

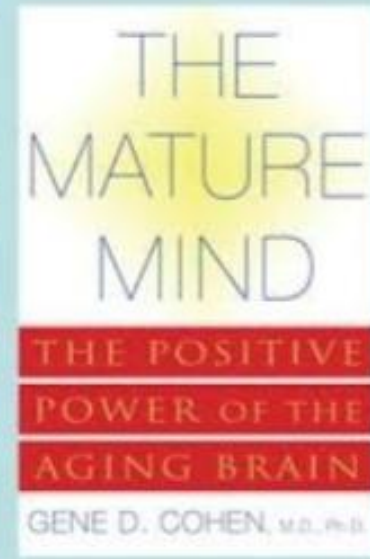
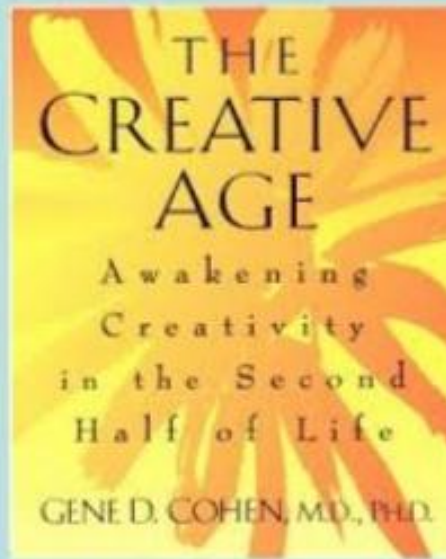
Developmental aging



Dr. Yajyoti



Mirror, Mirror on the Wall: What is Aging, After All ?



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Three major issues

❑ Nature / nurture

- How much do genetic inheritance and experience influence development ?

❑ Continuity / stages

- Is development a continuous process or does it proceed through separate stages ?

❑ Stability / change

- To what extent do our personality traits persist through life ?

Avoiding from
situations of
disease and
disability

Successful
Aging

Engagement
to life

High cognitive
and physical
function



 NATIONAL
GEOGRAPHIC

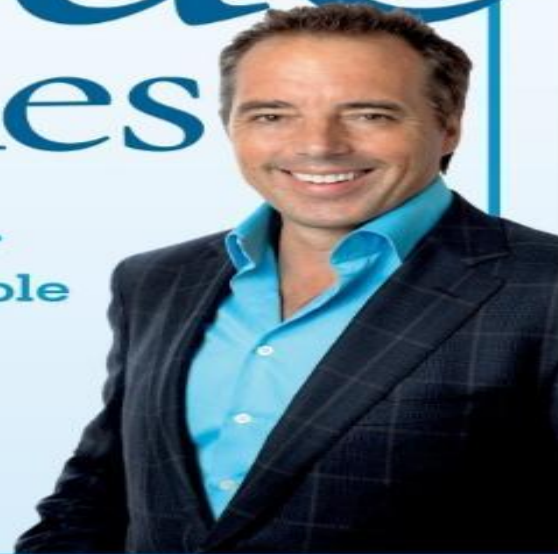
THE
**Blue
Zones**

"A must-read if you
want to stay young!"

