

What do we think about when we think about psychopathy?

CAPP validation by prototypicality analysis

Helge Andreas Hoff

Knut Rypdal

Mette Kreis (UK) & Hanna Heinzen (Ger)

PROTOTYPE

Best example

Abstract Idea

Standard

PROTOTYPE

Best example
Abstract Idea
Standard



PROTOTYPE ANALYSIS

Similarity to
best example

```
graph BT; A[PROTOTYPE ANALYSIS  
Similarity to  
best example] --> B[PROTOTYPE BIRD  
Wings Flies  
feathers]
```

PROTOTYPE

BIRD

Wings Flies
feathers

**PROTOTYPE
ANALYSIS**

Similarity to
best example



**PROTOTYPE
BIRD**

Wings Flies
feathers



**PROTOTYPE
ANALYSIS**

Similarity to
best example



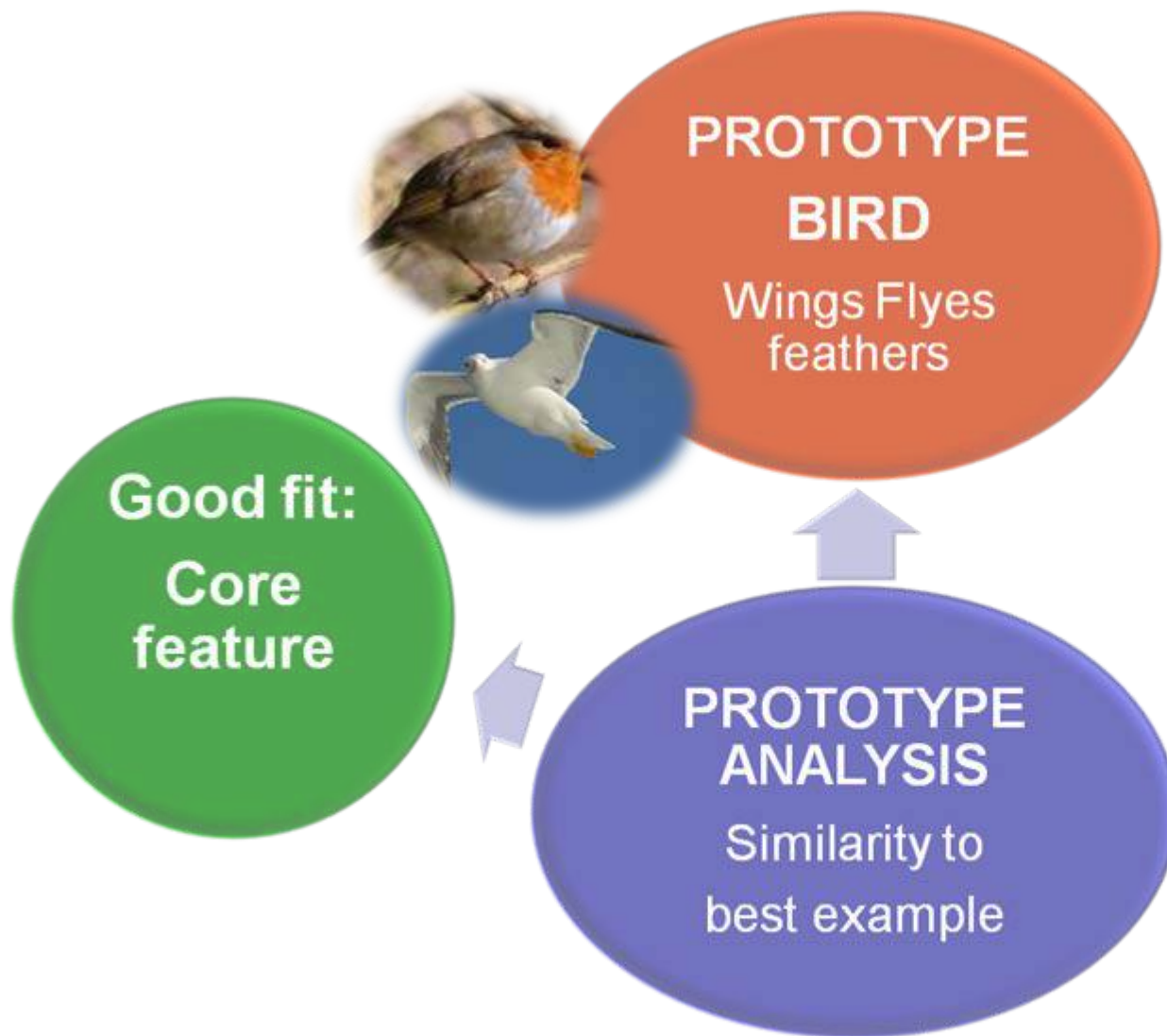
PROTOTYPE BIRD

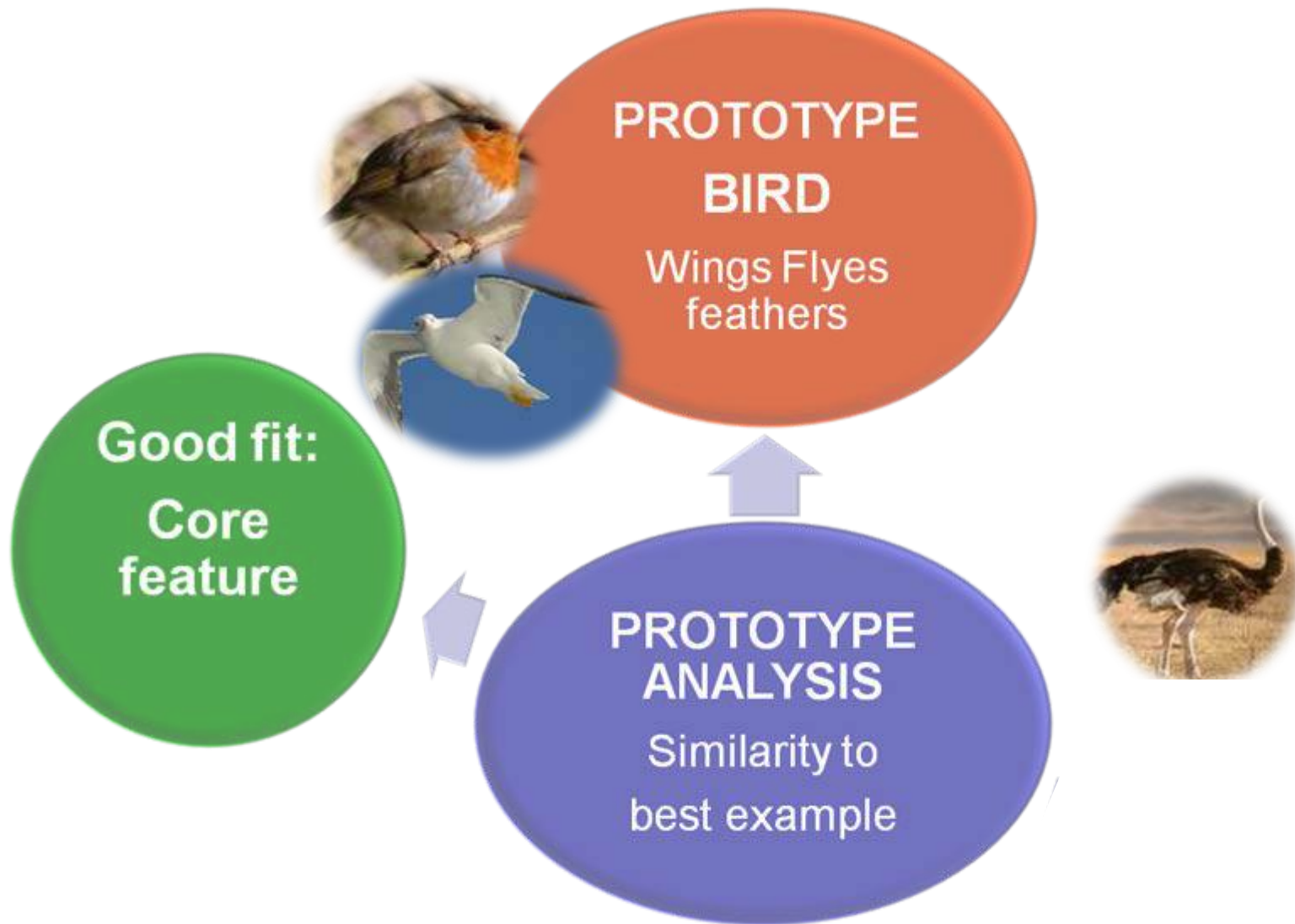
Wings Flies
feathers

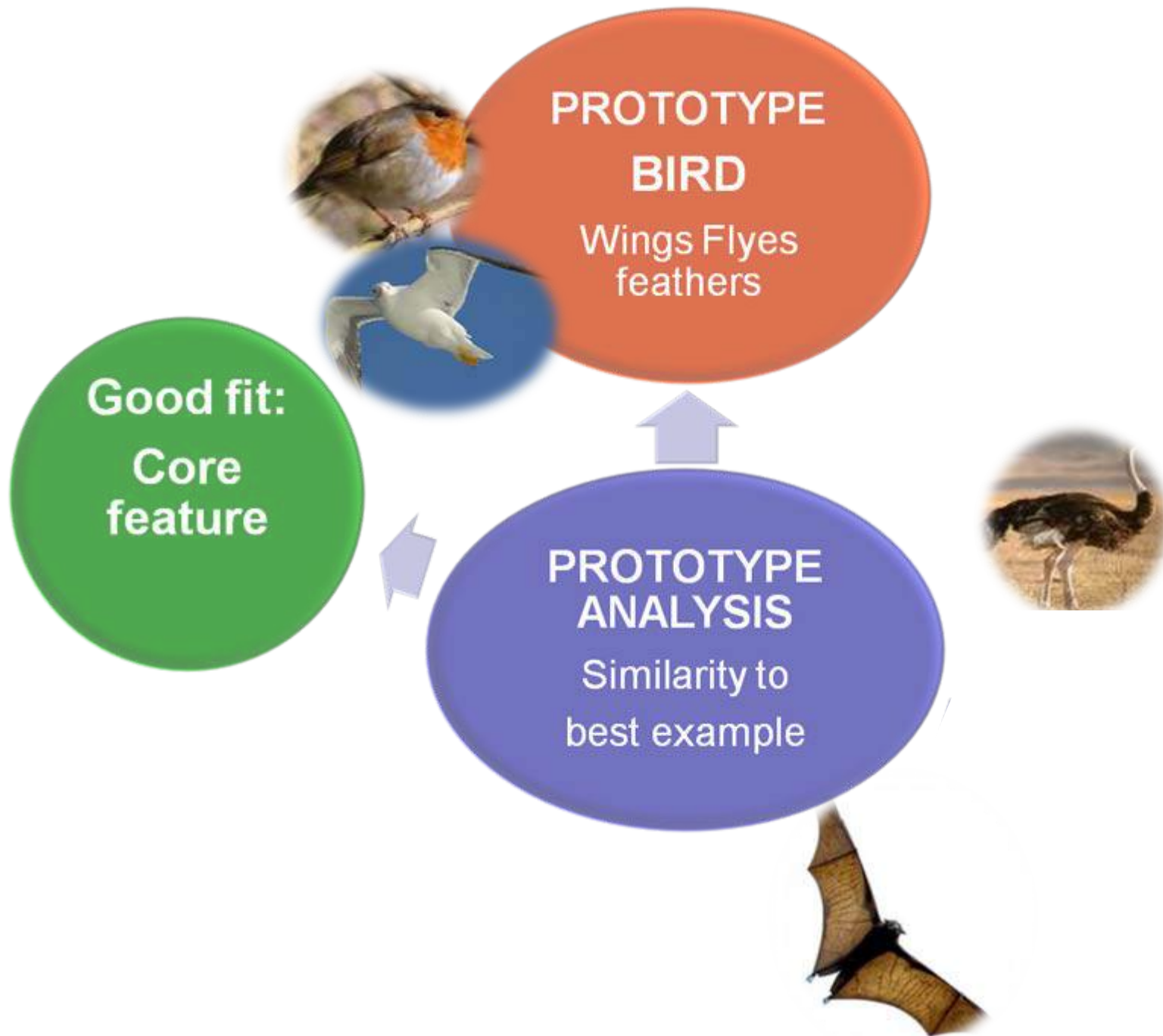


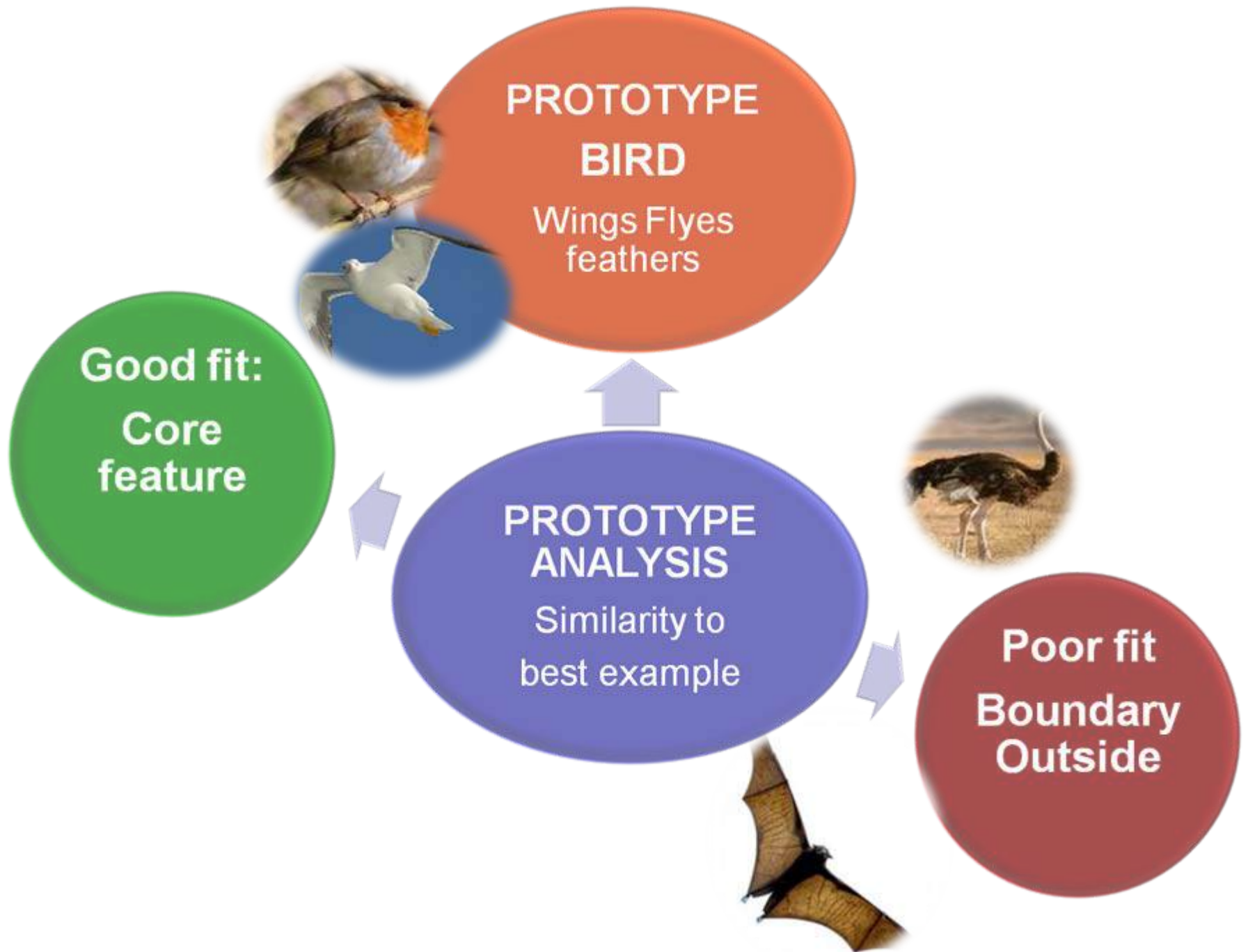
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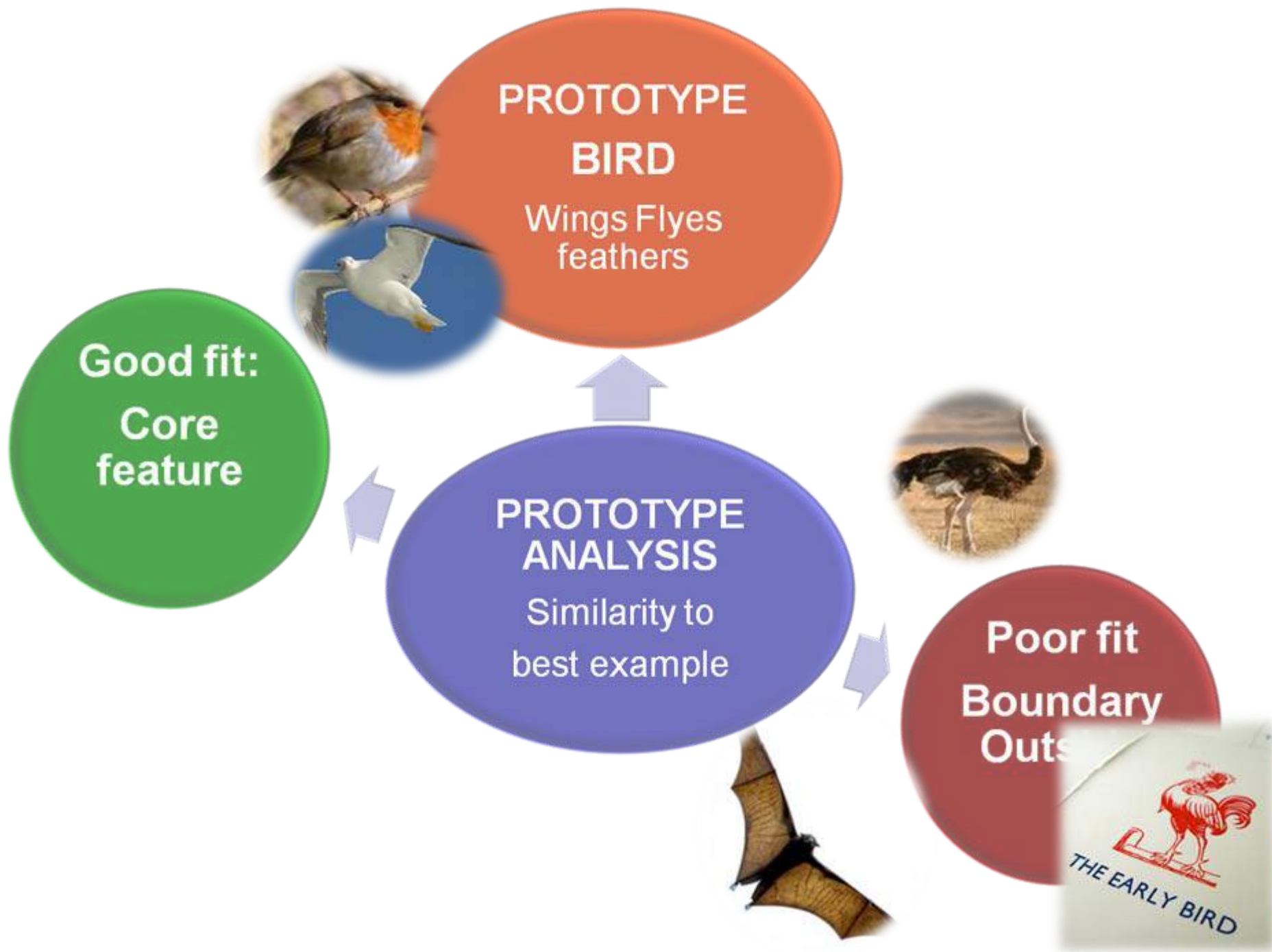
Similarity to
best example



