

#### Individual differences in happiness, arousal, & control

Why do different people have different motivational and emotional states even in the same situation?





Based on Reeve (2009, pp. 368-369)

# **Personality** characteristics:

Individual differences in happiness, arousal, and control

Three motivational

principles

Happiness

 Arousal Control

Reading:

Reeve (2009)

Ch 13 (pp. 367-390)

Neuroticism

 Sensation seeking · Affect intensity

Personality characteristics

Extraversion

Perceived control

Desire for control

# **Happiness** & Personality

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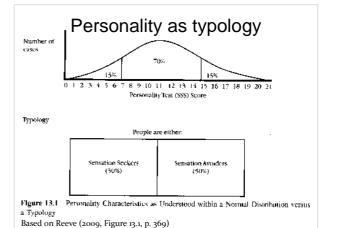
#### Outline - Individual Differences in Happiness, Arousal, and Control

- Happiness
  - Extraversion & happiness
  - Neuroticism & suffering
  - Extraverts & neurotics
- Arousal
  - Performance & emotion
  - Insufficient stimulation & undergrousal
  - Excessive stimulation & overarousal
  - Credibility of the inverted-U hypothesis
  - Sensation seeking
  - Affect intensity

Based on Reeve (2009, p. 367)

Control

- Perceived control
- Desire for control



#### Personality types vs. traits

- Relatively few people are at either end of a personality characteristic (most people are mid-way)
- Beware of typologies' oversimplification

For example:

Focus on extraversion (trait) rather extraverts (typology).

Based on Reeve (2009, pp. 368-369)

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#### The big 5 personality traits

**Trait Dimension** Description

Neuroticism Secure vs insecure Self-satisfied vs self-pitying

Extraversion Sociable vs retiring

Fun-loving vs sober Affectionate vs reserved

Openness Imaginative vs practical

Preference for variety vs routine Independent vs conforming

Agreeableness Soft-hearted vs ruthless

Trusting vs suspicious Helpful vs uncooperative

Conscientiousness Organised vs disorganised

Careful vs careless Disciplined vs impulsive

Source: Adapted from McCrae & Costa (1986, p. 1002).

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#### The big 5 personality traits

- 5 superordinate traits are well supported by wide variety of research.
- Commonly measured by "NEO" (Costa & McCrae, 1980s) or IPIP
- Not everyone agrees on the naming of these traits.

#### The big 5 personality traits: Labels

1/	2	3	4	5	6 (Authors)
Emotional control	Social adaptability	Inquiring intellect	Conformity	Will to achieve	Fiske (1949)
Emotionality	Surgency	Culture	Agreeableness	Conscientious -ness	Norman (1963)
Emotionality	Assertiveness	Intelligence	Likeability	Responsibility	Orgatta (1964)
Neuroticism	Extraversion	Intellect	Friendly compliance	Will to achieve	Digman (1990)
Neuroticism	Extraversion	Openness to experience	Agreeableness	Conscientious -ness	Costa & McCrae (1985)
AFFECT	POWER	INTELLECT	LOVE	WORK	Peabody & Goldberg (1989)

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#### The big 5 personality traits

The Big 5 according to the "NEO":

- Neuroticism
- Extraversion
- Openness to Experience
- Agreeableness
- Conscientiousness

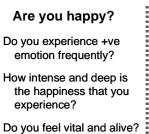
#### **Personality traits** → motivation, emotion, and behaviour

Personality traits:

- cause people to react differently to different situations, e.g., positively or negatively
- cause people to approach and avoid different situations
- determine choice and alteration of situations, e.g., approach, avoid, or modify situation

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Based on Deckers (2010, pp. 210-212) 12





Based on Reeve (2009, pp. 368-369)

#### Are you unhappy?

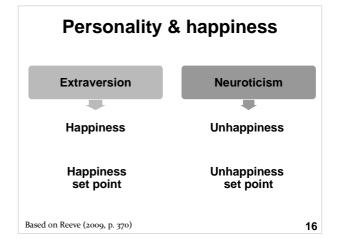
Do you suffer emotionally?

How intensely do you experience negative emotions?

Is your typical day an emotional roller-coaster?



