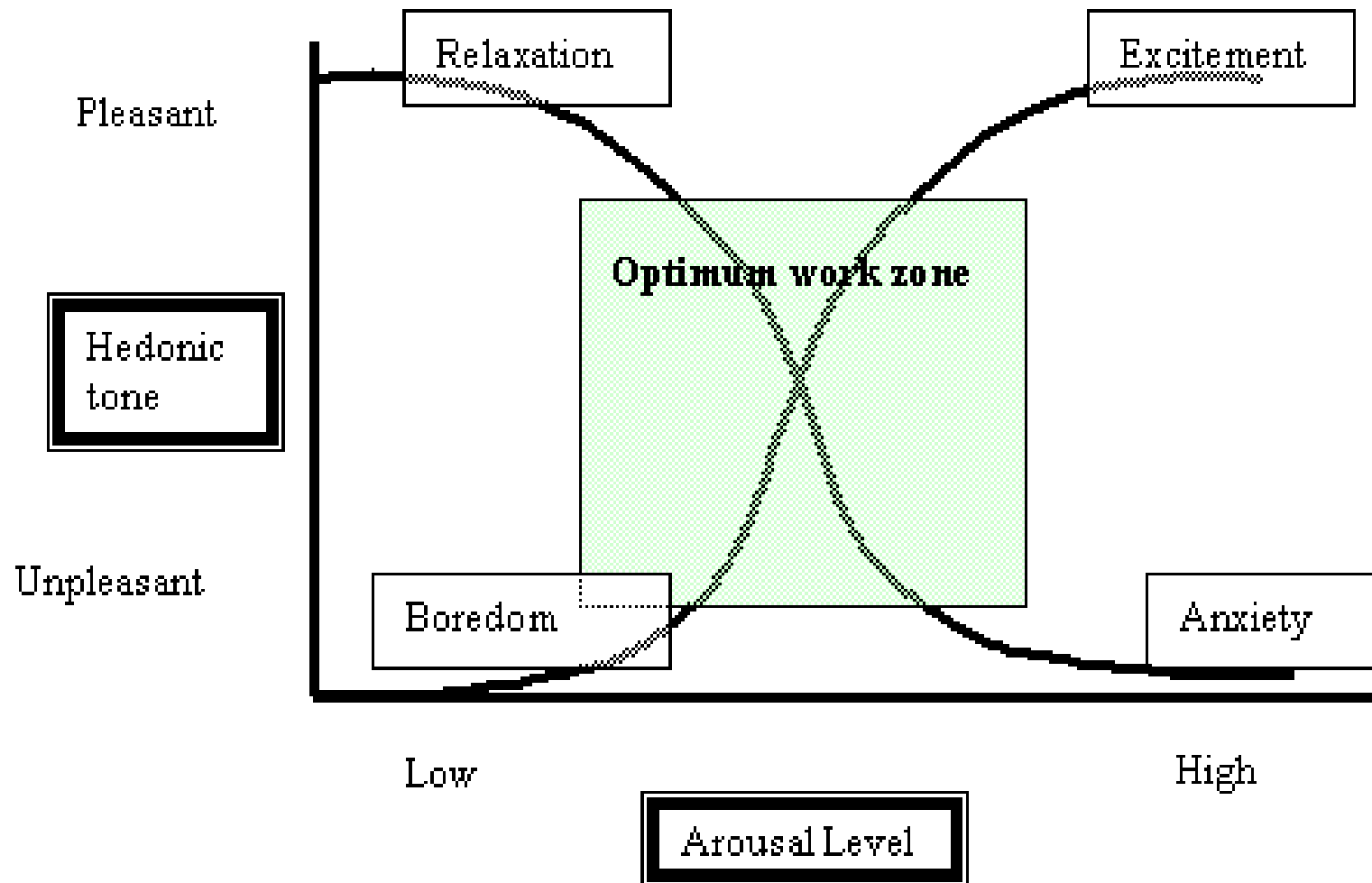
??Lack of knowledge or skills??

Graber ML et al 2005

Neuro-cognitive factors in errors



“Immaculate perception” and
“hot cognition”



Self-assessment

- ... a process of interpreting data about our own performance and comparing them to an implicit or explicit standard...
 - Summative / predictive
 - Continuous self-monitoring

Data

- Impersonal
 - Interpersonal
 - Intrapersonal
-

Why self-assessments are flawed

- Data problems
 - Flawed reasoning
 - Intermittent reinforcement for substandard practice
 - Lack of self-monitoring
-

Mindlessness: denial, self-deception and delusion

... “the tendency of the mind to seek premature closure .. That quality of the mind that imposes a definition on things and then mistakes the definition for the actual experience”

Mindlessness and communication

“... could this be something serious?”