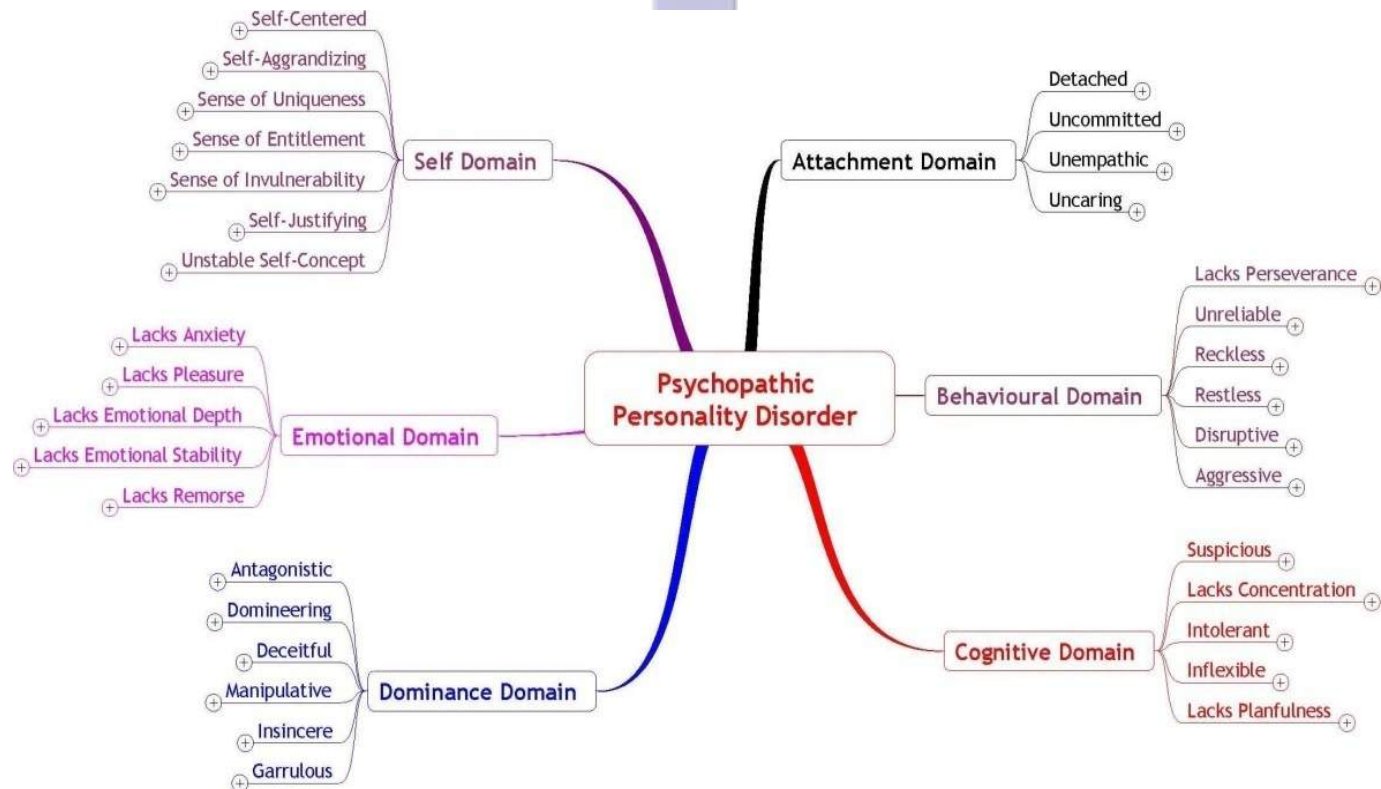


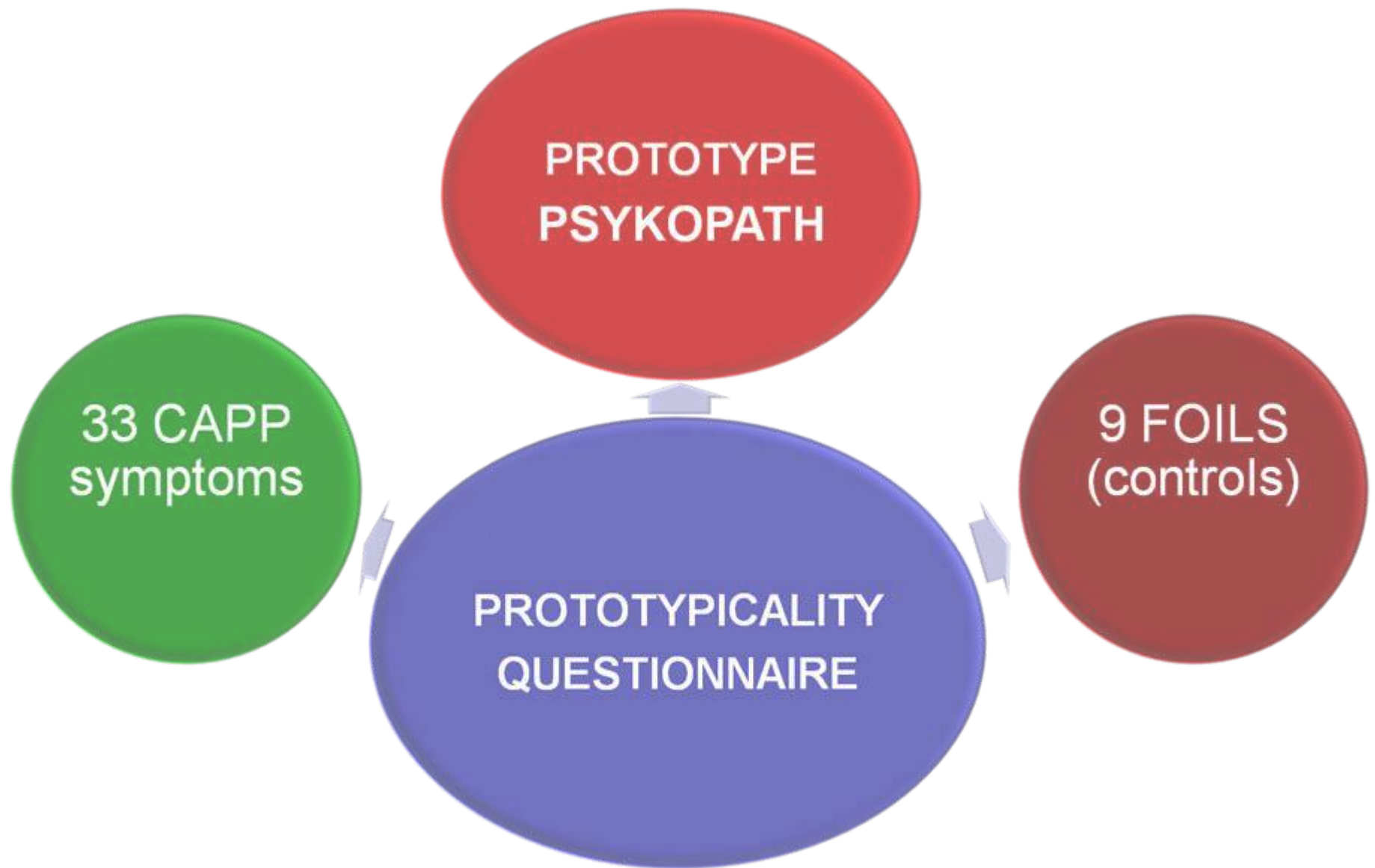


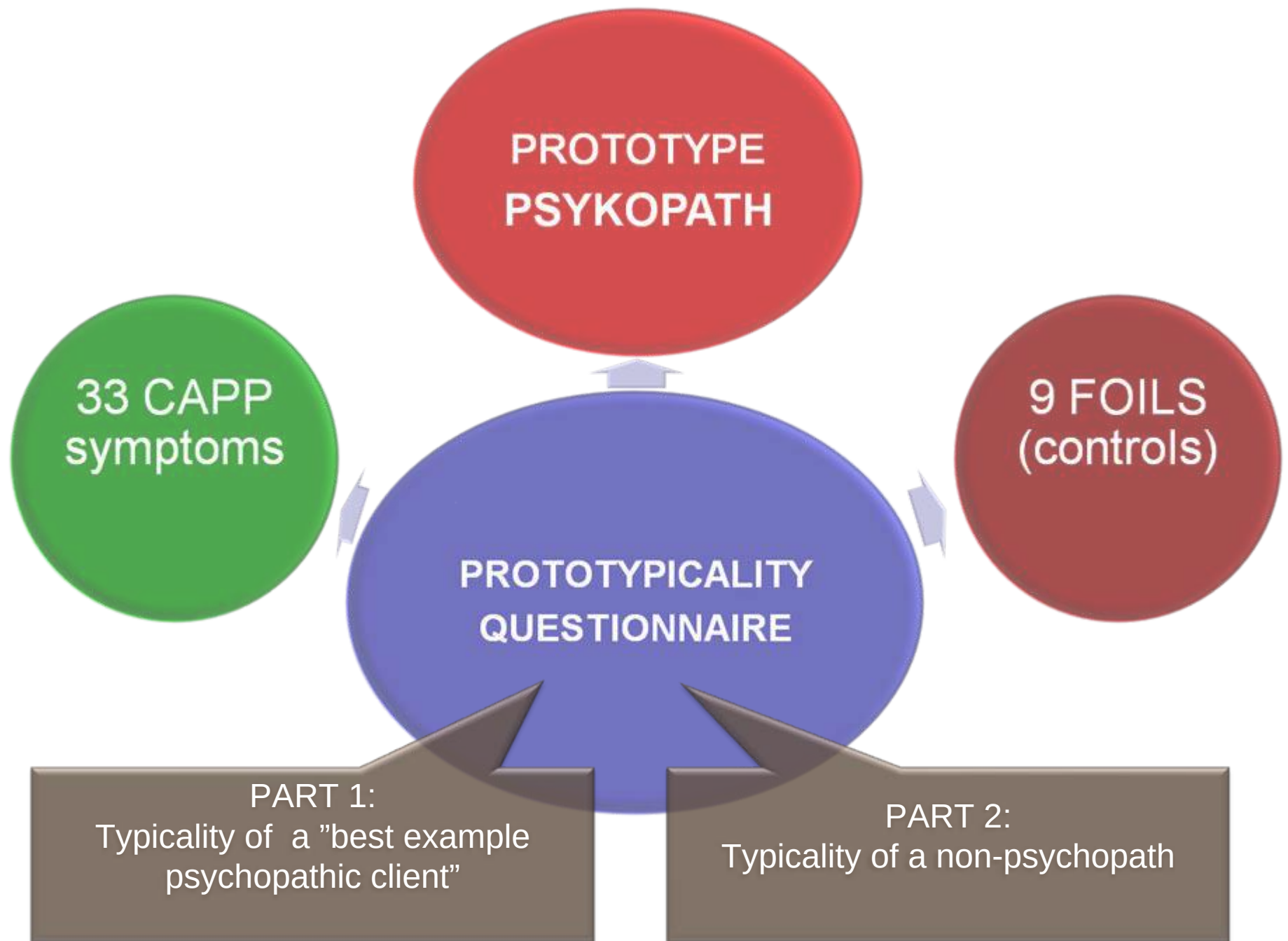


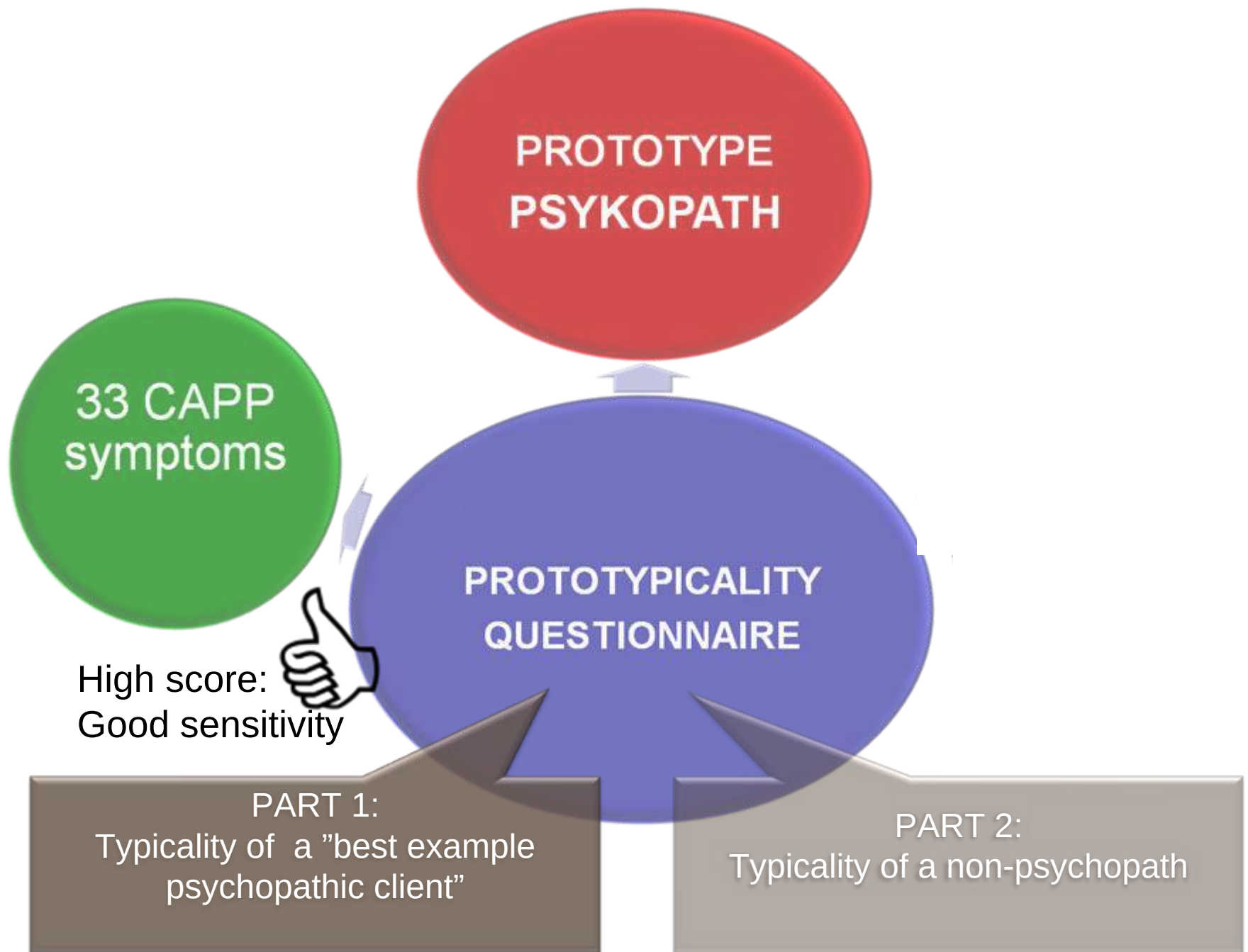


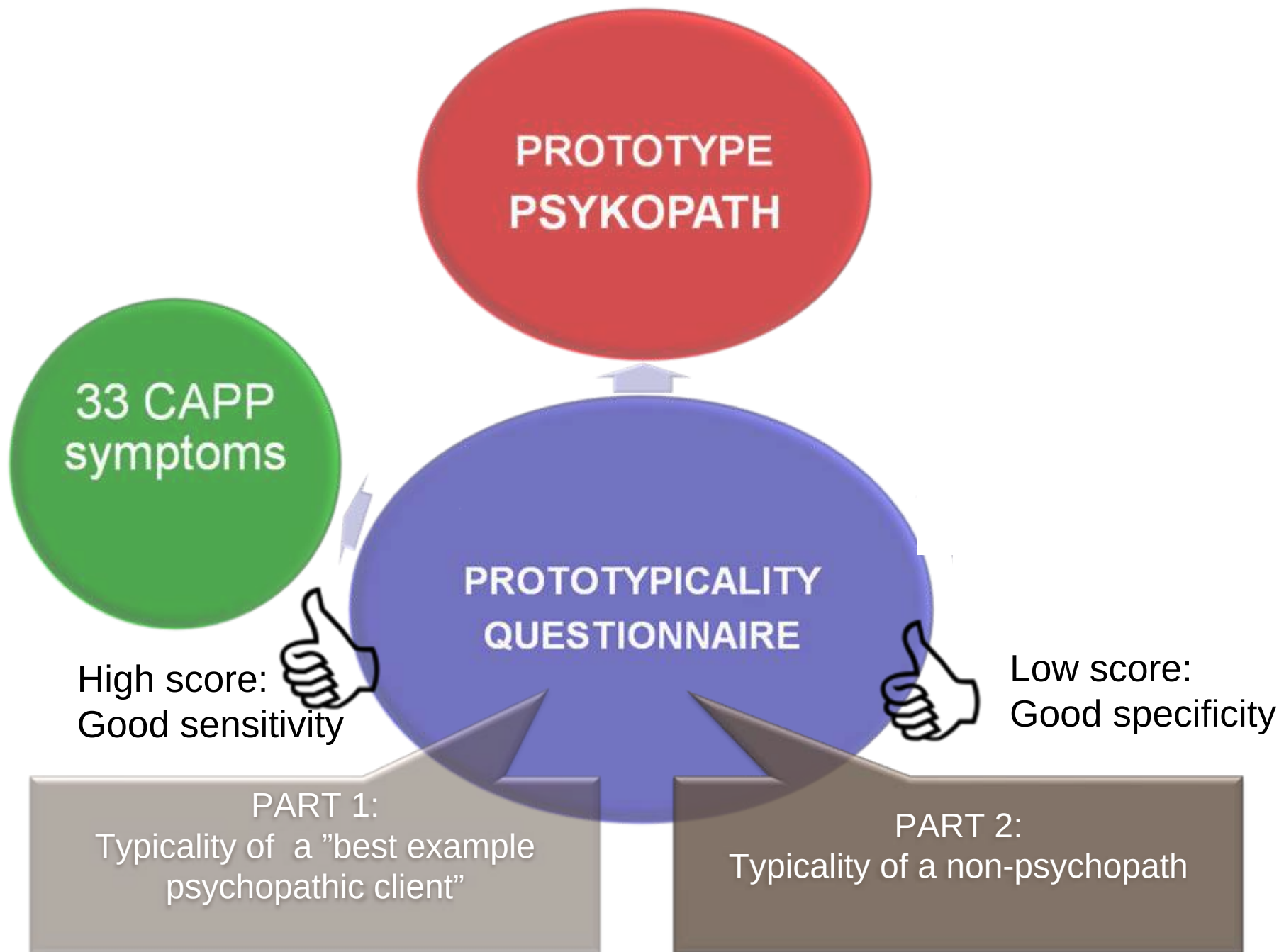
PROTOTYPE PSYKOPATH











Prototypicality studies

1. **Kreis, Cooke, Michie, Hoff & Logan**
 - in press. Journal of Personality Disorders