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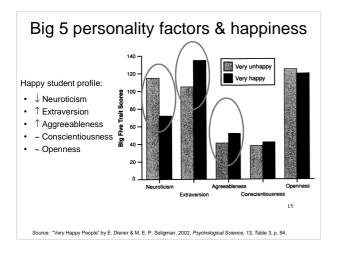


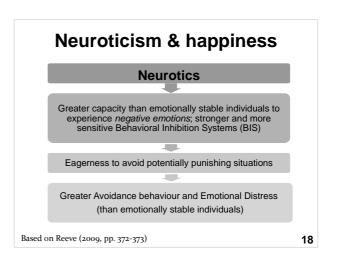
# Happiness and unhappiness are related, but separate, dimensions



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# Extraversion & happiness Extraverts Greater capacity than introverts to experience positive emotions; stronger and more sensitive Behavioral Activating Systems (BAS) Eagerness to approach potentially rewarding situations Greater Social Dominance (than introverts) Greater Social Dominance (than introverts) Greater Social Continuous (than introverts)

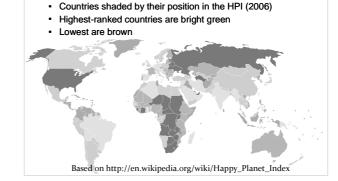




#### **Happiness economics**

- Quantitative study of happiness, positive and negative affect, well-being, quality of life, life satisfaction and related concepts, typically combining economics with other fields such as psychology and sociology.
- The field has grown substantially since the late 20th century, for example by the development of methods, surveys and indices to measure happiness and related concepts.
- e.g., World Database of Happiness http://worlddatabaseofhappiness.eur.nl/

Based on http://en.wikipedia.org/wiki/Happiness\_economics 19



Happy Planet Index

· Environmental efficiency of supporting well-being (Ratio of

happiness to resource consumption (sustainability))

	Country	Mean	Country	Mean	Country	Mean
	Denmark	4.24	Malaysia	2.61	Croatia	0.87
	Puerto Rico	4.21	W. Germany	2.60	Morocco	0.87
$\Box$	Colombia	4.18	Vietnam	2.52	India	0.85
≥'	loeland	4.15	France	2.50	Uganda	0.69
_	N Ireland	4.13	Philippines	2.47	Zambia	0.68
·==	Ireland	4.12	Uruguay	2.43	Algeria	0.60
S	Switzerland	3.96	Indonesia	2.37	Burkina Faso	0.60
0 45	Netherlands	3.77	Chile	2.34	Egypt	0.52
ب بد	Canada	3.76	Dominican Rep	2.29	Slovakia	0.41
:⊏	Austria	3.68	Japan	2.24	Hungary	0.36
	El Salvador	3.67	Spain	2.16	Montenegro	0.19
_ o ∈	Malta	3.61	Israel	2.08	Tanzania	0.13
_ <b>≤</b> =	Luxemburg	3.61	Italy	2.06	Azerbaijan	0.13
well-being untries	Sweden	3.58	Portugal	2.01	Macedonia	-0.06
	New Zealand	3.57	Taiwan	1.83	Rwanda	-0.15
$\circ$	U.S.A.	3.55	E. Germany	1.78	Pakistan	-0.30
မ ၁	Guatemala	3.53	Slovenia	1.77	Ethiopia	-0.30
	Mexico	3.52	Ghana	1.73	Estonia	-0.36
ti 7	Norway	3.50	Poland	1.66	Serbian Bosnia	-0.45
ပ်စ	Belgium	3.40	Czech Rep	1.66	Lithuania	-0.70
× 0,	Britain	3.39	China	1.64	Latvia	-0.75
Θ _	Australia	3.26	Mali	1.62	Romania	-0.88
. <u>₩</u> ⊏	Venezuela	3.25	Kyrgyzstan	1.59	Russia	-1.01
<u> </u>	Trinidad	3.25	Jordan	1.46	Georgia	-1.01
Subjective in 97 cc	Finland	3.24	Greece	1.45	Bulgaria	-1.09
	Saudi Arabia	3.17	S Africa	1.39	Iraq	-1.36
	Thailand	3.02	Turkey	1.27	Albania	-1.44
	Cyprus	2.96	Peru	1.24	Ukraine	-1.69
	Nigeria	2.82	S Korea	1.23	Belarus	-1.74
	Brazil	2.81	Hong Kong	1.16	Moldova	-1.74
	Singapore	2.72	Iran	1.12	Armenia	-1.80
	Argentina	2.69	Bangladesh	1.00	Zimbabwe	-1.92
	Andorra	2.64	Bosnia	0.94	Mean:	1.57

#### **Natural happiness and** synthetic happiness

- Natural happiness: Occurs when you get what you want.
- Synthetic happiness: Occurs when you accept that you didn't get what you
  - Synthetic happiness is as real as natural happiness
- e.g., in dating, you look to get what you want, in marriage, you find a way to like what you've got.

Based on http://en.wikipedia.org/wiki/Happiness\_economics 23

#### Easterlin paradox (1974)

- Within a given country people with higher incomes are more likely to report being happy.
- However, in international comparisons, the average reported level of happiness does not vary much with national income per person, at least for countries with income sufficient to meet basic needs.

