Individual cognitions as antecedents of emotional competence and job satisfaction

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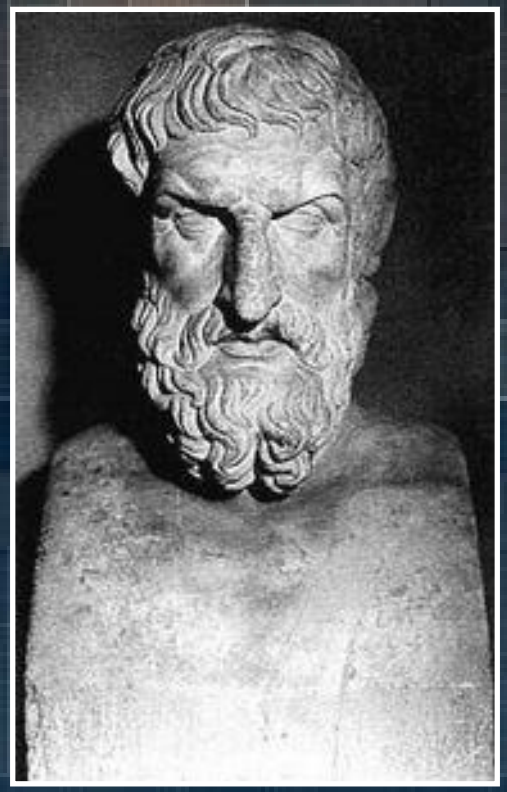


„It is not the things themselves that disturb people but their judgements about those things.“

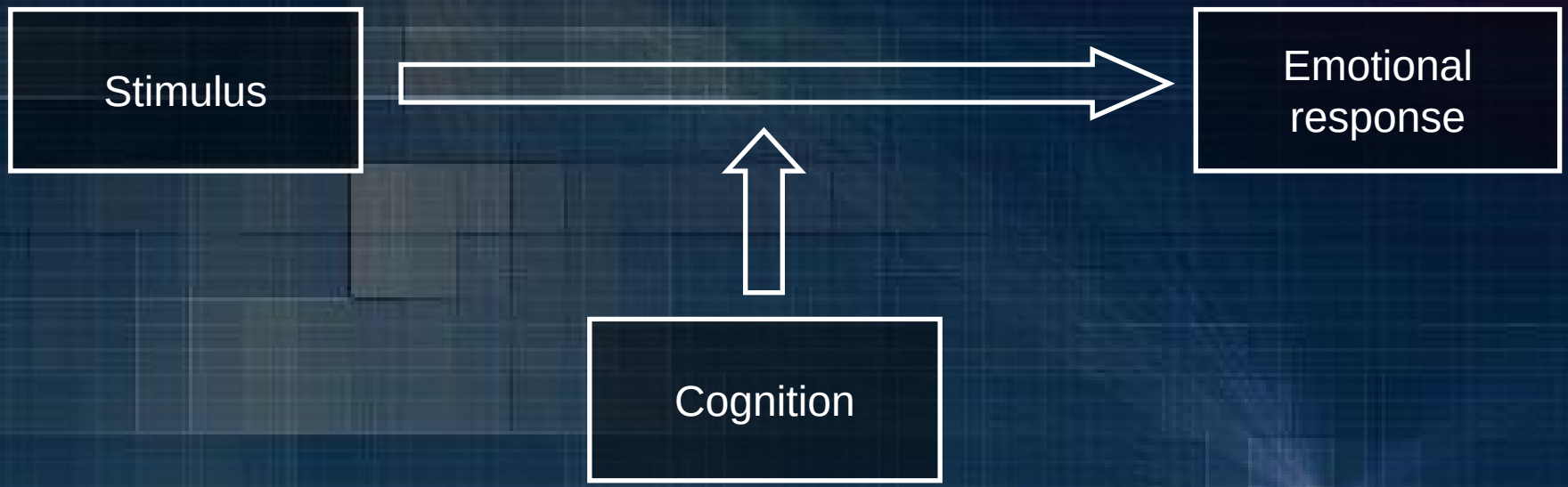
Epictetus (50-138)

Central assumption of appraisal theories:

Emotions are elicited and differentiated on the basis of a person‘s *subjective evaluation* or appraisal of the personal significance of a situation, object, or event on a number of dimensions or criteria.