—DR. MEHMET C. OZ

Lessons for
Living Longer
From the People
Who've Lived
the Longest

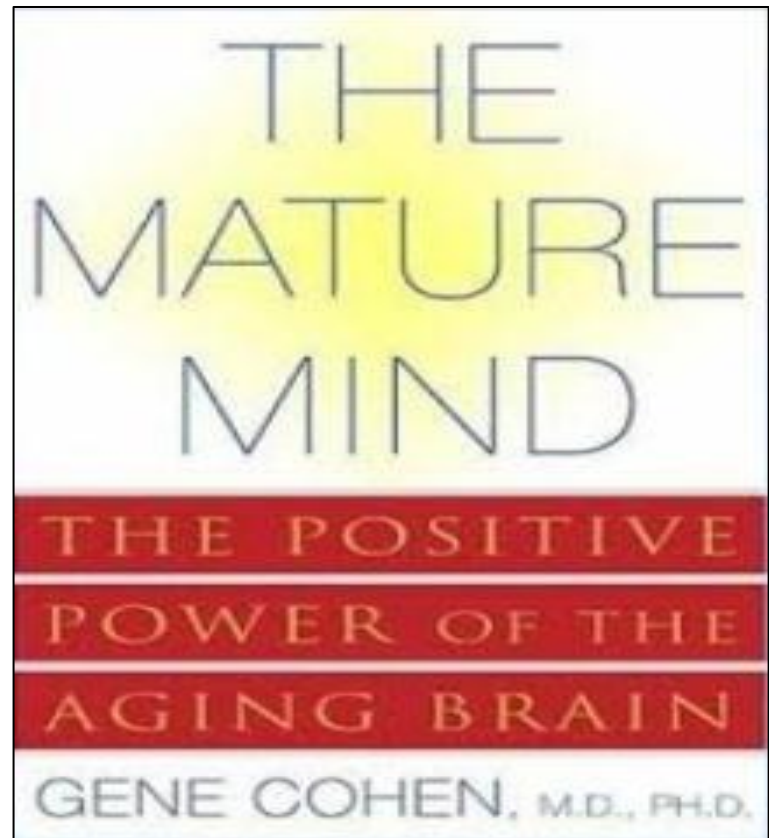
The
New York
Times
Bestseller



DAN BUETTNER

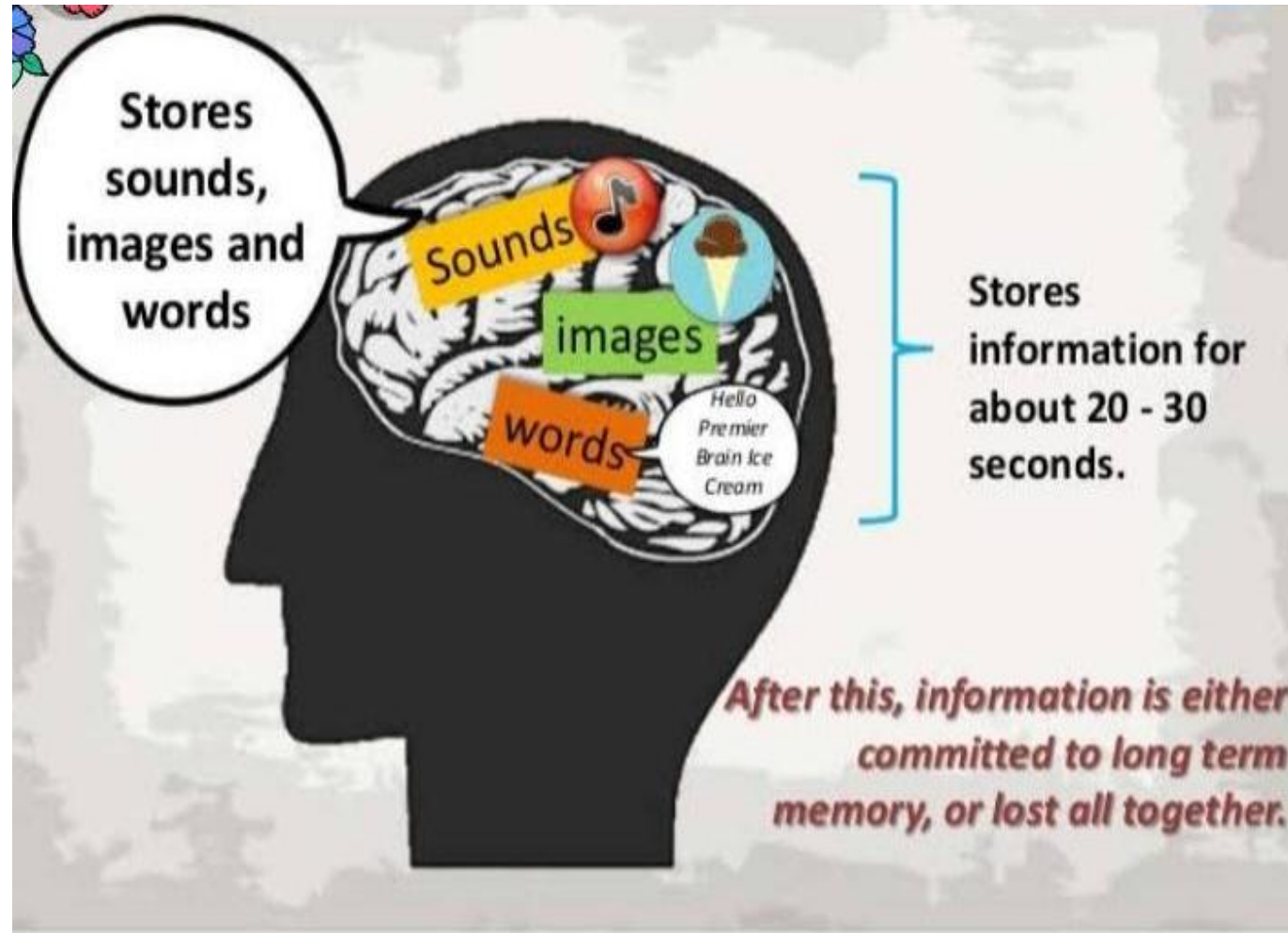
Developmental Intelligence

- The maturing of cognition, emotional intelligence, judgment, social skills, life experience and consciousness and their integration and synergy.