#### Why are we happy?

■ Why are we happy? (Dan Gilbert, 2004, 21:20, TED talk)

http://www.ted.com/talks/dan\_gilbert\_asks\_why\_are\_we\_happy.html

Based on http://en.wikipedia.org/wiki/Happiness economics 21

### **Arousal**

Strong

Strong

Simple task
Focused attention, flashbulb memory, fear conditioning

Difficult task
flow High

Neak

Low High

Original Yerkes-Dodson (1908) diagram. The Hebbian curve left out the top line showing that increased arousal did not adversely impact performance during simple tasks.

Based on http://commons.wikimedia.org/wiki/File:OriginalYerkesDodson.JPG

#### Arousal

- A person's arousal level is mostly a function of how stimulating the environment is
- People engage in behaviour to ↑ or ↓ their level of arousal:
  - When underaroused, people seek out opportunities to ↑ their arousal levels, because
    - ↑s in environmental stimulation are pleasurable and enhance performance whereas
    - lacktriangle  $\del{\downarrow}$ s are aversive and undermine performance
  - When overaroused, people seek out opportunities to ↓ their arousal levels, because
    - ↑s in environmental stimulation are aversive and undermine performance whereas
    - ullet ullets are pleasurable and enhance performance

Based on Reeve (2009, p. 374)

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#### Insufficient stimulation & underarousal

#### Sensory deprivation:

An individual's sensory and emotional experience in a rigidly unchanging environment

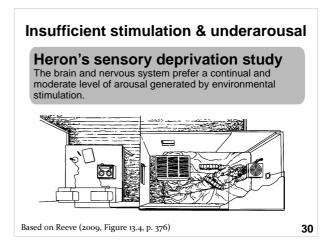
#### **Human beings harbour motives**

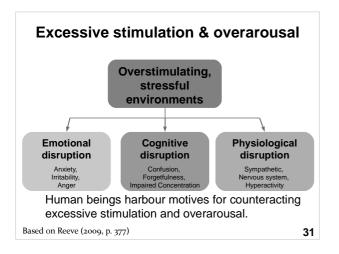
for counteracting insufficient stimulation and underarousal.

Based on Reeve (2009, pp. 375-377)

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# Performance & arousal Hebbian curve became popular in the 1950s Increasing alerness, interest, positive emotion and disturbance, anxiety Low Moderate High Arousal Figure 13.3 The Inverted-U Curve: Relationship between Arousal Level and Performance/Well-Being Source: From "Drive and the C. N. S.—Conceptual Nervous System," by D. O. Hebb, 1955. Psychological Review, 62, pp. 245–254. Based on Reeve (2009, pp. Figure 13.3)





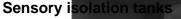
#### Sensation seeking

Personality characteristic related to arousal and reactivity.

Related to the extent to which a person's central nervous system (brain and spinal cord) requires change and variability.

Based on Reeve (2009, p. 379)

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- Sensory isolation tanks provide minimal externa stimulation
- Relaxing
- Restorative
- Facilitate higher consciousness

COPYRIANT HISTORY CON

"Over the last 25 years I have exhausted numerous addictions and relationships in pursuit of the very sensation - or state of being actually that the floatation tank gave me in one hour. No drug-induced euphoria, no sexual or romantic high, no nicotine or food fix, nor any spiritual venture ever brought me as close to my desired destination as the float tank did. This illusively defined 'destination' became much clearer to me after floating in the tank. It's a truly remarkable and freeing experience."

Annie C - http://www.samadhitank.com/

#### Sensation seeking

Defined as "the seeking of varied, novel, complex, and intense sensations and experiences, and the willingness to take physical, social, legal, and financial risks for the sake of such experiences"

(Zuckerman, 1994)

Based on Reeve (2009, p. 379)

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#### Credibility of the inverted-U hypothesis

- Neiss's criticism
  - Descriptive rather than explanatory
  - Does not apply to everyday affairs in which arousal level changes relatively little.
- Revelle, Amaral, & Turriff's experiment (1976)
  - The inverted-U hypothesis applies nicely to everyday sources of stimulation e.g., caffeine and time pressure.

Based on Reeve (2009, pp. 377-379)

# Sensation seeking & sensory deprivation

- Zuckerman was a graduate student in sensory deprivation studies.
- Zuckerman interested in subjects who:
  - hated deprivation

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- couldn't tolerate low levels of stimulation
- wanted new experiences

#### **Sensation seeking**

- Sensation seeking determines how a person reacts to a situation or event.
- Sensation seeking determines the situations and activities a person chooses.







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#### Sensation seekers – Biological basis

- SSs have ↓ levels of monoamine oxidase (MAO)
- SSs tend to have relatively ↑ levels of dopamine → their biochemistry favours approach over inhibition
- SSs tend to have relatively ↓ levels of serotonin → their biochemistry fails to inhibit them from risks and new experiences

Based on Reeve (2009, pp. 379-381)

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#### Who was the sensation seeker?





