

Cognitive Reserve and Successful Aging

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Grouping Aging Processes into 3 possible trajectories:

1. **Aging**, with disease and disability
2. **Usual aging**, with absence of overt pathology but presence of some declines in function
3. **Successful (or healthy) aging**, with no pathology and little or no functional loss



Productive Aging

Healthy Aging

Psychological Aging

Successful Aging

(functional plasticity persists in old age)



Psychological Aging

- Focuses on the ability to respond and adapt to changing environment
- This involves engaging **cognitive process** with **learning, memory, intelligence, motivation, emotions, feelings** and assigning meaning to life.



Successful Aging

- Despite the increase in physical and mental disability that usually accompanies the aging process, **successful aging is** not only **possible** but also **more common** than previously thought
- Older adults tend to report **higher levels of well-being** than do younger adults
- **Life satisfaction** and **general well-being** do not necessarily decrease with age and might even increase

What is Well-being?

- Well-being is a positive outcome that is meaningful for people and for many sectors of society, because it tells us that people perceive that their lives are going well.
- Well-being generally includes global judgments of life satisfaction and feelings ranging from depression to joy.
- Well-being usually includes physical well-being, mental and emotional well-being.

How Well-being is measured?

WHO Well-Being Index(1998 version)

Over the last two weeks

1. I have felt cheerful and in good spirits
2. I have felt calm and relaxed
3. I have felt active and vigorous
4. I wake up feeling fresh and rested
5. My daily life has been filled with things that interest me

Scoring:

0 = At no time 1 = Some of the time 2 = Less than half of the time
3 = More than half of the time 4 = Most of the time 5 = All of the time