Self-monitoring

...the ongoing *moment-to-moment habit* of seeking, integrating and responding to both external and internal data about one's own performance *during everyday work...*

Epstein et al 2008, after Damasio A 1994 and 1999; Siegel DJ. 2007

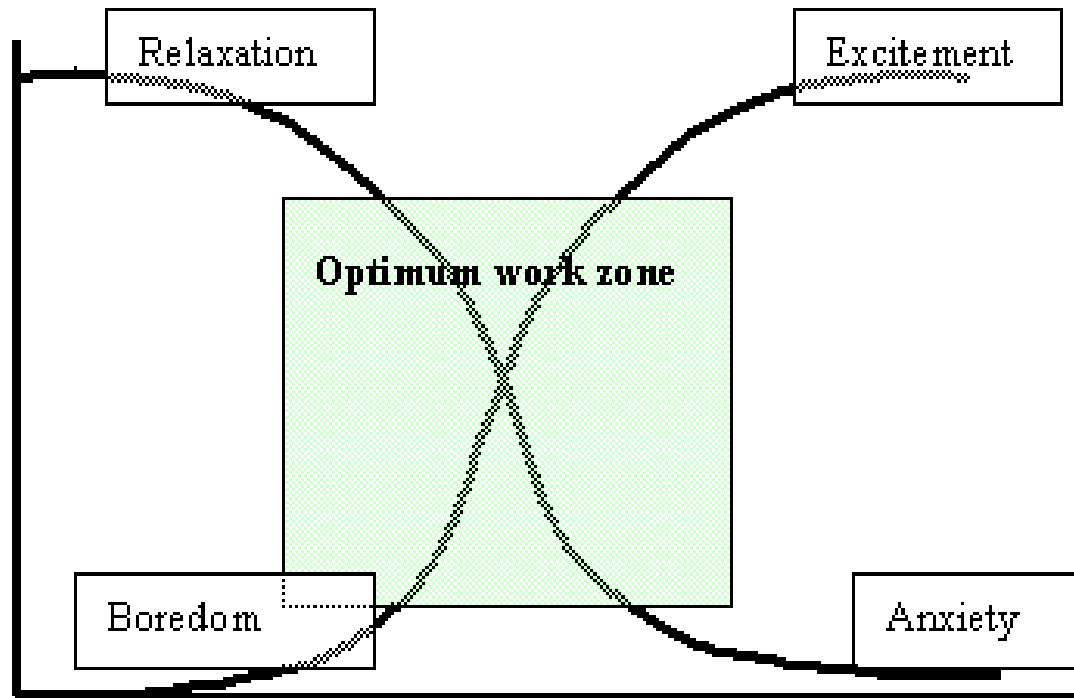
Mindful practice

Moment-to-moment purposeful attentiveness to one's own mental processes during every day work with the goal of practicing with clarity and compassion

Qualities of mindful practitioners

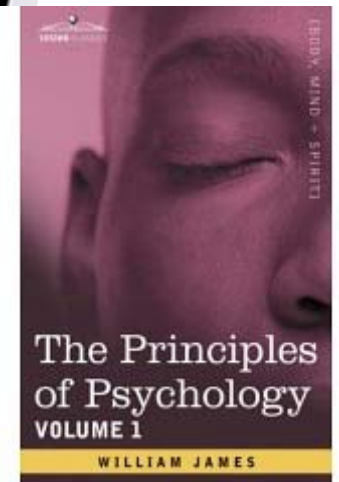
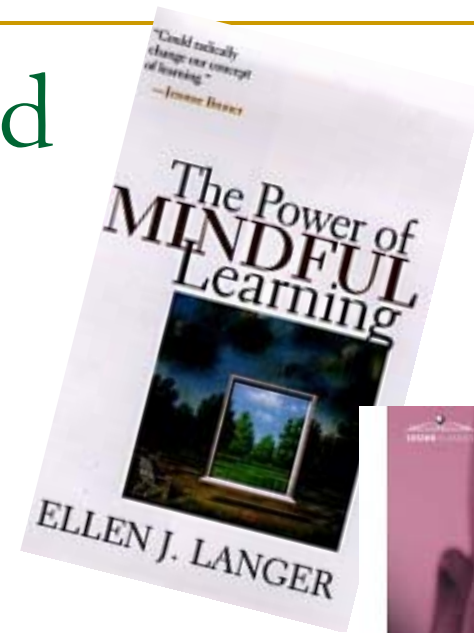
- Motivation
 - Paying attention
 - Observing the observer
 - Curiosity / Openness
 - Diminished reactivity
 - Mental stability
-

Knowing when you're out of the box



Cultivating habits of mind

- Seeing information as novel
- Seeing “facts” as conditional
- Seeing situations from multiple perspectives simultaneously
- Temporarily suspending categorization/judgment
- Self-questioning



Langer EJ 1997, James W 1895, Fitzgerald FS 1945, Borrell-Carrio F & Epstein RM 2005

Asking reflective questions

Questions that “open up” and “tend not toward edification”

- “What feelings are affecting my ability to observe?”
 - “What am I assuming that might not be true?”
 - “How are prior experiences and expectations affecting how I view the situation?”
 - “Did I use ‘fuzzy logic’ or ‘cognitive alibis’ to justify my actions?”
 - “What would a trusted peer say about the way I managed this situation?”
 - “Am I really done, or am I engaging in premature closure?”
-

Can mindful self-monitoring be taught?

- Formal practice
 - Informal practice
 - Reflection
 - Mindful health systems
-

Assessing self-monitoring

Summary

He who knows not, and knows not that he knows not is a fool
...shun him.

He who knows not, and knows that he knows not, is a student
...teach him.

He who knows, and knows not that he knows, is asleep
... awaken him.

He who knows, and knows that he knows, is wise
...follow him.

Attributed to Confucius, Persian proverb, Arabic saying, and many others