Steve Irwin

**Princess Diana** 

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#### **Sensation Seeking Scale**

(SSS; Zuckerman)

- Thrill and adventure seeking (action gamblers)
- Seek experiences outside the conventional lifestyle (travel, friends, art)
- Disinhibition: release of inhibitions, escape the pressures of daily life. (escape gamblers)
- Low tolerance for boredom, repetition and sameness.

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#### Sensation seekers

- Need higher levels of stimulation to maintain positive mood.
  - When stimulation falls → mood slumps.
  - Push to keep stimulation levels as high as possible.
  - Enjoy more intense sensations and experiences
- Are more likely to:
  - Search for novel experiences
    - Prefer unusual stimuli and situations
    - Choose things that are out of the ordinary
    - See sensations and experiences being worth physical, social, legal, or financial risks
    - Engage in risky sports and activities
  - Be more more susceptible to boredom

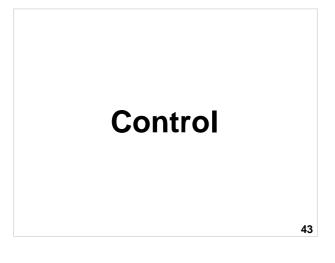
#### SSS predictor of addiction

Sensation seeking is correlated with:

- Alcoholism
- Gambling



Perhaps common in all addictions



## Control

## Perceived Control

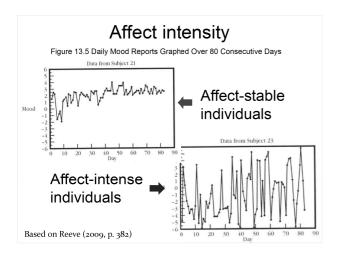
Differences in people's pre-performance expectancies of possessing the needed capacity to produce positive outcomes.

### Desire for Control

The extent to which individuals are motivated to establish control over the events in their lives.

Based on Reeve (2009, p. 384)

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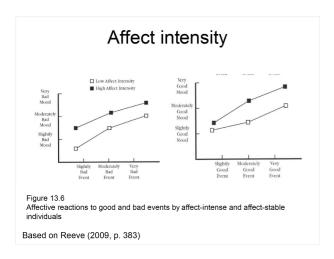
#### **Perceived control**

In order to perceive that one has control over a given situation...

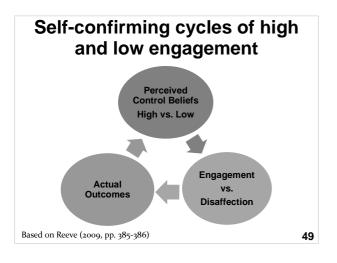
- 1. The self must be capable of obtaining the available desired outcome
- 2. The situation in which one attempts to exercise control needs to be at least somewhat predictable and responsive.

Based on Reeve (2009, p. 384)

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#### **Perceived control** Goal setting **Perceived** Task choice **Control Beliefs** Effort Concentration High Perceived •Persistence in the face of Control difficulty VS. Low Perceived •Positive emotional states Control Problem-solving strategies •Performance Based on Reeve (2009, pp. 384-385) 48



#### **Upcoming lectures**

- Individual differences
- U
- ■Unconscious motivation (Ch 14)
- ■Growth psychology (Ch 15)
- Summary & conclusion (Ch 16)

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#### **Desire for control**

	Aspiration level	Response to challenge	Persistence	Attributions for success and failure
High DC vs. Low DC	Select harder tasks; set goals more realistically	React with greater effort	Work at difficult tasks longer	More likley to attribute success to self and failure to unstable source
High DC benefit	Higher goals are achieved	Difficult tasks are completed	Difficult tasks are completd	Motivation level remains high
High DC liability	May attempt goals too difficult	May develop performance- inhibiting reactions	May invest too much effort	May develop an illusion of control

Figure 13.7 Influence of Desire for Control during Achievement-Related Performance (Burger, 1985)

Based on Reeve (2009, p. 387)

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#### References

- Deckers, L. (2010). Motivation: Biological, psychological, and environmental (3rd ed.).
   Boston, USA: Allyn & Bacon.
- Reeve, J. (2009). *Understanding motivation and emotion* (5th ed.). Hoboken, NJ: Wiley.

Note: Image credits are in the slide notes  $\,$ 

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#### Summary

- Two personality characteristics related to happiness:
  - Extraversion → BAS → Happiness
  - Neuroticism  $\rightarrow$  BIS  $\rightarrow$  Unhappiness
- Two personality characteristics related to arousal:
  - Sensation seeking
  - Affect intensity
- Two personality characteristics relate to control:
  - Perceived control
  - Desire for control

Based on Reeve (2009, pp. 388-389)

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