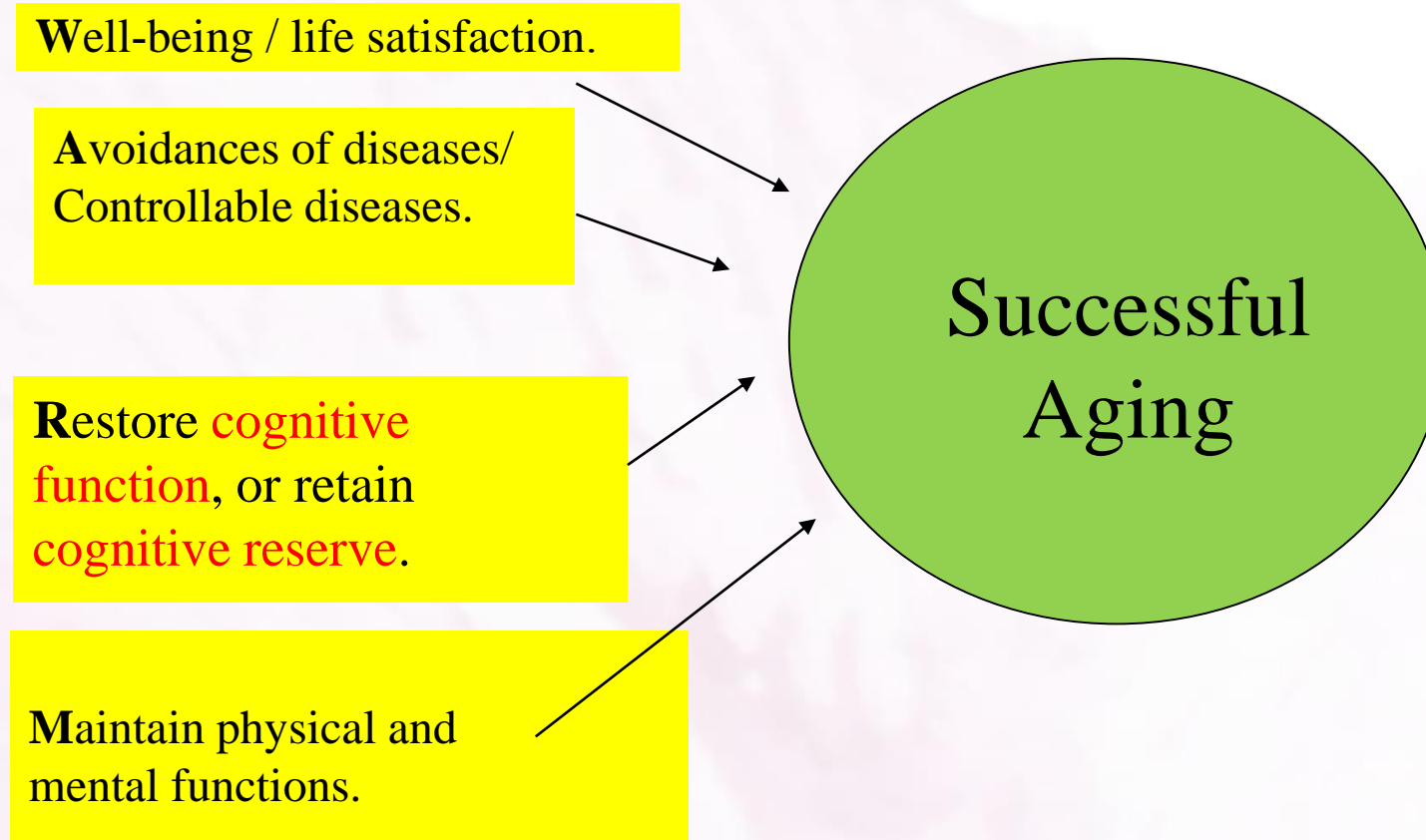


positive psychiatry and successful aging

Variable	Traditional psychiatry	Positive psychiatry
Treatment goal	Symptom relief and relapse prevention	Recovery, increased well-being, successful aging , posttraumatic growth
Main treatments	Drugs and generally short-term psychotherapies for symptom relief and relapse prevention	Psychosocial and behavioral (and, increasingly biological) interventions to enhance positive attributes
Prevention	Largely ignored	Important focus across the life span



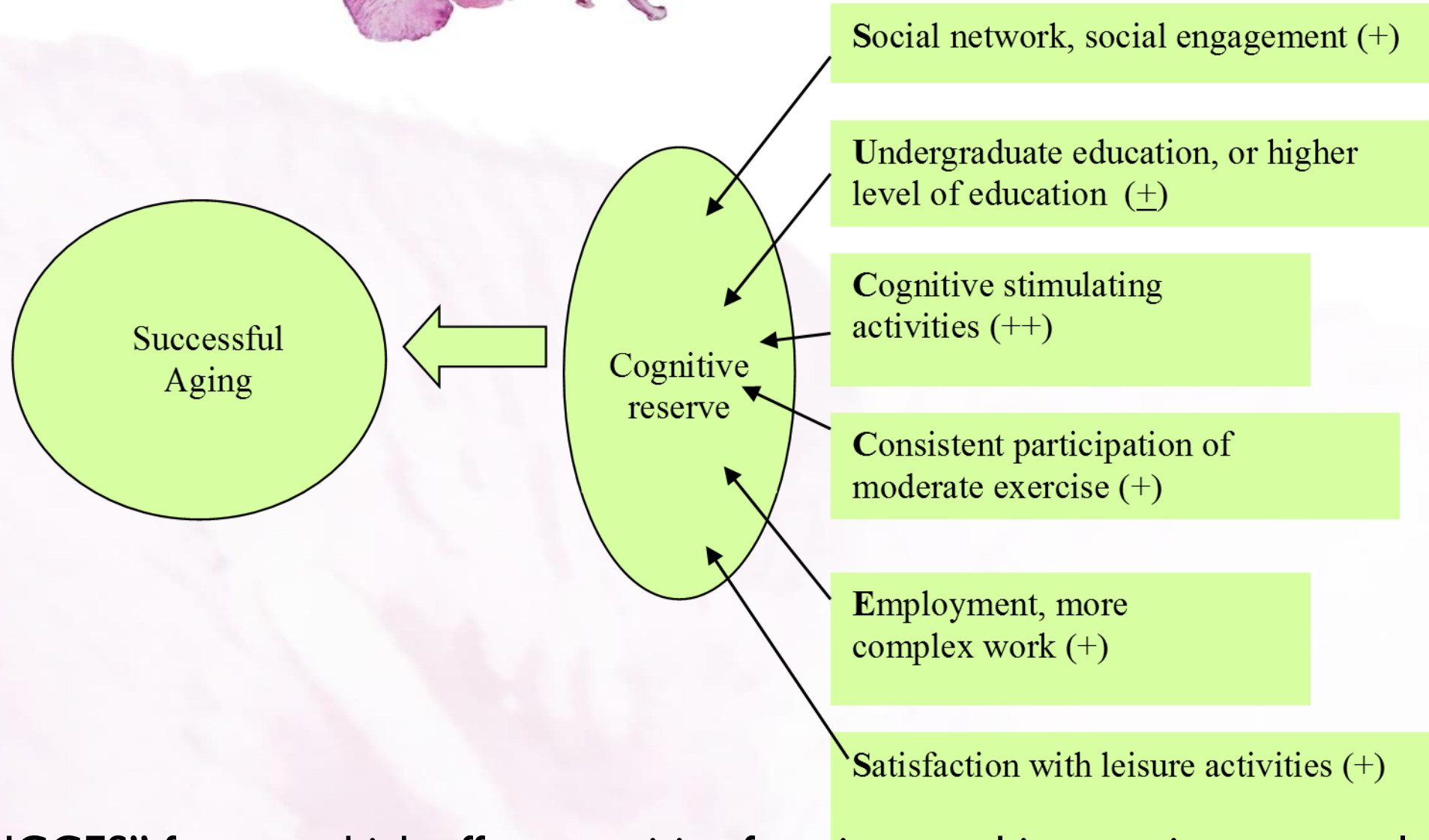
WARM condition for successful aging (proposed by Udomratn P ,2016)