2. **Hoff, Rypdal, Mykletun & Cooke**
 - in press. Journal of Personality Disorders
3. **Fittkauf, Heinzen, Kreis, & Huchzermeier**
 - Unpublished Master Thesis?



Prototypicality studies

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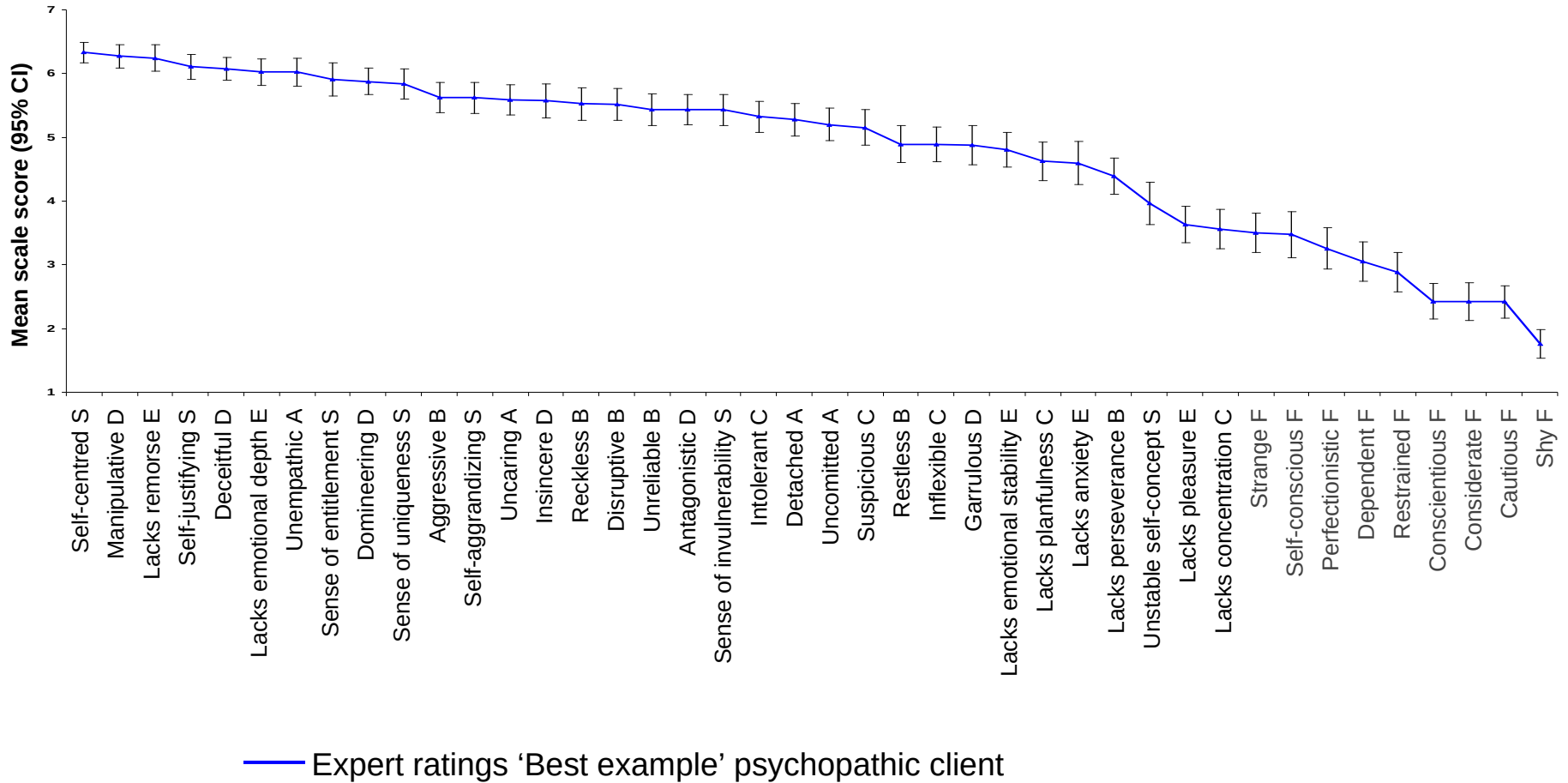
- in press. Journal of Personality Disorders
- N=132