Source: Cohen GD. The Mature. New York: Basic Book 2005, p. 35

What is Short-term Memory ?



Long Term Memory

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graph TD; A[Long Term Memory] --> B[Declarative memory]; A --> C[Procedural memory]; B --> D["Semantic Memory: Concerns knowing what. This is memory for meanings – for example knowing the meaning of word.  
Episodic Memory: Concerns knowing when, where and what. It is linked to personal experience, especially important, exciting or emotional ones."]; C --> E["These memories concern knowing how to do things.  
Often this memory is automatic and is resistant to forgetting. For example, you may drive a car without consciously recalling every procedure involved and without forgetting how to."];
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Declarative memory

Semantic Memory: Concerns knowing what. This is memory for meanings – for example knowing the meaning of word.

Episodic Memory: Concerns knowing when, where and what. It is linked to personal experience, especially important, exciting or emotional ones.

Procedural memory

These memories concern knowing how to do things.

Often this memory is automatic and is resistant to forgetting. For example, you may drive a car without consciously recalling every procedure involved and without forgetting how to.

Types of Intelligence

❑ Crystallized Intelligence

- Accumulated knowledge
- Increases with age



❑ Fluid Intelligence

- Ability to solve problems quickly and think abstractly.
- Peaks in the 20's and then decreases over time

Raymond Catell's Fluid versus Crystallized Intelligence

❑ Fluid intelligence:

- The ability to solve abstract relational problems that have not been explicitly taught and are free of cultural influences
- Ex., Verbal analogies, memory for lists, etc.

❑ Crystallized intelligence:

- The ability to solve problems that depend on knowledge acquired in school or through other experiences
- Ex., General information, word comprehension

Ego Integrity vs. Despair

- ❑ Erikson explains that late adulthood is marked by a **crisis between ego integrity and despair** as older adults are looking back over their lives, evaluating it and coming to terms with it.
- ❑ Those who successfully resolve the crisis, experience a sense of **satisfaction and accomplishment**; those who do not resolve the crisis successfully, look back on their lives with dissatisfaction and may be **unhappy**, depressed, angry or despondent.

❑ Mild-life re-evaluation

- Internal drive for re-evaluation, exploration and transition
- Motivated by “Quest energy”

❑ Liberation

- Internal drive for liberation, exploration, and innovation: “If not now, when?”

❑ Summing-up

- Internal drive for recapitulation, resolution and contribution: life review, altruism

❑ Encore

- Internal drive for reflection, continuation, and celebration of self, family, community, culture and spirituality

Creative / Expressive Arts

Mastery and control and social engagement through engaging arts programs yields better health outcomes.

(Cohen et al., 1994)

The new research on creativity and aging demonstrates, “The very act of engaging one’s mind in creative ways affects health directly via the many mind/body connections.”

Dr. Gene Cohen

“Art is like chocolate to the brain.

Dr. Gene Cohen

Creativity is not just for Artists

- ❑ Cohen emphasizes the role of creativity playing a dynamic role in:
 - **Relationships:** “New starts, new directions, and mid-course corrections.”
 - **Responding to adversity:** “Problems become a catalyst for developing the potential.”
 - **Intergenerational and community interactions:** “An opportunity to do something for the common good.”

Source: Cohen GD. The Creative Age: Awakening the Human Potential in the Second Half on Life. HarperCollins Publishers, 2000.



Socioemotional selectivity
theory states that with age,
a person's social goals shift
from being
knowledge-related to
emotion-related.

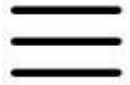


- **Gerotranscendence** is a natural and individual process towards maturity and wisdom, normally accompanied by more life satisfaction. It may be described as a transformation, characterised by new ways of understanding life, activity and oneself.



Selective Optimization with Compensation (SOC)

- ❑ Elective selection
 - Making choices to reduce involvement in order to concentrate on another
- ❑ Loss-based selection
 - Reducing involvement because of lack of resources or abilities
- ❑ Compensation
 - Finding alternate ways of meeting goals due to loss of ability or diminished skills



(L-R) Dr Mahadev Kale, Dr Anand Bhatia, Dr Farrokh Wadia and Dr Dayanand Shetty.



“Aging is an extraordinary process where you become the person you always should have been.”

—David Bowie