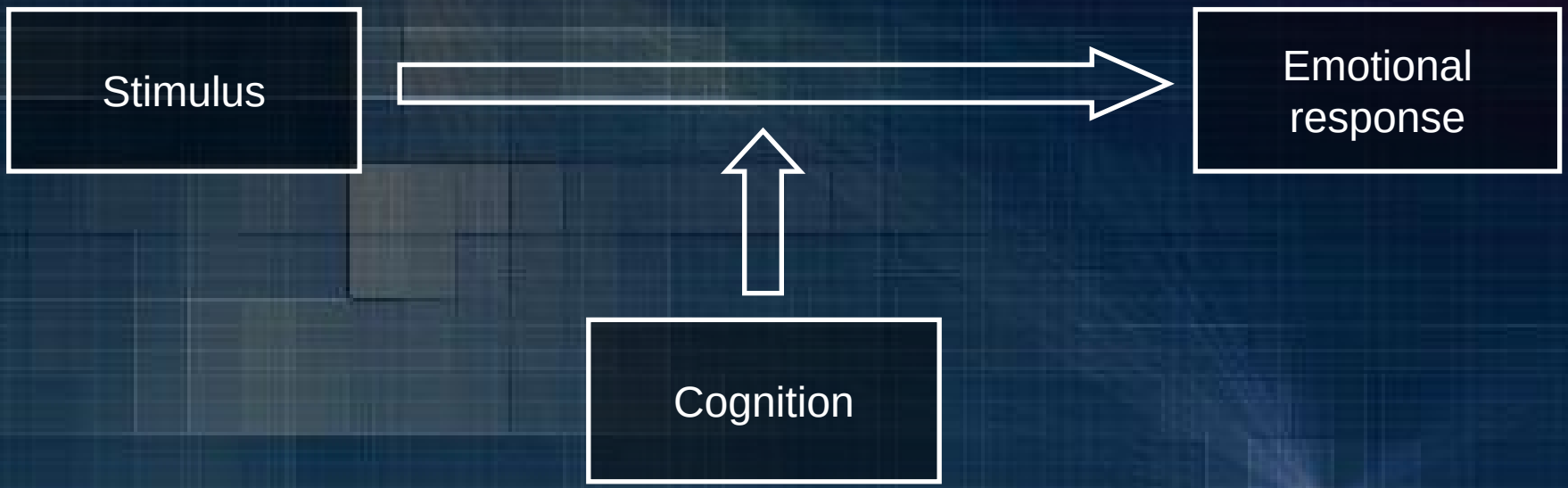
Scherer (1999)