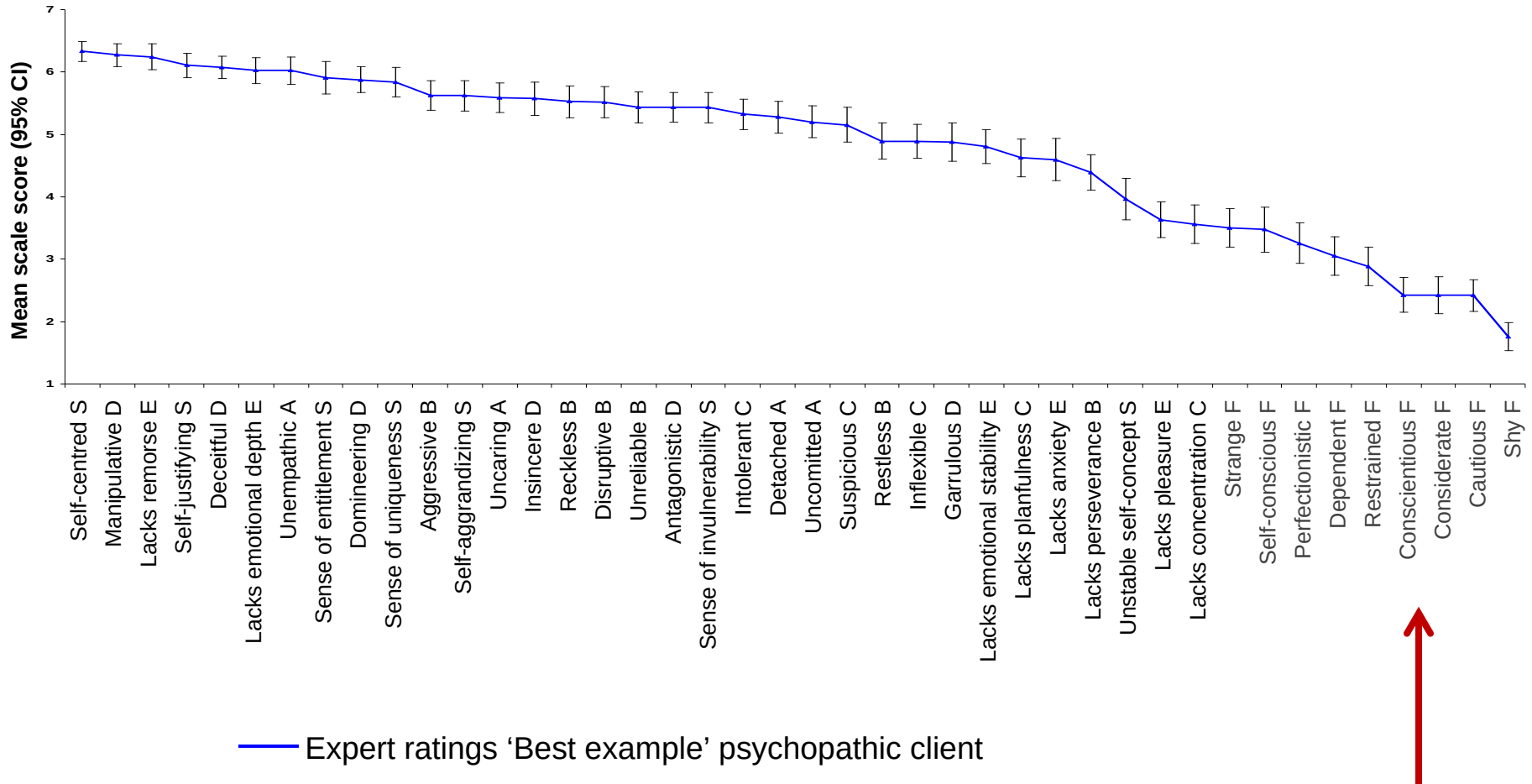
The
Expert's
Mind



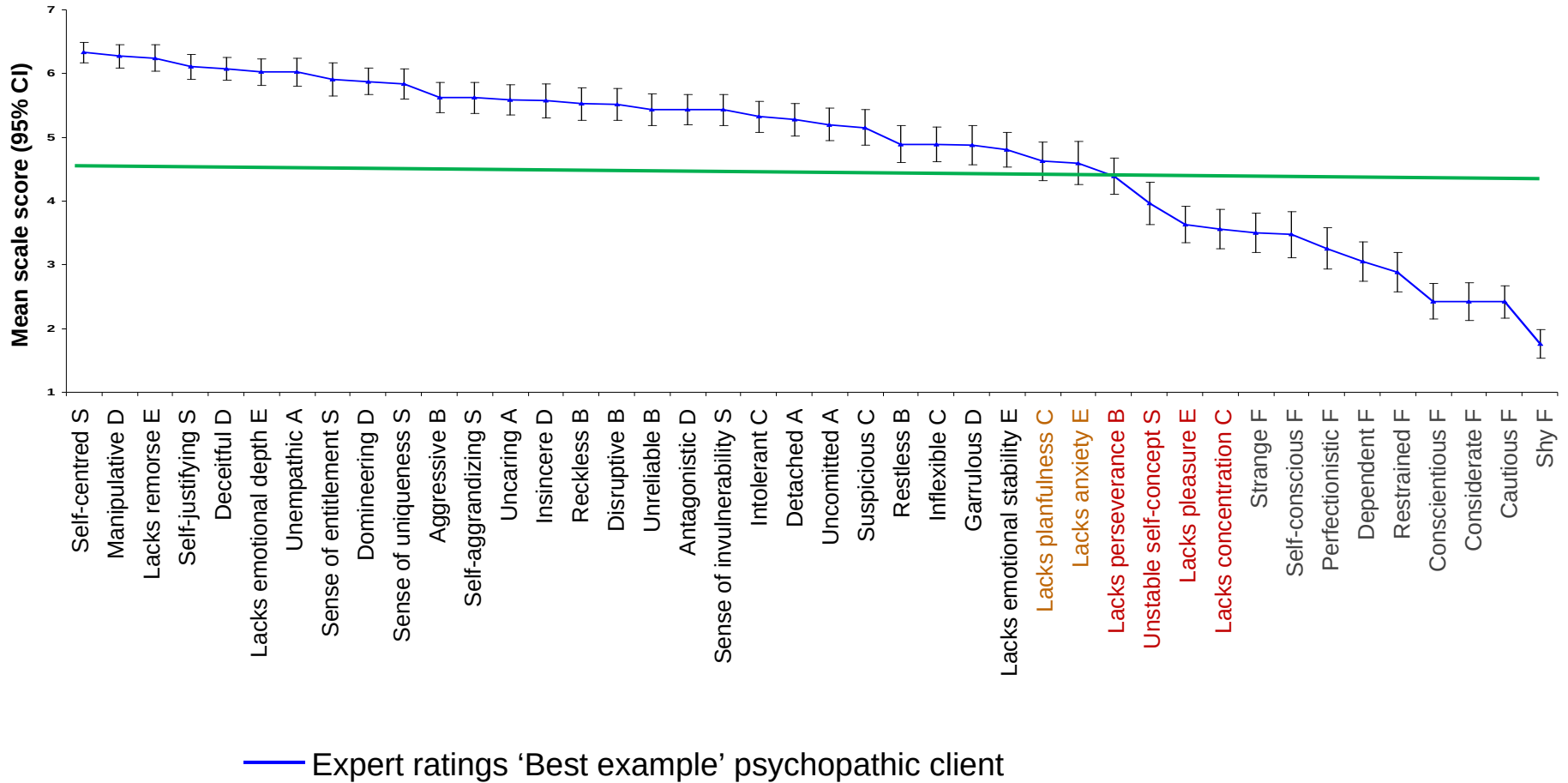
Prototypicality ratings by CAPP symptoms



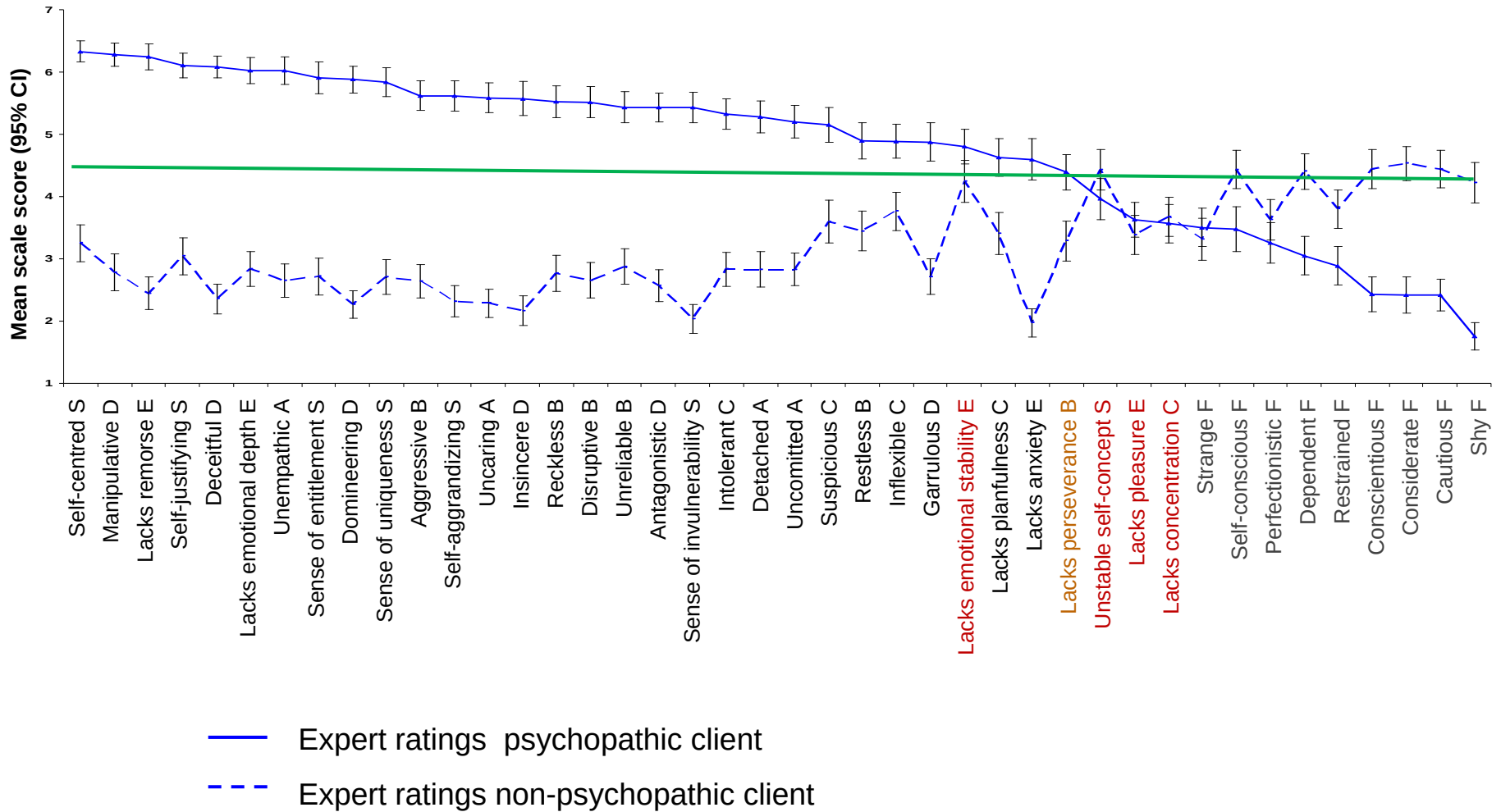
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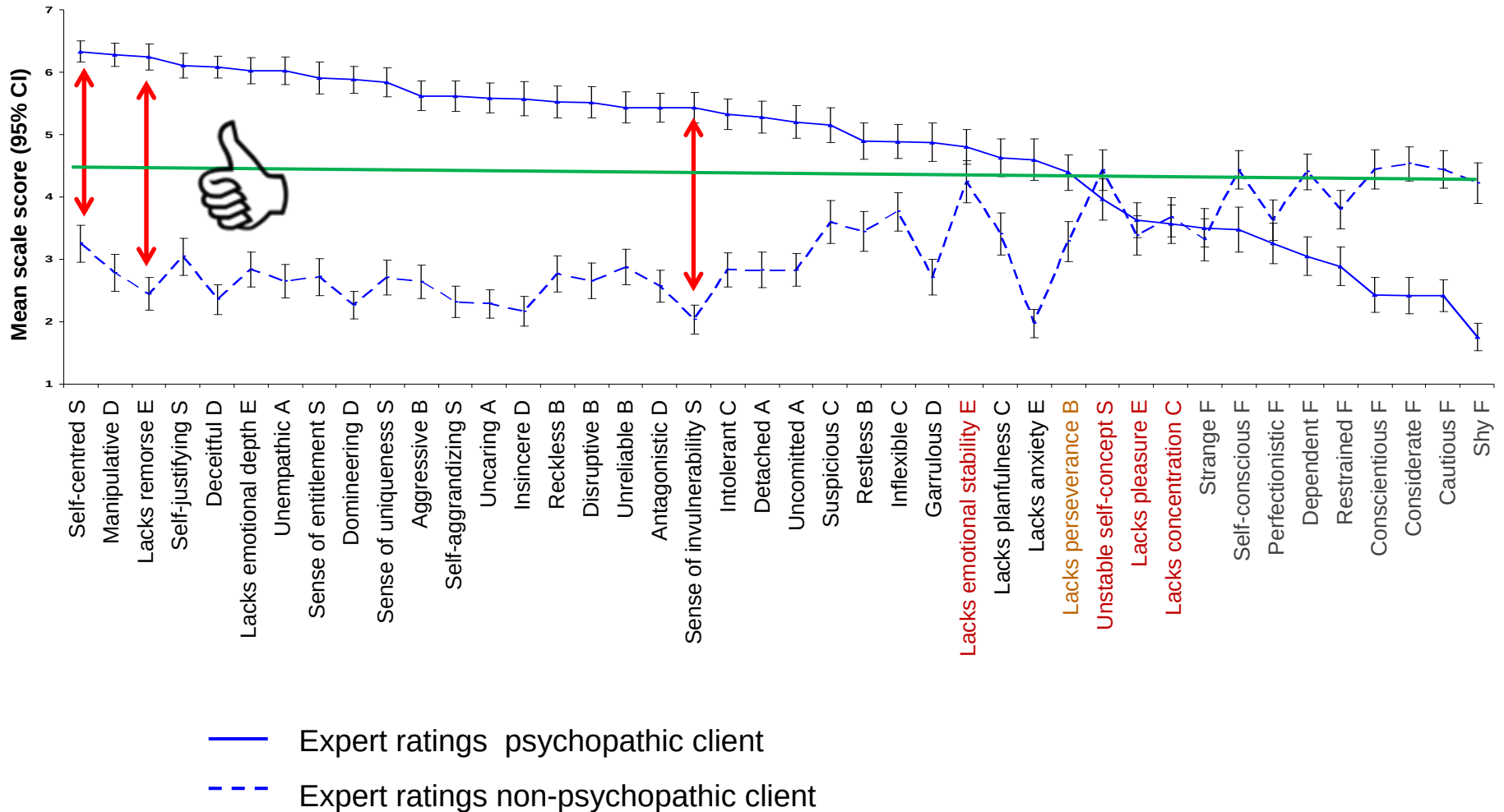
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Prototypicality studies