Comparison between brain and cognitive reserves

Variable	Global Reserve	
	Brain Reserve	Cognitive Reserve (CR)
changes or compensations	structural	functional
neurobiology aspect	neurodegenerative	neuroplasticity
process	passive	active
compared with computer machine	hardware	software



“SUCCES” factors which effect cognitive functions, and interactions several of these factors leads to successful aging (proposed by Udomratn P ,2016)



Predictors of Successful Aging (I)

- Vahia et al (2012) identified various domains of aging that appeared to influence successful aging
- These domains included **Resilience, Optimism, Spirituality, Engagement in leisure-time activities (ROSE)**
- **Resilience**, a personality characteristic that moderates the negative effects of stress and negative experiences and promotes adaptation to new challenges



Predictors of Successful Aging (II)

- **Optimism** predicted **QoL** over a period of 7-8 yrs. above the effect of biomedical factors
- **Optimism** appears to affect **objective physical functioning** as well as **subjective well-being**
- **Optimism** predicts **subjective physical functioning** better than objective physical functioning

(Bowling and Iliffe ,2011)



Predictors of Successful Aging (III)

- **Spirituality** is an important predictor of well-being in older age, independent of other factors
- **Spiritual well-being** contributed to the prediction of psychological well-being, subjective well-being, physical symptoms, and depression

(Lawler-Row and Elliott ,2009)



Predictors of Successful Aging (IV)

- **Engagement in leisure-time activities** included physical activity and exercise and cognitive, artistic, and social engagement.
- **Regular physical activity** is an importance preventive strategy against cognitive decline as well as a method to reduce sx of depression and improve cardiovascular health
- **Participating in social events** and **interacting with others** through art has been associated with successful aging and well-being



Successful Aging

สุขที่ใจ เพียงพอ ขอแค่นี้
พร้อมทั้งมี **well-being** พรั่งพร้อม
ทั้งปลอดภัย ปลอดภัย เลี่ยงโรคภัย
cognitiveให้ ดียิ่งนัก **success** เอย

(พิเชฐ อดมรัตน์, 2560)



Conclusion

- Cognitive reserve and interaction with several factors (SUCCES) leads to successful aging
- Four conditions, a so-called WARM, is important for successful aging
- Predictors of successful aging composed of ROSE
- Successful aging is possible and more common than previously thought

Thank you