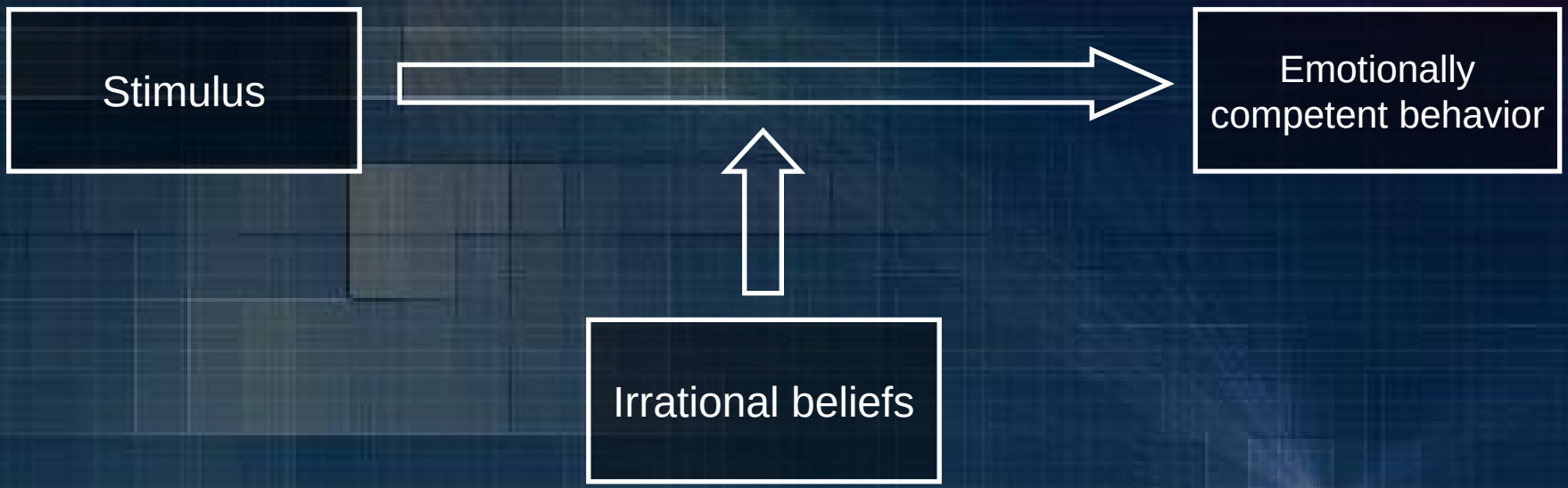
In short: Cognitions about stimuli *determine* emotional reactions to these stimuli.

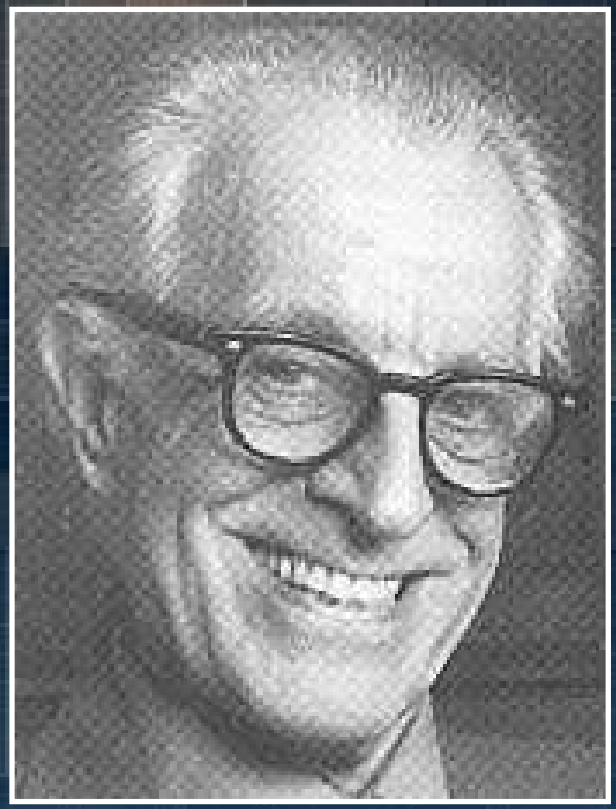


What‘s new here:

1. We want to look at a *special kind* of cognitions, namely **irrational beliefs**.
2. We argue: Some aspects of these emotional reactions can also be classified as aspects of **emotional competence** (e.g., emotion control)


Stimulus
Emotional response
Cognition


Stimulus
Emotionally competent behavior
Irrational beliefs



„Irrational beliefs significantly contribute to or cause emotional and behavioral disturbances.“

Albert Ellis (*1913)

Founder of Rational-Emotive-Behavior Therapy (REBT)

What are irrational beliefs?

Characteristics of irrational beliefs:

- Rigid
- Unrealistic
- Illogical
- Absolutistic
- Not falsifiable
- Include valuation of the person

A central irrational belief:

I absolutely have to be successful, otherwise I am a worthless person.