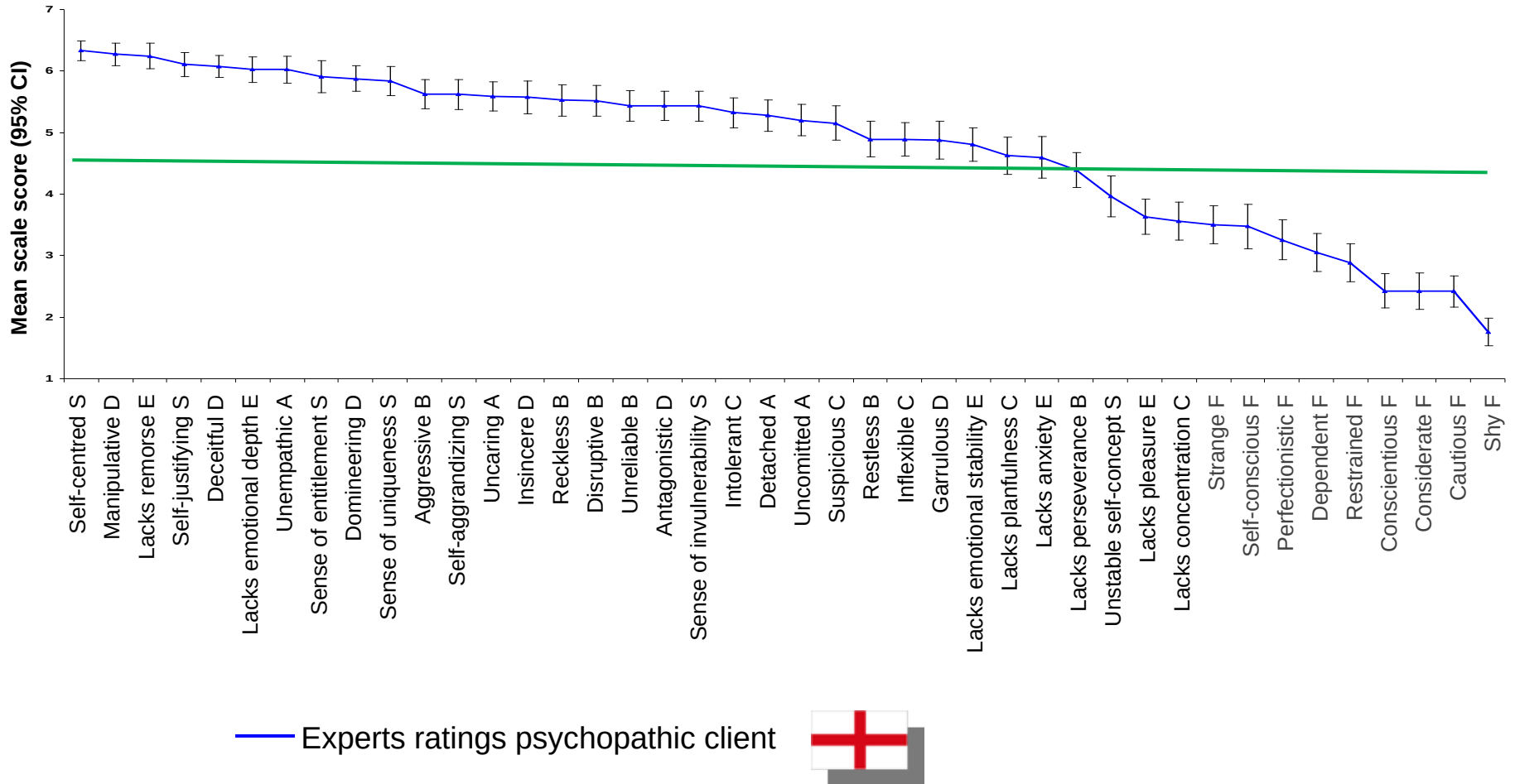
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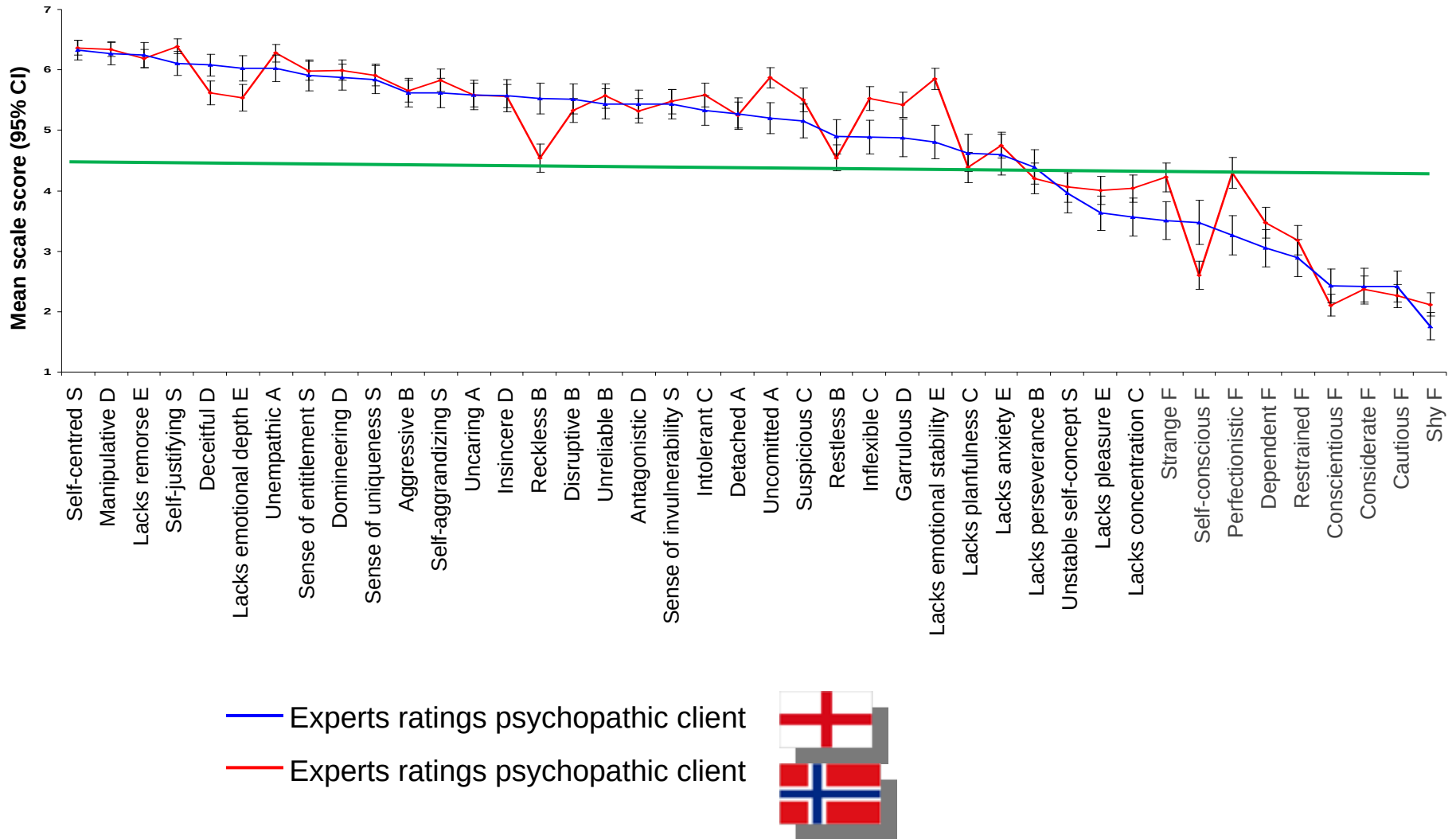
The
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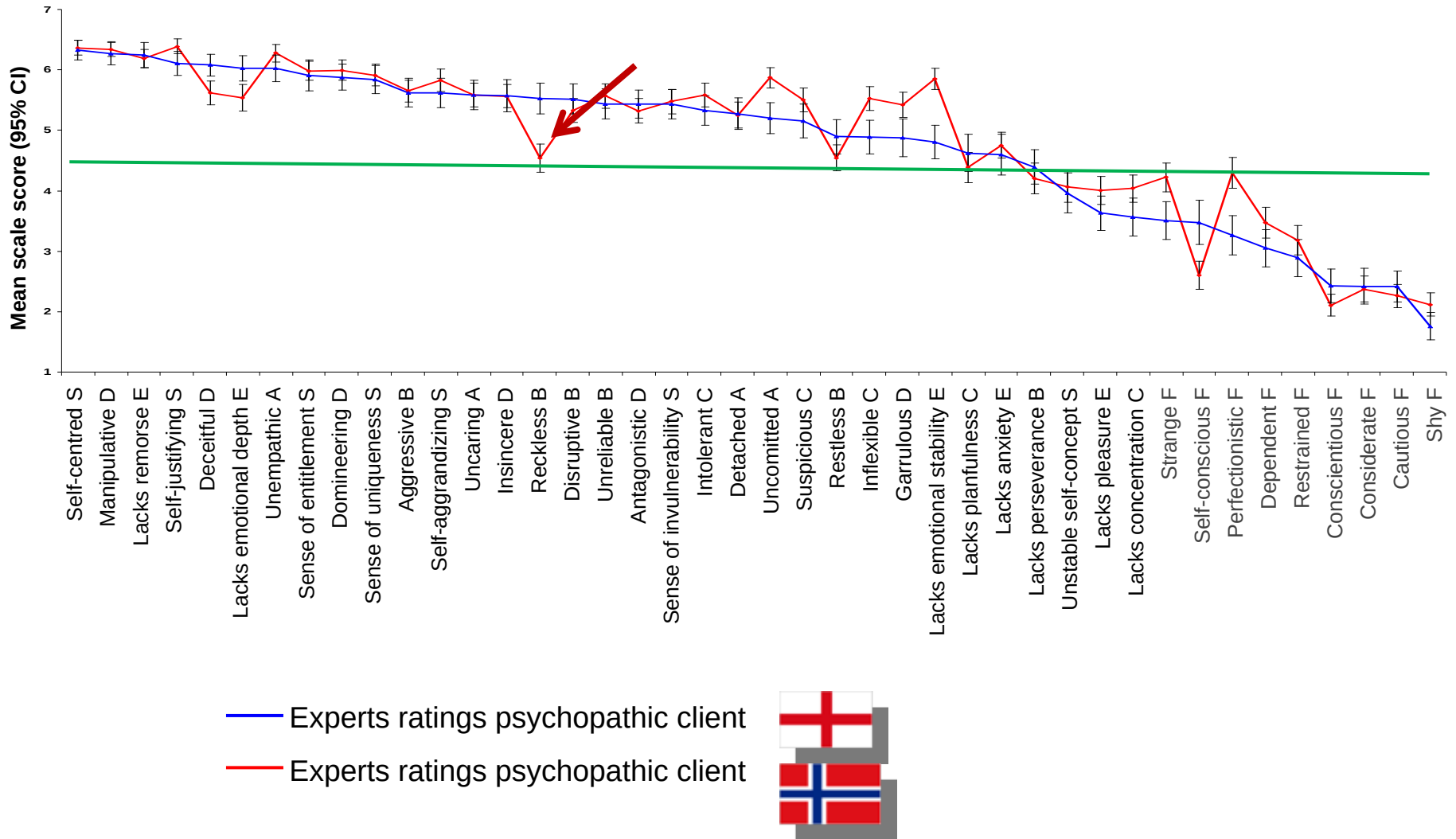
Prototypicality ratings by CAPP symptoms



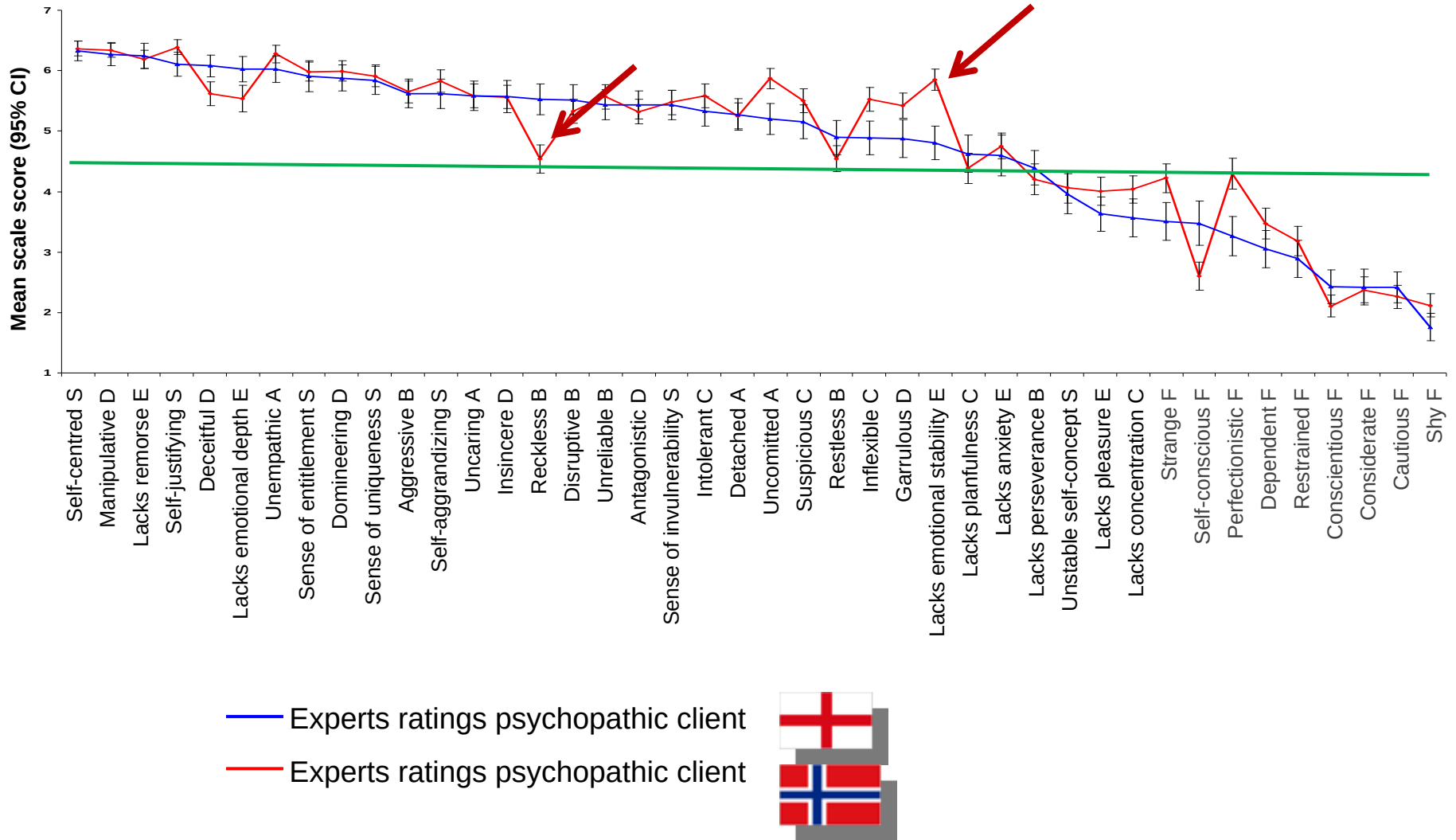
Prototypicality ratings by CAPP symptoms