(Achievement situations)

Another irrational belief (Ellis collected 12):

You have no control over your emotions and you are not responsible for your feelings.

(Emotional control)

The modification of these linked irrational ideas is the central aspect of Rational-Emotive-Behavior Therapy (REBT)

And it works!

Engles, G. I., Garnefsky, N & Diekstra, F. W. (1993). Efficacy of rational-emotive therapy: A quantitative analysis. Journal of Consulting and Clinical Psychology, 6, 1083-1090.

Grawe, K., Donati, R. & Bernauer, F. (1994). Psychotherapie im Wandel. Von der Konfession zur Profession. Göttingen: Hogrefe.

Lyons, L. C. & Woods, P. J. (1991). The efficacy of rational emotive therapy: A quantitative review of the outcome research. Clinical Psychology Review, 11, 357-369.

Summary:

- Cognitions are determinants of emotional reactions, i.e. emotional experience and emotion management (confirmed)
- Emotional control is a central aspect of emotional competence/intelligence (definition/confirmed)
- Irrational beliefs as specific cognitions are supposed to lead to reduced emotional control (theoretically postulation/no test so far)

Assumptions:

- Irrational beliefs might be connected with reduced emotional competence
- Irrational beliefs might have an explanatory value in explaining individual differences in emotional competence.

Hypotheses:

1) When confronted with the same events irrational beliefs should result in reduced emotional competence whereas rational beliefs should foster emotional competence (tested in experimental scenario study [1])
2) Irrational beliefs should be associated with reduced emotional competence (tested in real-life correlational study [2])

Study 1

- Subjects: 113 persons (80 female, 33 male, average age of 31.2 years, ranging from 15 to 64)
- Method: Scenario studies using stimulus persons (placed in organizational context)

Procedure:

- Respondents received three scenarios
- In every scenario the two stimulus persons were in identical situations:
  - Promotion (+)
  - Failure in constructing prototype (-)
  - Failing to manage team (-)
- **IV**: Only difference between stimulus persons: Rational vs. irrational beliefs

- **DV** (1+2): **Perception** and **modification** of emotional states based on
  - individual (other)
  - individual (self)
  - group level
- **DV** (3): **Identification** of the respondent with stimulus persons
- **Additionally**: Assessment of respondent's **job satisfaction** (Relevant aspect of rational thinking and emotional intelligence)
- Assessment: 11-point rating scales

	Perception		Modification	
	Rational	Irrational	Rational	Irrational
Situation 1: Promotion (individual emotions)	5.90	4.80	7.10	3.72
	t(111) = 2.59 p < .05 d = 0.25		t(111) = 10.30 p < 0.001 d = 0.97	
Situation 2: Prototype construction (own emotions)	6.83	3.40	7.95	2.70
	t(112) = 10.71 p < .001 d = 1.01		t(110) = 22.38 p < 0.001 d = 2.12	
Situation 3: Teamwork (group emotions)	7.00	3.33	7.43	2.71
	t(111) = 10.44 p < .001 d = 0.98		t(110) = 13.79 p < 0.001 d = 1.30	
Overall	6.58	3.83	7.28	2.93
	t(112) = 10.23 p < .001 d = 0.97		t(112) = 18.11 p < 0.001 d = 1.70	

Effect size (Cohen, 1988): d = 0.20 (small), d = 0.50 (medium) und d = 0.8 (large)

Identification and job satisfaction:

- The two [aggregated] indicators of identification (rational vs. irrational) correlated negatively (r = -.63, p < .001).
- Both variables correlated significantly (p < .005) with respondent's work life satisfaction:
  Identification with the irrational person: r = -.28
  Identification with the rational person: r = .29.

Effect size (Cohen, 1988): r = 0.10 (small), r = 0.30 (medium) und r = 0.5 (large)

Conclusion:

- Evidence, that **perception** and **management** of emotional states (on [self/other] individual and group level) as important components of emotional intelligence/competence are perceived to be influenced by irrational beliefs
- A person identifying her/himself with irrational thinking persons is less satisfied in (occupational) life, identification with rational thinking persons corresponds with increased satisfaction

Limitation: Although the use of scenarios is a valid and meaningful method of emotional assessment it does not provide data of real persons!

Study 2

- Subjects: 136 persons (94 female, 42 male; average age of 28.0 years, ranging from 18 to 73)
- Method: Correlational study

Measurement of personal variables:

- **Irrational Beliefs** (**IB**, Försterling & Bühner 2003, 6 Items)
- **Emotional Competence inventory** (**ECI**, Boyatzis, Goleman & Rhee, 2000, 72 items)
- **Emotional intelligence Scale** (**EIS**, Wong & Law, 2002, 16 items)

Boyatzis, R. E., Goleman, D., & Rhee, K. S. (2000). Clustering competence in emotional intelligence: Insights from the Emotional Competence Inventory. In R. Bar-On & J. D. A. Parker (Hrsg.). The handbook of Emotional Intelligence: Theory, development, assessment, and application at home, school, and in the workplace (S. 343-362). San Francisco, CA: Jossey-Bass.

Försterling, F., & Bühner, M. (2003). Attributional veridicality and evaluative beliefs: How do they contribute to depression? Journal of Social and Clinical Psychology, 22 (4), 369-392.

Wong, C.-S., & Law, K. S. (2002) .The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. The Leadership Quarterly, 13, 243–274.

Additionally:

Occupational satisfaction (OS)

- Identical to study 1: “How satisfied are You overall with your occupational life?”
- Rating scale ranging from 0 (“not at all”) to 10 (“very”)

Reliability:

- **Irrational Beliefs (IB): .63**
- **Emotional Competence inventory (ECI): .93**
  (relevant subscale [self management]: .80)
- **Emotional intelligence Scale (EIS): .82**
  (relevant subscale [regulation of emotion]: .88)

Tumasjan, A., Welpe, I., Stich, J., Spörrle, M. & Försterling, F. (2005). Empirical competence-testing: A psychometric examination of the German version of the Emotional Competence Inventory [Abstract]. In K. W. Lange, K.-H. Bäuml, M. W. Greenlee, M. Hammerl & A. Zimmer (Eds.), Experimentelle Psychologie. Beiträge zur 47. Tagung experimentell arbeitender Psychologen (p. 206). Lengerich: Pabst Science Publishers.

Welpe, I., Tumasjan, A., Stich, J., Spörrle, M. & Försterling, F. (2005). Emotional Intelligence and its consequences for occupational and life satisfaction – Emotional Intelligence in the context of irrational beliefs [Abstract]. In K. W. Lange, K.-H. Bäuml, M. W. Greenlee, M. Hammerl & A. Zimmer (Eds.), Experimentelle Psychologie. Beiträge zur 47. Tagung experimentell arbeitender Psychologen (p. 221). Lengerich: Pabst Science Publishers.

Results: Correlations

Overall scales:

ECI – EIS: .41, $p < .01$ (EIS always recoded)

IB – ECI: -.21, $p < .05$

IB – EIS: -.19, $p < .05$

Effect size (Cohen, 1988): r = 0.10 (small), r = 0.30 (medium) und r = 0.5 (large)

Results: Correlations

Subscales:

IB – ECI (self management) : -.23, $\underline{p} < .05$

IB – EIS (regulation of emotion): -.34, $\underline{p} < .01$

Effect size (Cohen, 1988): r = 0.10 (small), r = 0.30 (medium) und r = 0.5 (large)

Results: Correlations

Occupational satisfaction (OS):

IB – OS: -.34, $p < .01$

ECI – OS: .16, $p < .07$ (ns)

EIS – OS: .23, $p < .05$

Effect size (Cohen, 1988): r = 0.10 (small), r = 0.30 (medium) und r = 0.5 (large)

Results: Regression

Occupational satisfaction (OS):

	B	SE B	β	R^2corr
EIS	.48	.28	.16	
ECI	.20	.62	.03	
IB	-.93	.26	-.30**	R^2 = .12

** = p < *.005*

Can these results be explained by **Common method bias (CMB)**?