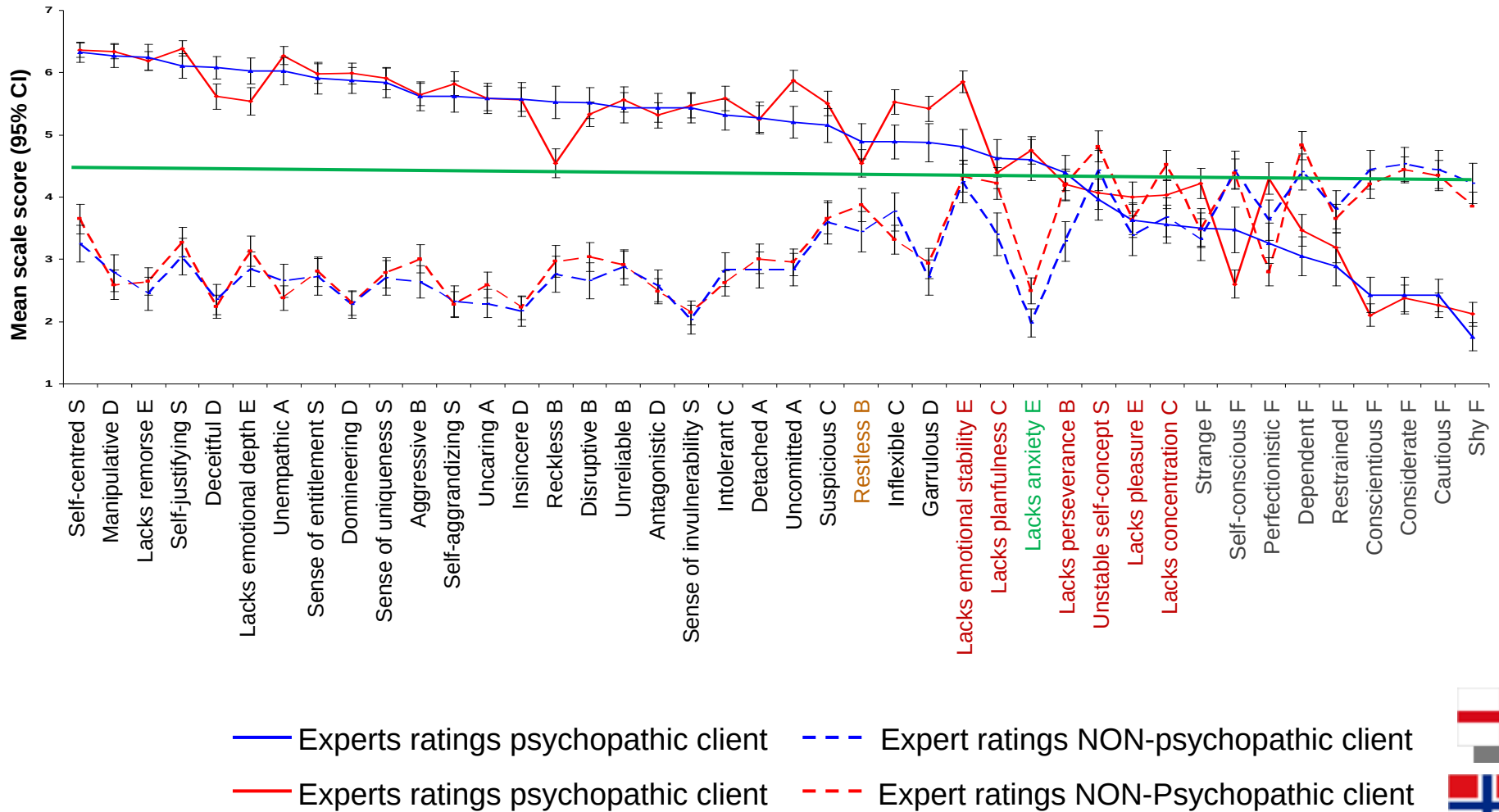
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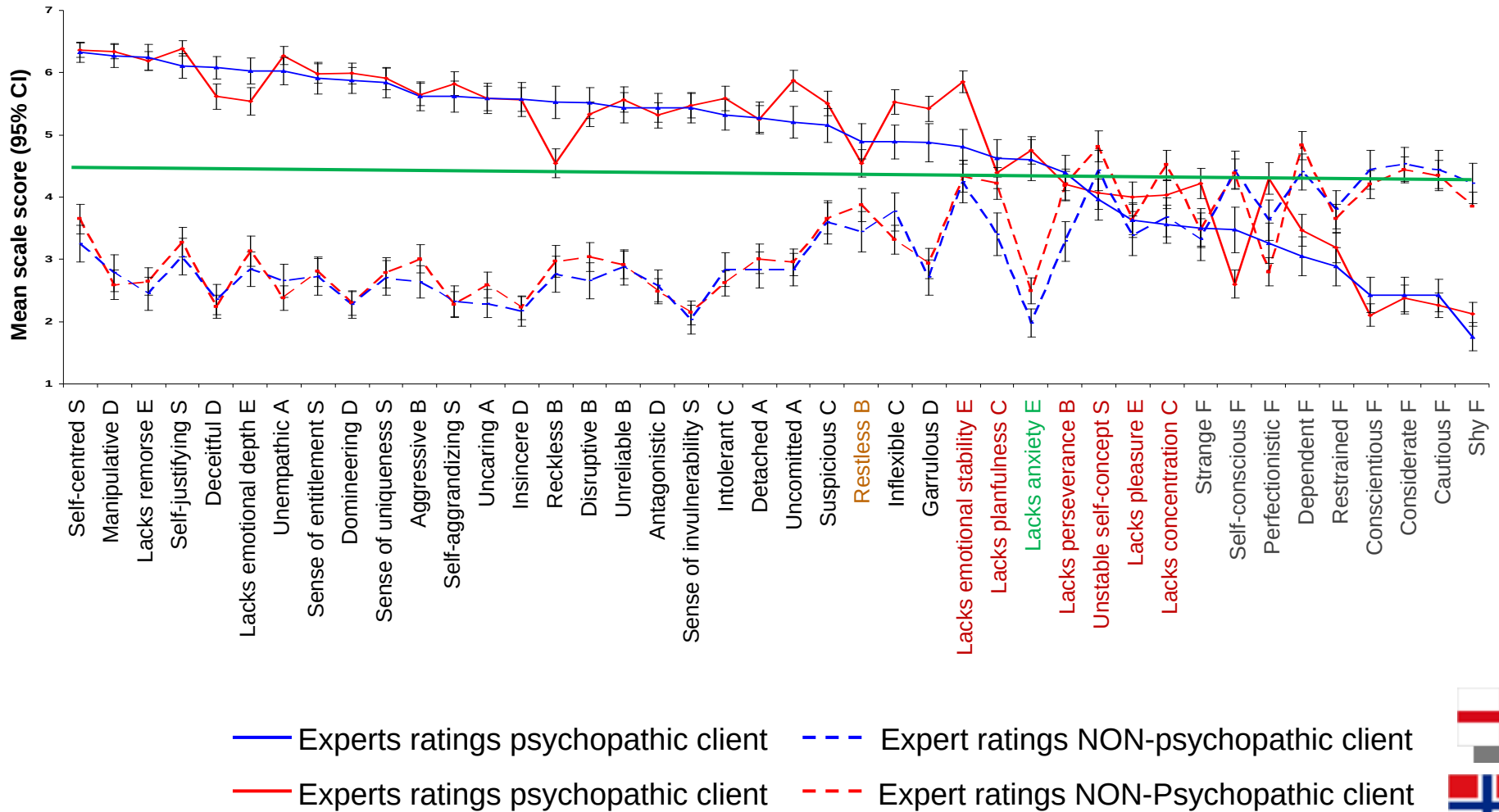
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Prototypicality ratings by CAPP symptoms



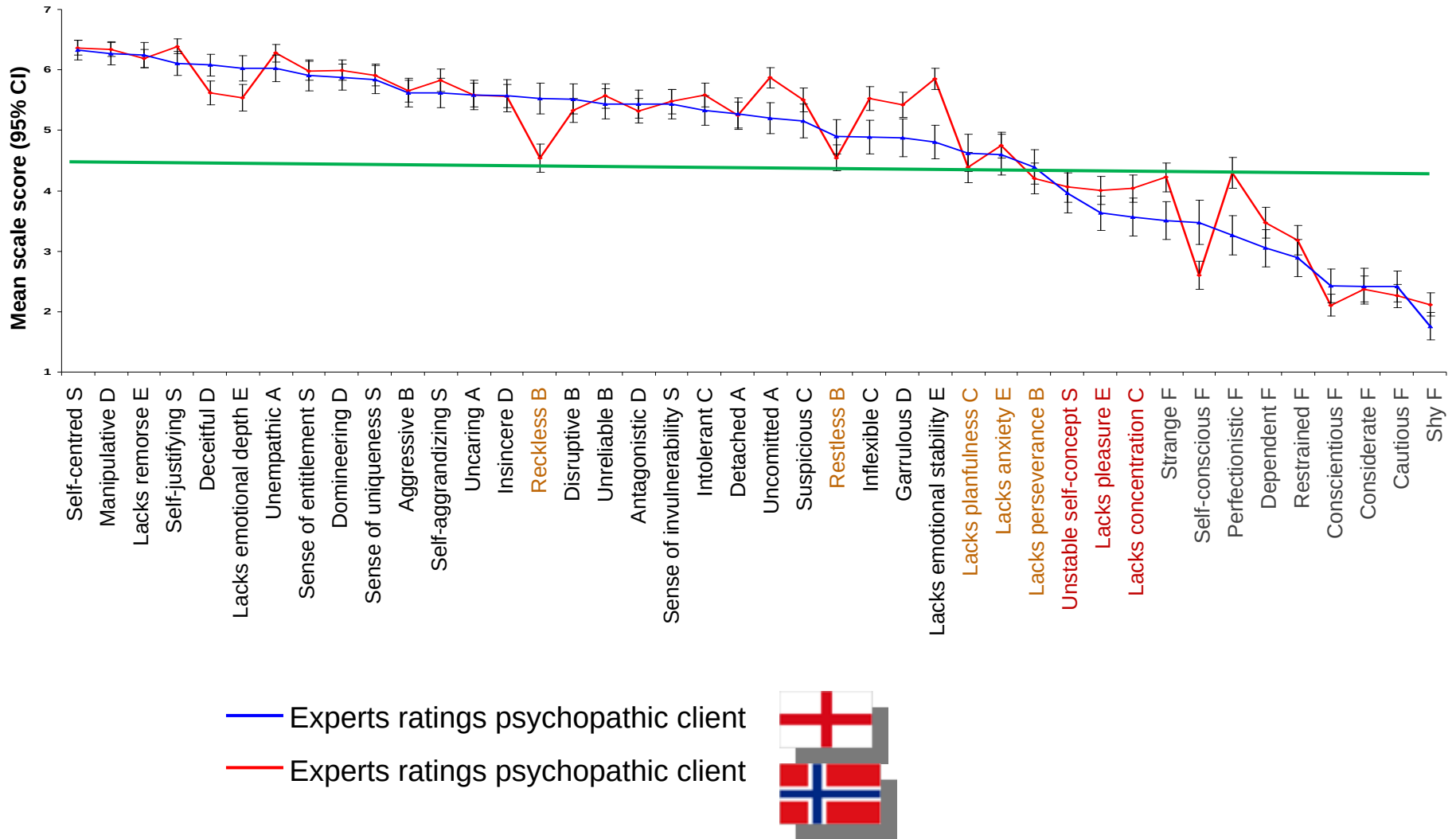
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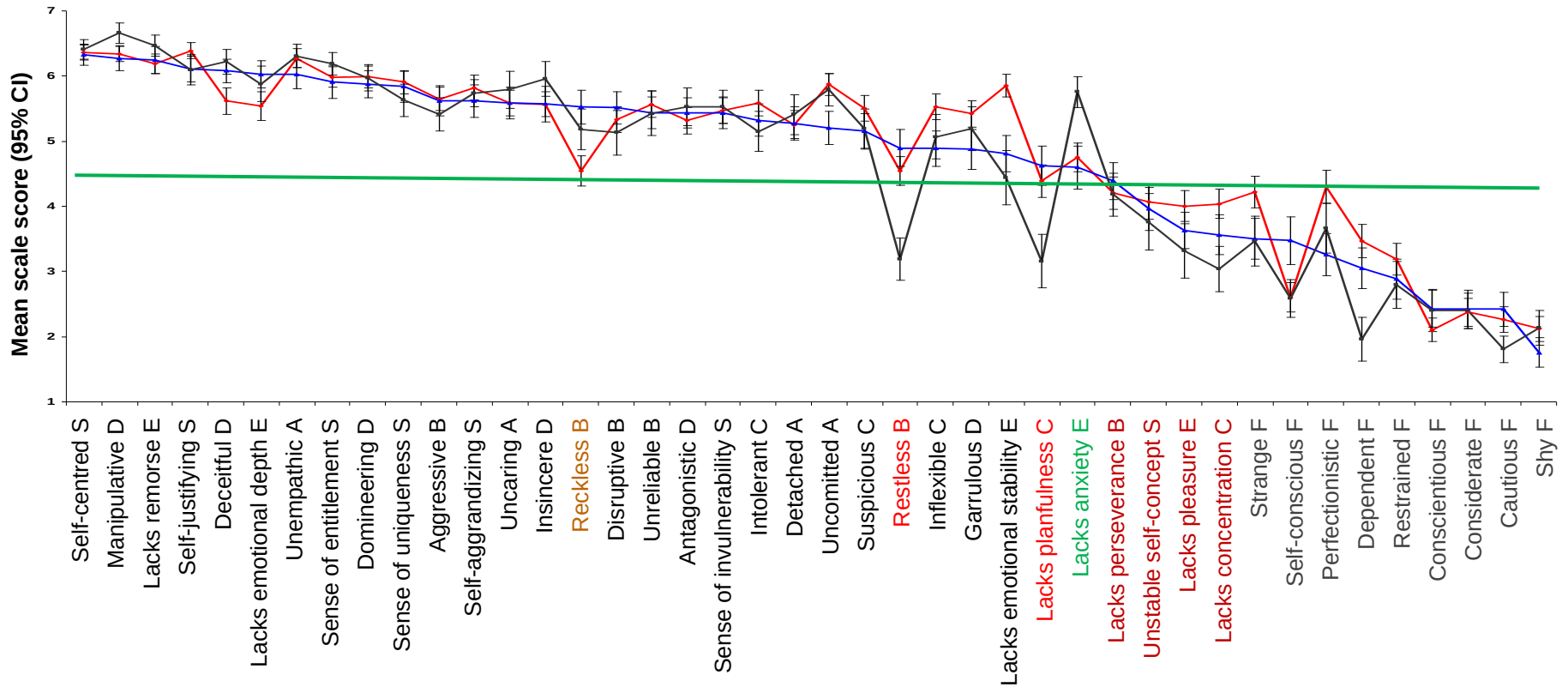


The
Expert's
Mind

Prototypicality ratings by CAPP symptoms



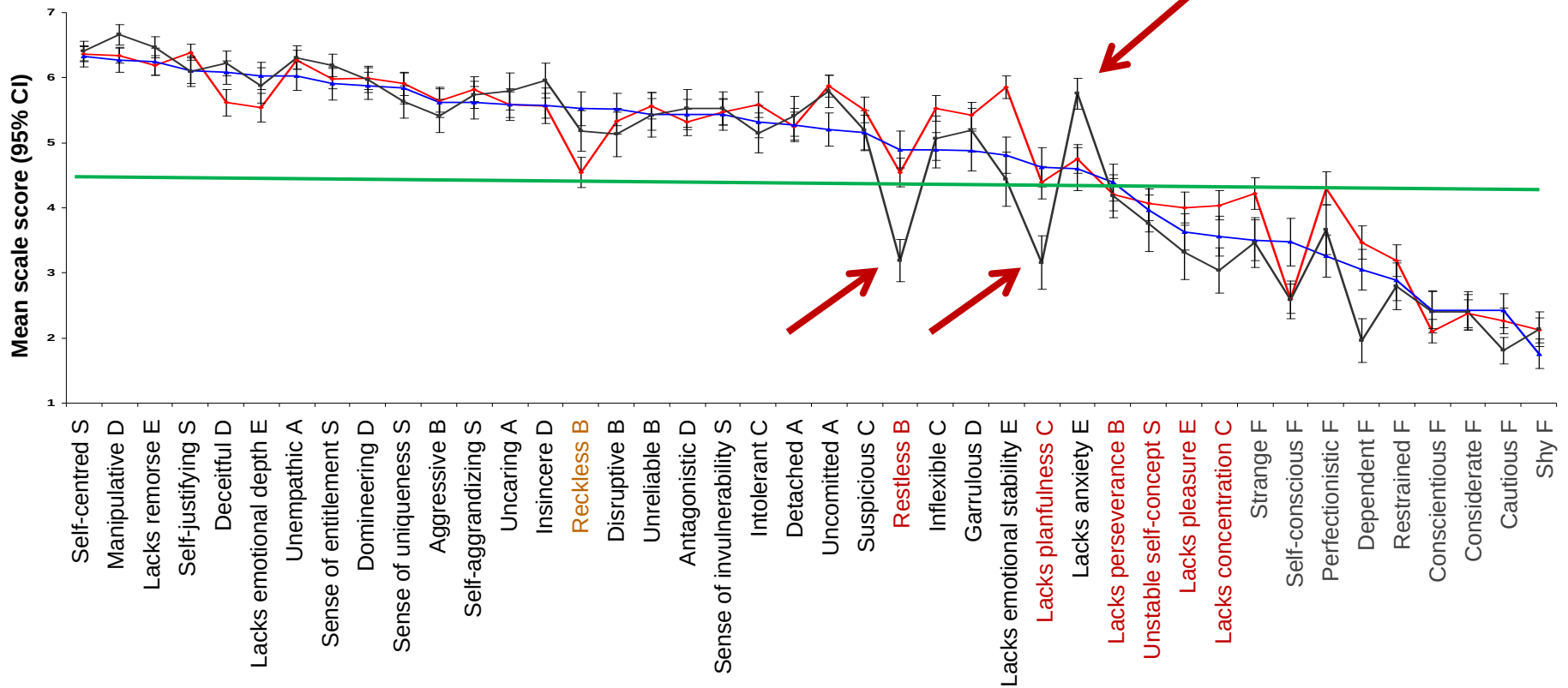
Prototypicality ratings by CAPP symptoms