> "Based on theoretical considerations, one would expect that the measures of Construct A would be correlated with measures of Construct B. However, if the measures of Construct A and the measures of Construct B also share common methods, those methods may exert a systematic effect on the observed correlation between the measures. Thus, at least partially, common method biases pose a rival explanation for the correlation observed between the measures."

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. Journal of Applied Psychology, 88 (5), 879-903.

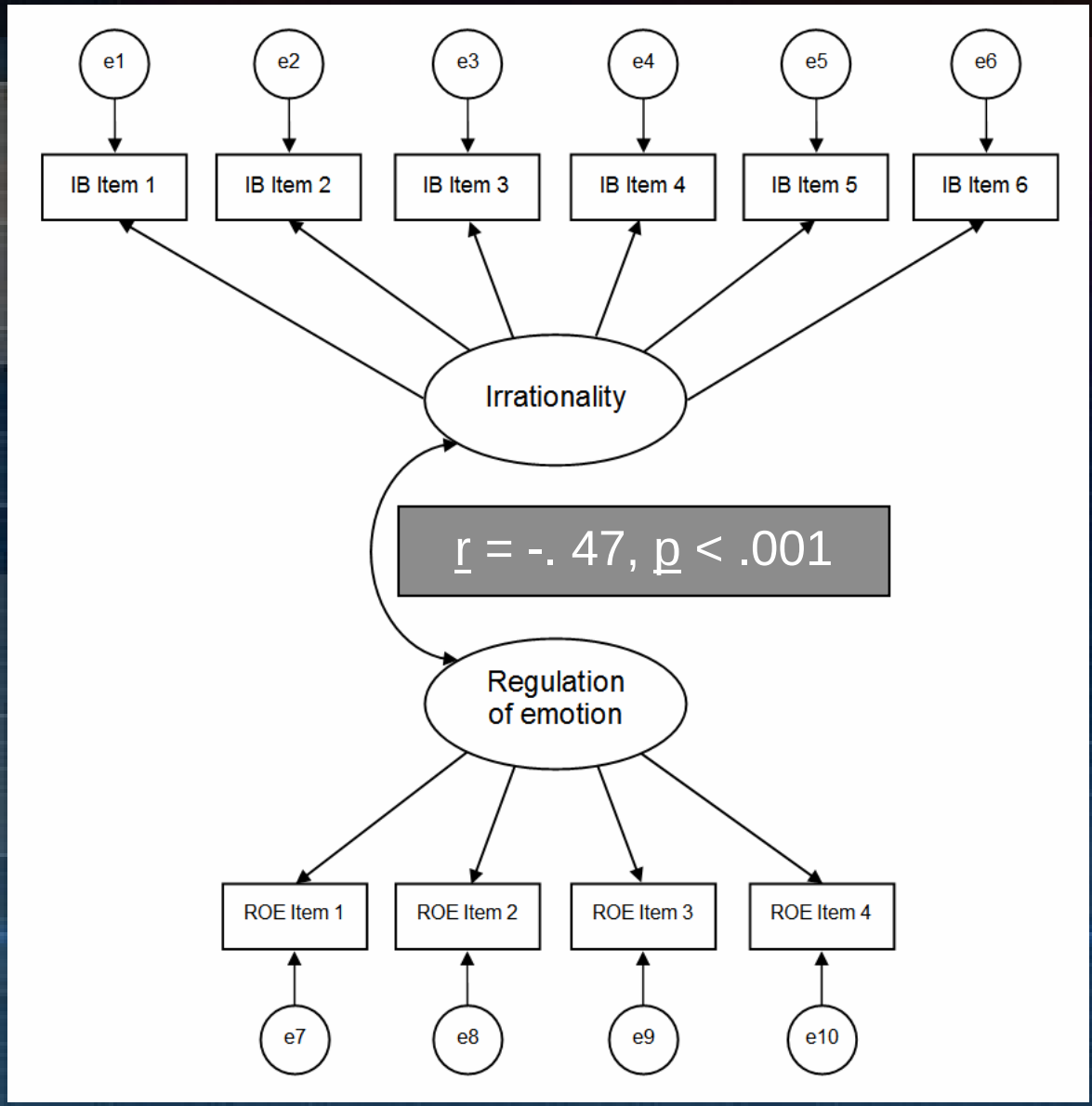
① Standard correlation

IB
(mean value of six items)

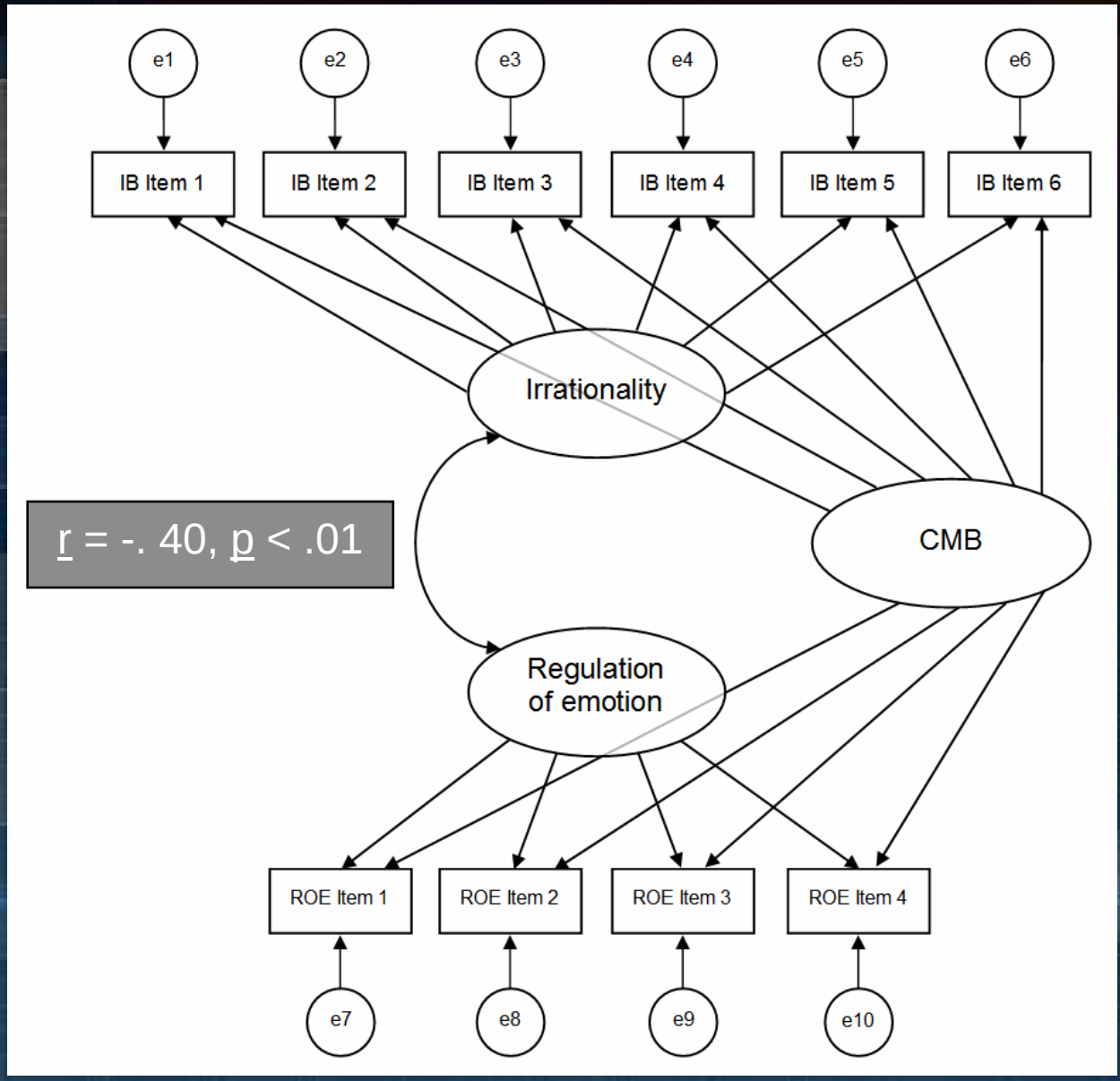
$r = -.34$, $p < .01$

EIS subscale
regulation of emotion (ROE)
(mean value of four items)