- Expert ratings psychopathic client
- Expert ratings psychopathic client
- Expert ratings psychopathic client



Prototypicality ratings by CAPP symptoms



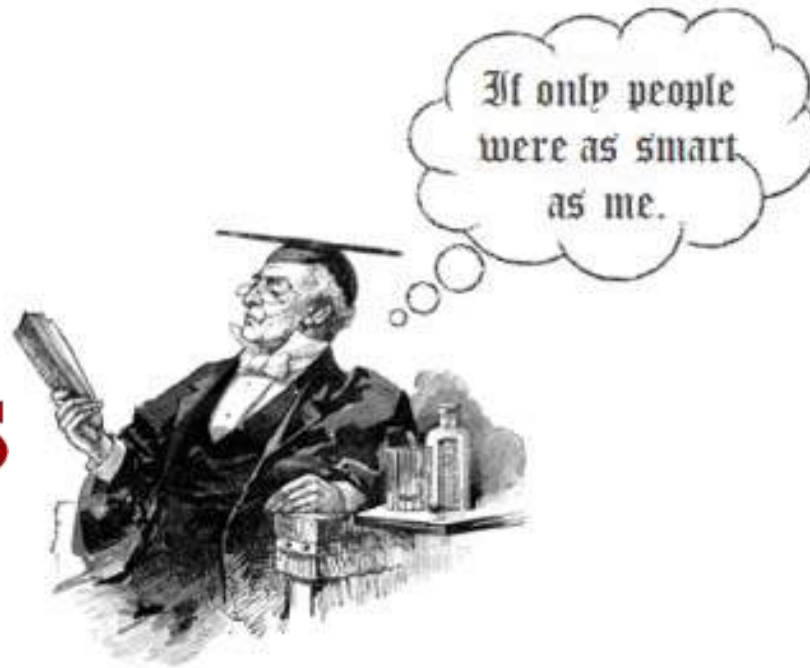
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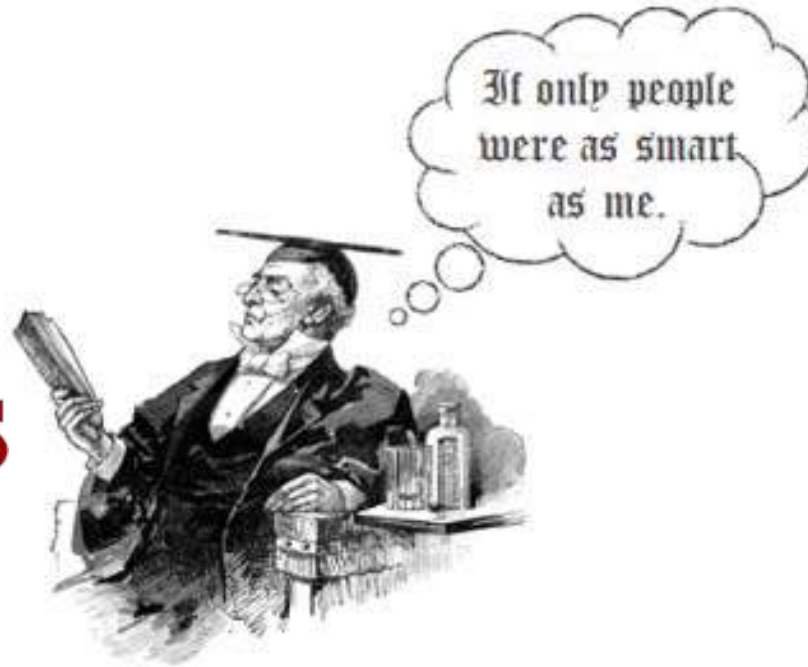
Expert ratings psychopathic client



The Expert's Mind



The Expert's Mind



“prototypical analysis of clinical constructs as a measure of validity is not constrained to mental health professionals” (Rogers et al, 1992)

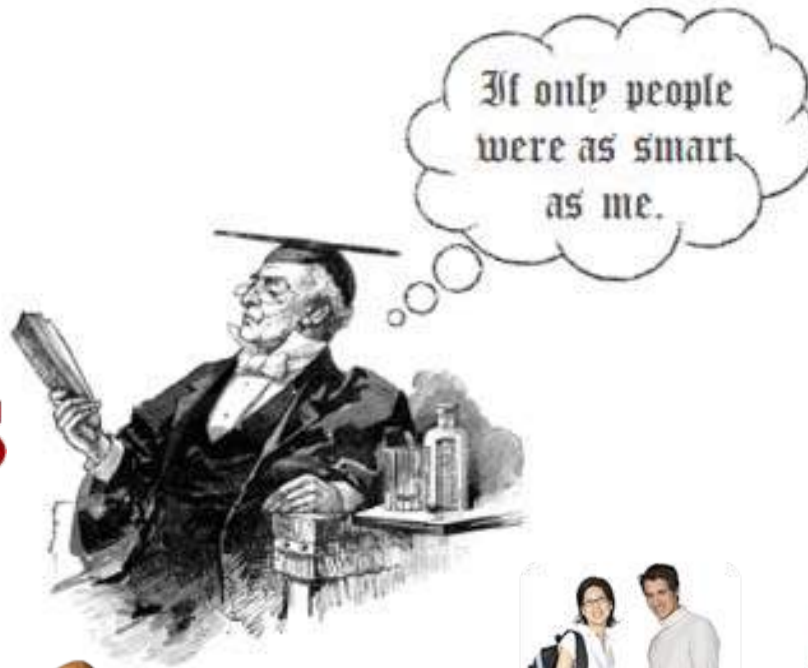
In accord with the lexical approach to personality



The Expert's Mind

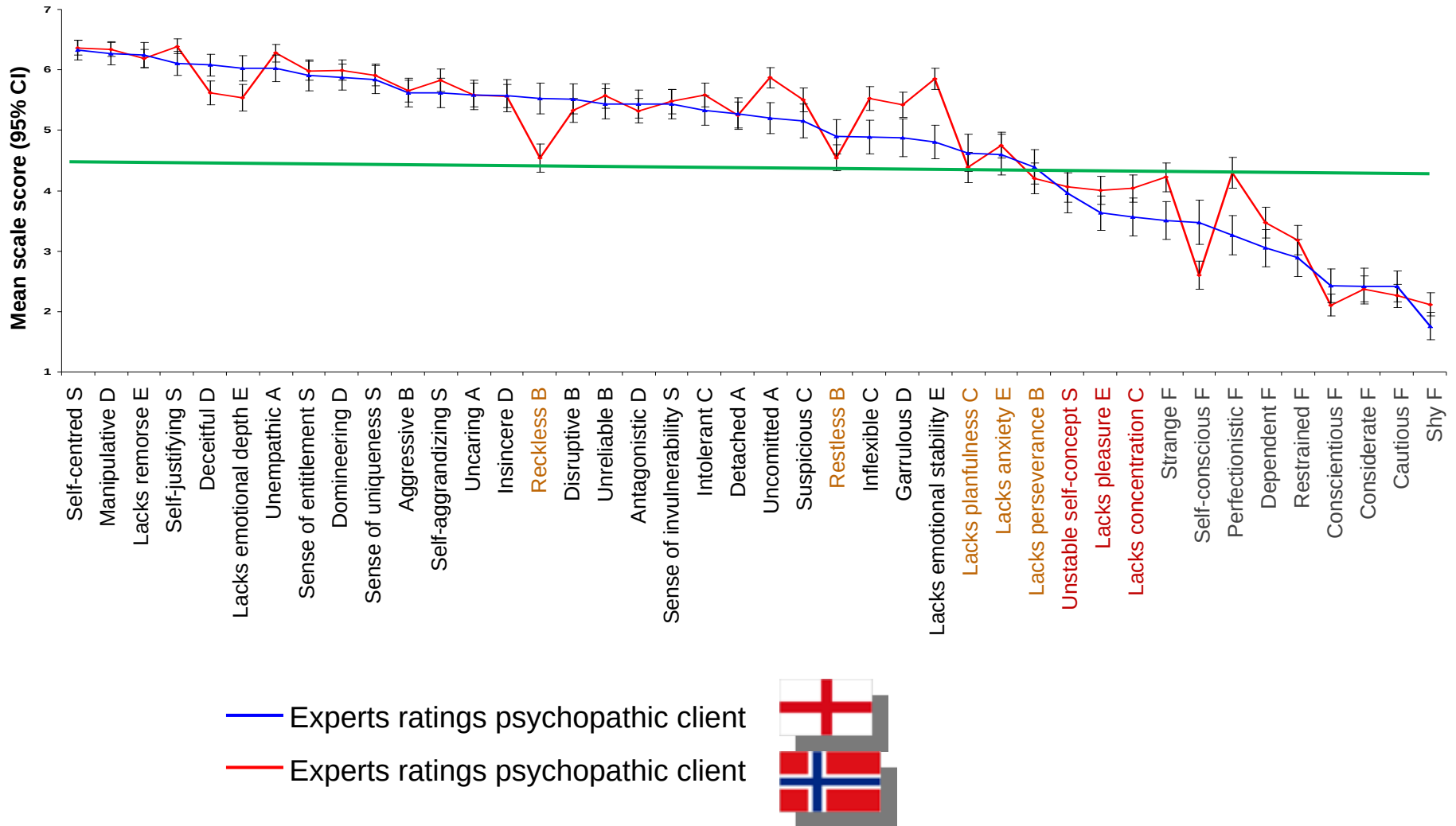
N=211

N=553

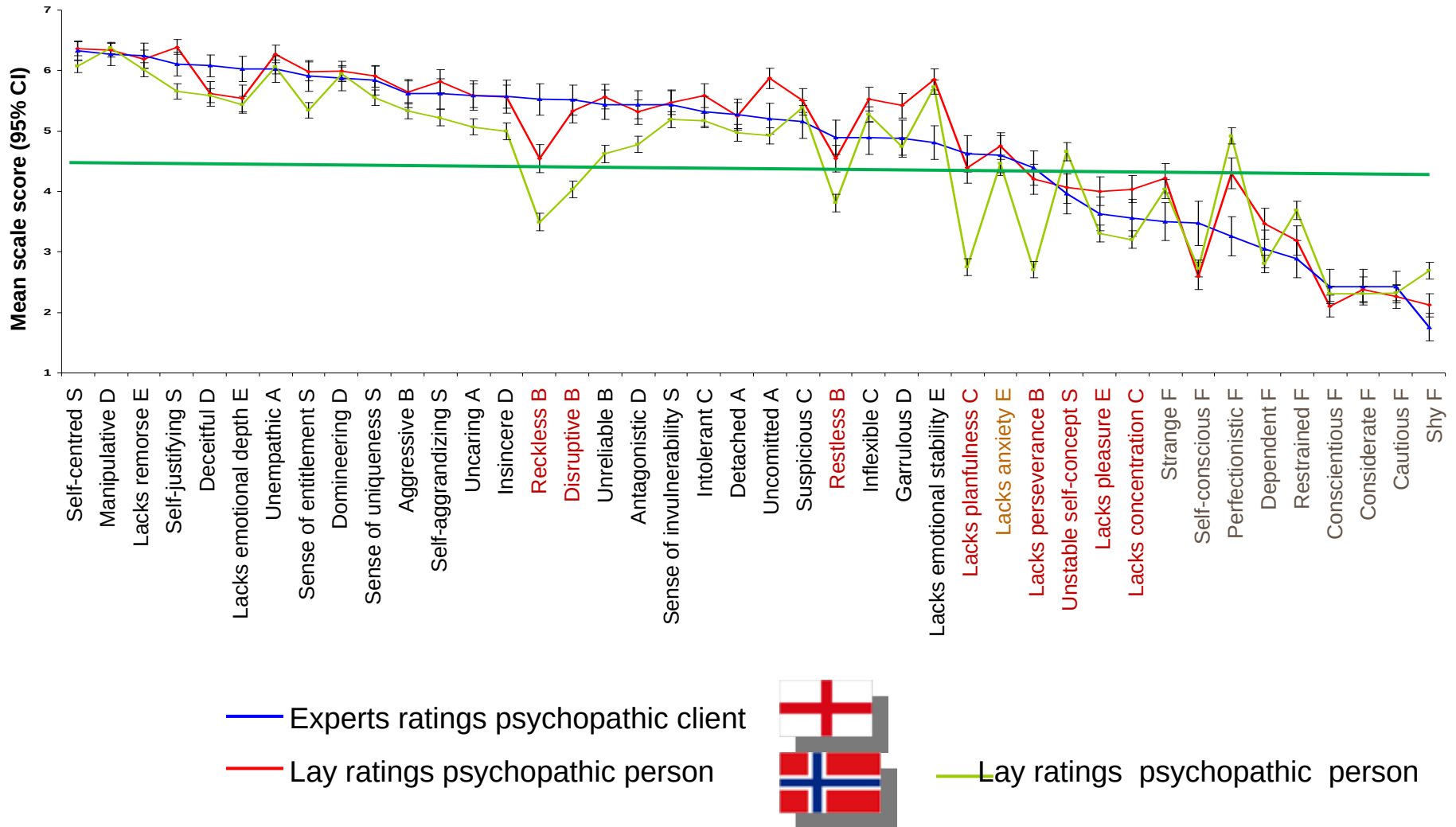


"How characteristic is this trait of a person you think of as highly psychopathic?"