② Structural equation modeling



③ Structural equation modeling (+ CMB)

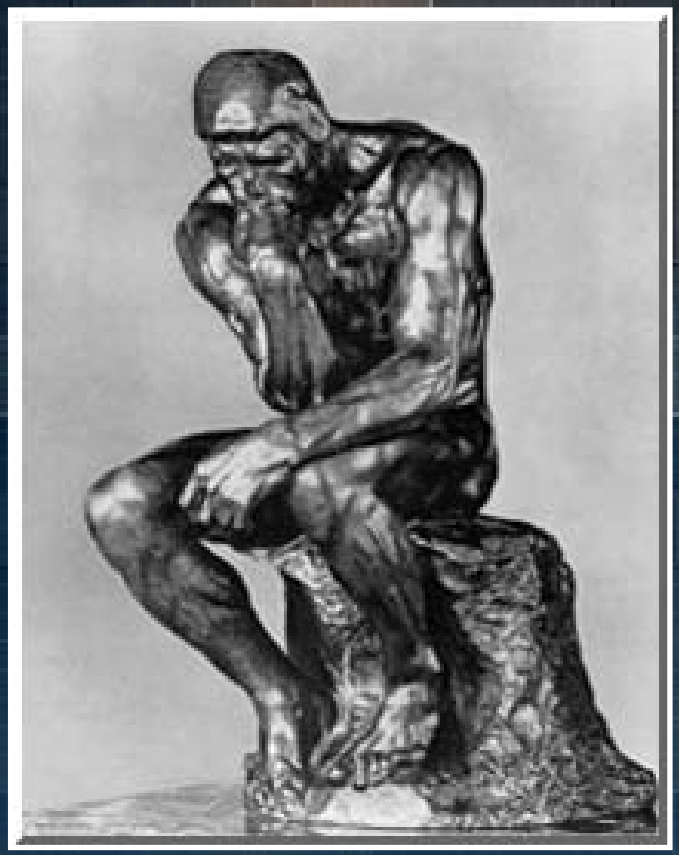


General results of SEM:

- From ① to ②: Obvious increase of correlation due to elimination of reliability problems
- From ② to ③: Slightly reduced correlation due to CMB
- From ② to ③: Increase in model fit (including CMB creates a better representation of the data)
- All correlations reported here remain significant

Conclusions:

- Evidence of an interrelation between emotional control (as a central component of emotional competence) and irrational beliefs
- Emotional competence and irrational beliefs are related with occupational satisfaction; when using emotional competence and irrationality as predictors of satisfaction only irrationality remains significant
- Common method bias cannot offer an adequate complete explanation of these interrelations



Discussion

Final conclusions:

- A connection between irrational cognitions and emotional competence (emotion control/regulation) can be demonstrated.
- Some evidence of cognitions as antecedents of emotional competence.
- Especially irrational beliefs (but also emotional competence) seem to be connected with job satisfaction.
- The use of scenario studies (stimulus person) and real person data did not result in contradicting findings.
- Common method bias cannot offer an adequate complete explanation of these interrelations.

Further research questions:

- Will a reduction of irrational beliefs result in increased emotional competence?
- Are there additional cognitive components as antecedents of emotional competence?
- Why are rational thinking persons more satisfied? Do they actively change their environment or do they just perceive it differently?

An ignorant person expects good and bad to come from externals.

A philosopher expects good and bad to come from himself.

Epictetus

Thank You very much