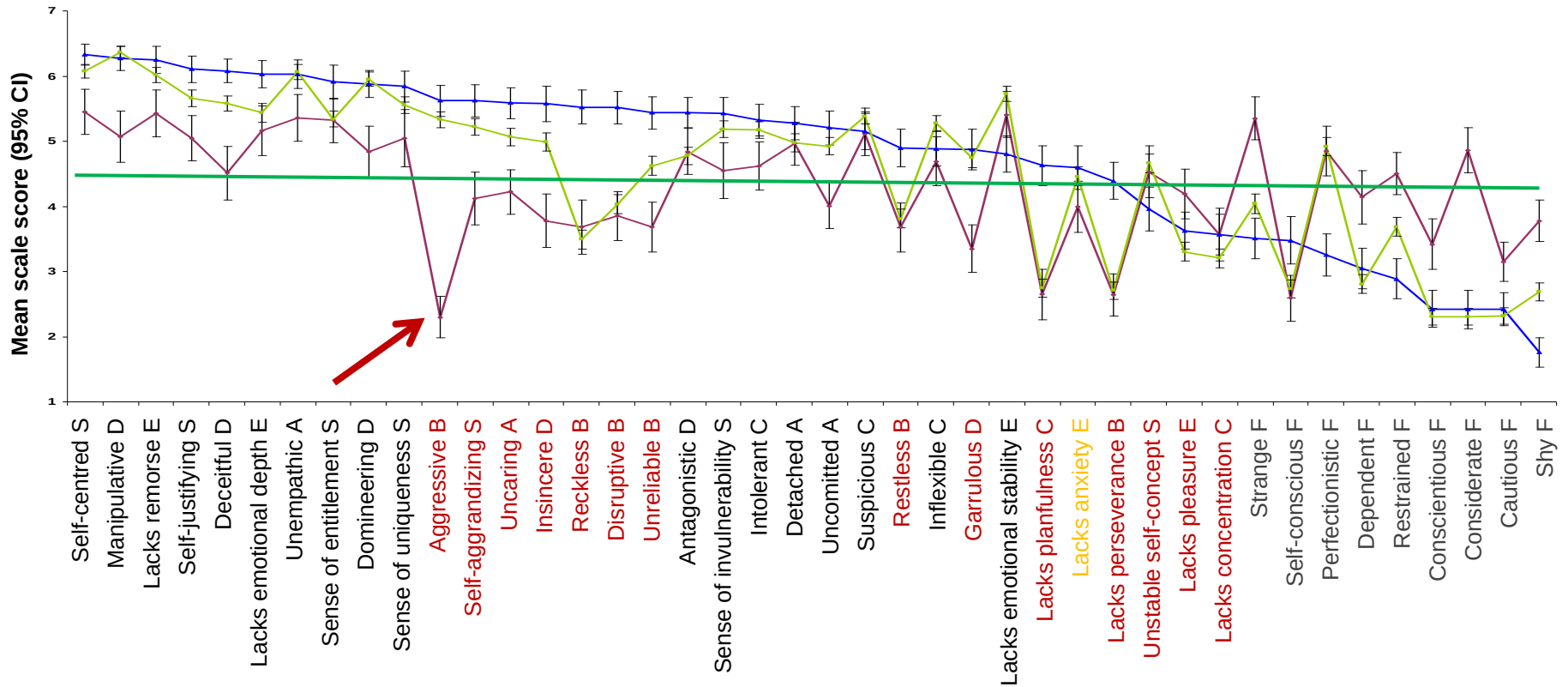
Prototypicality ratings by CAPP symptoms



Prototypicality ratings by CAPP symptoms



Prototypicality ratings by CAPP symptoms

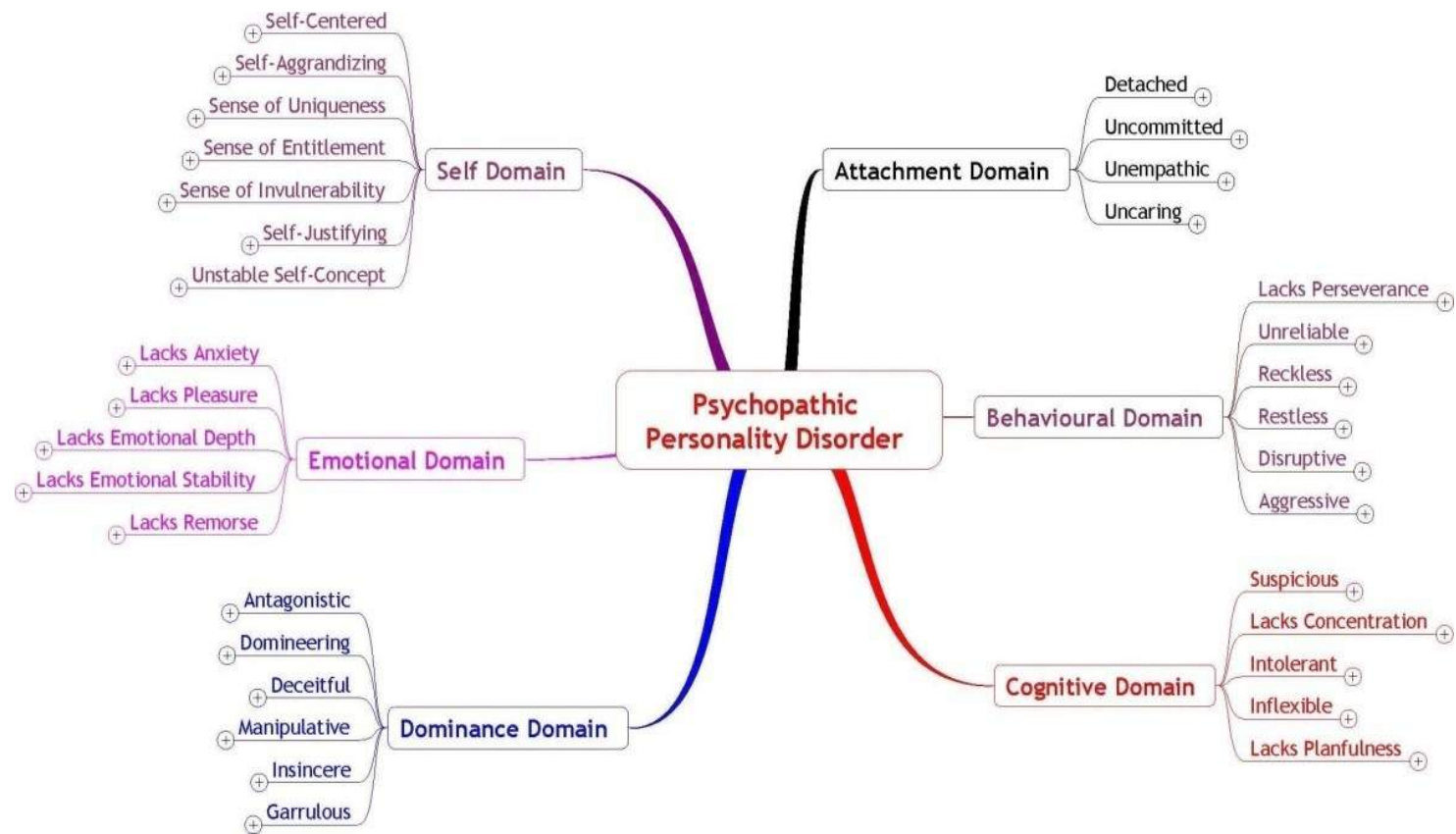


- Experts ratings psychopathic client
- Lay ratings psychopathic person
- Lay ratings psychopathic person



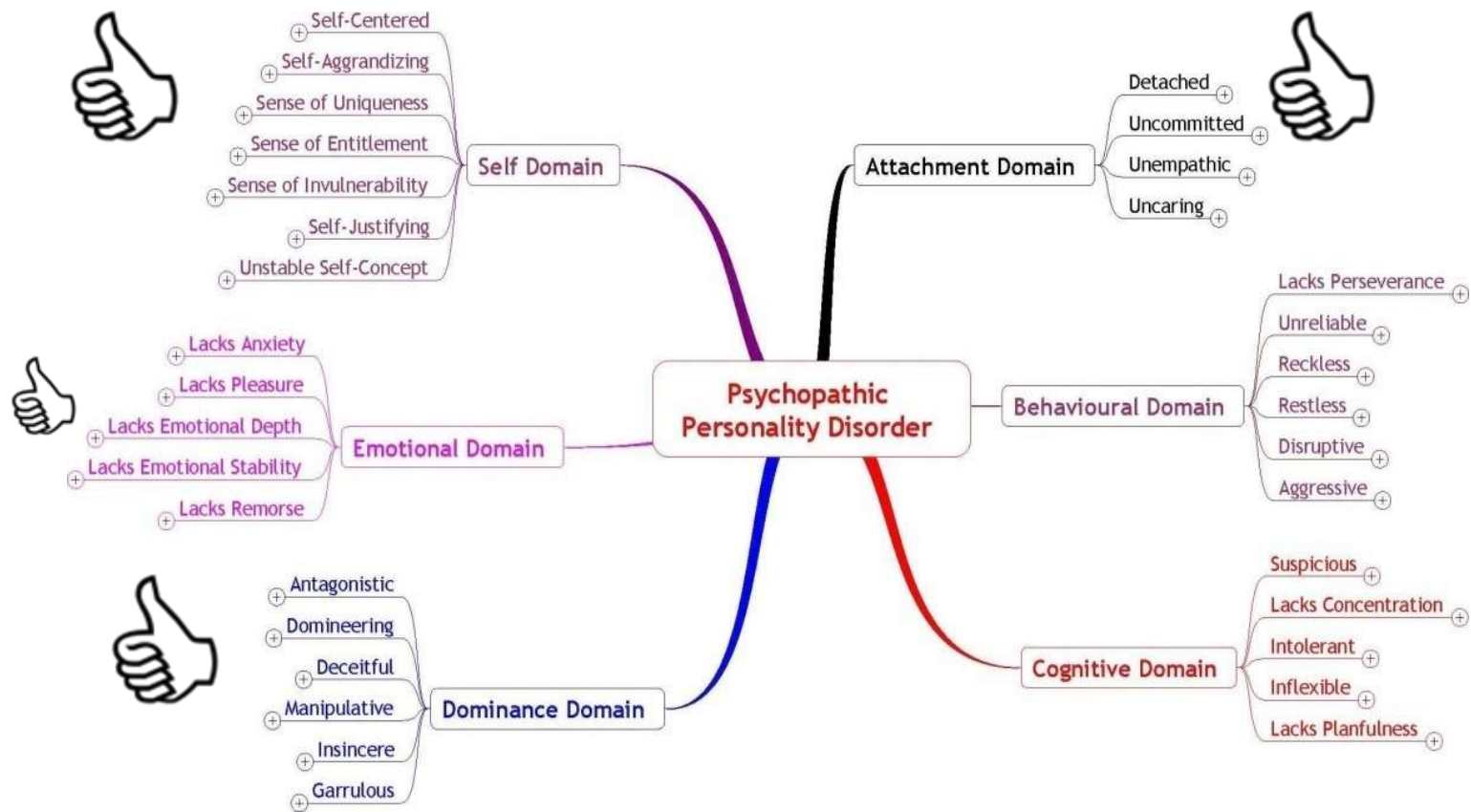
Conclusions....

What (in the CAPP) do we think about when we think about psychopathy?



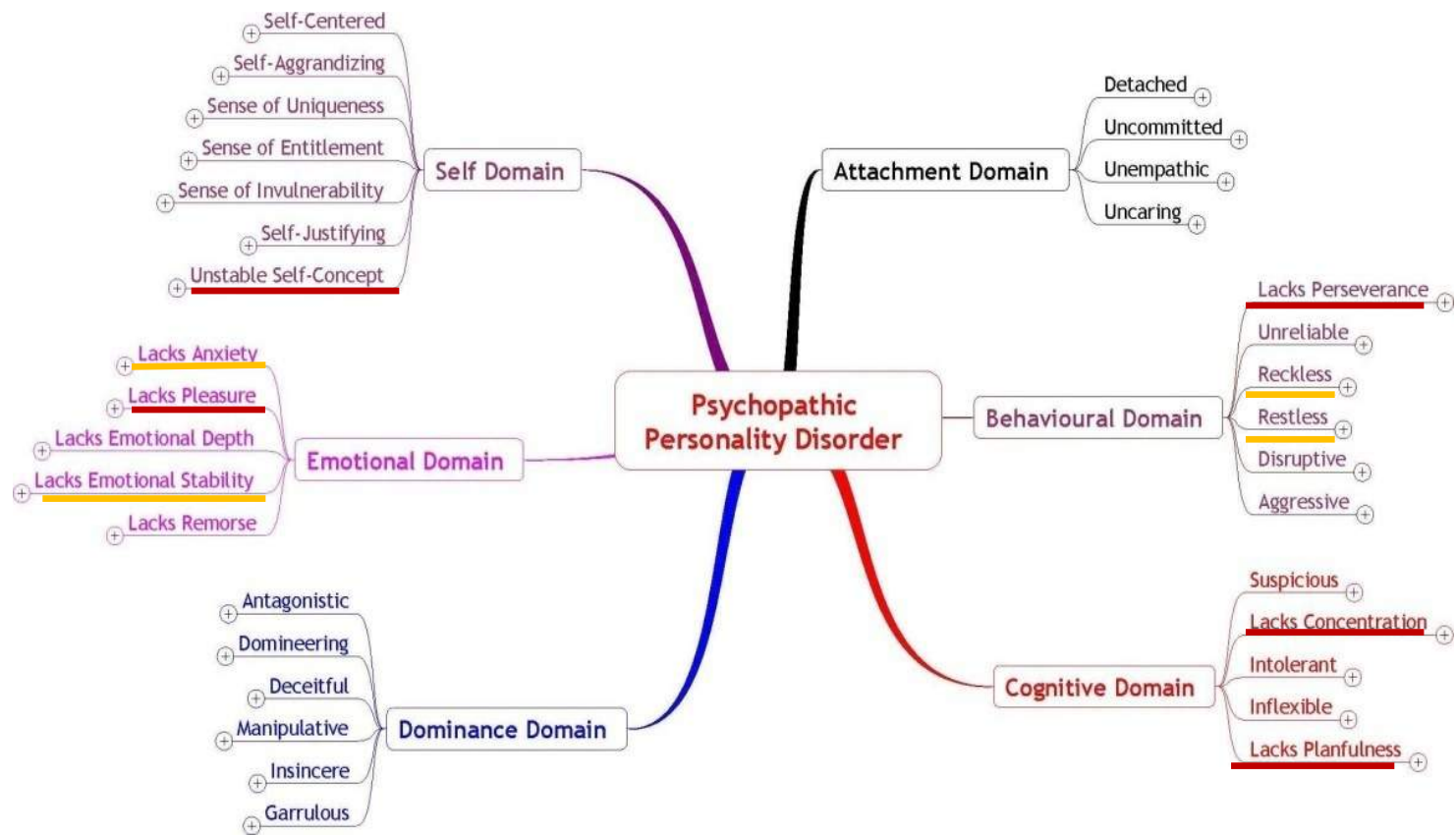
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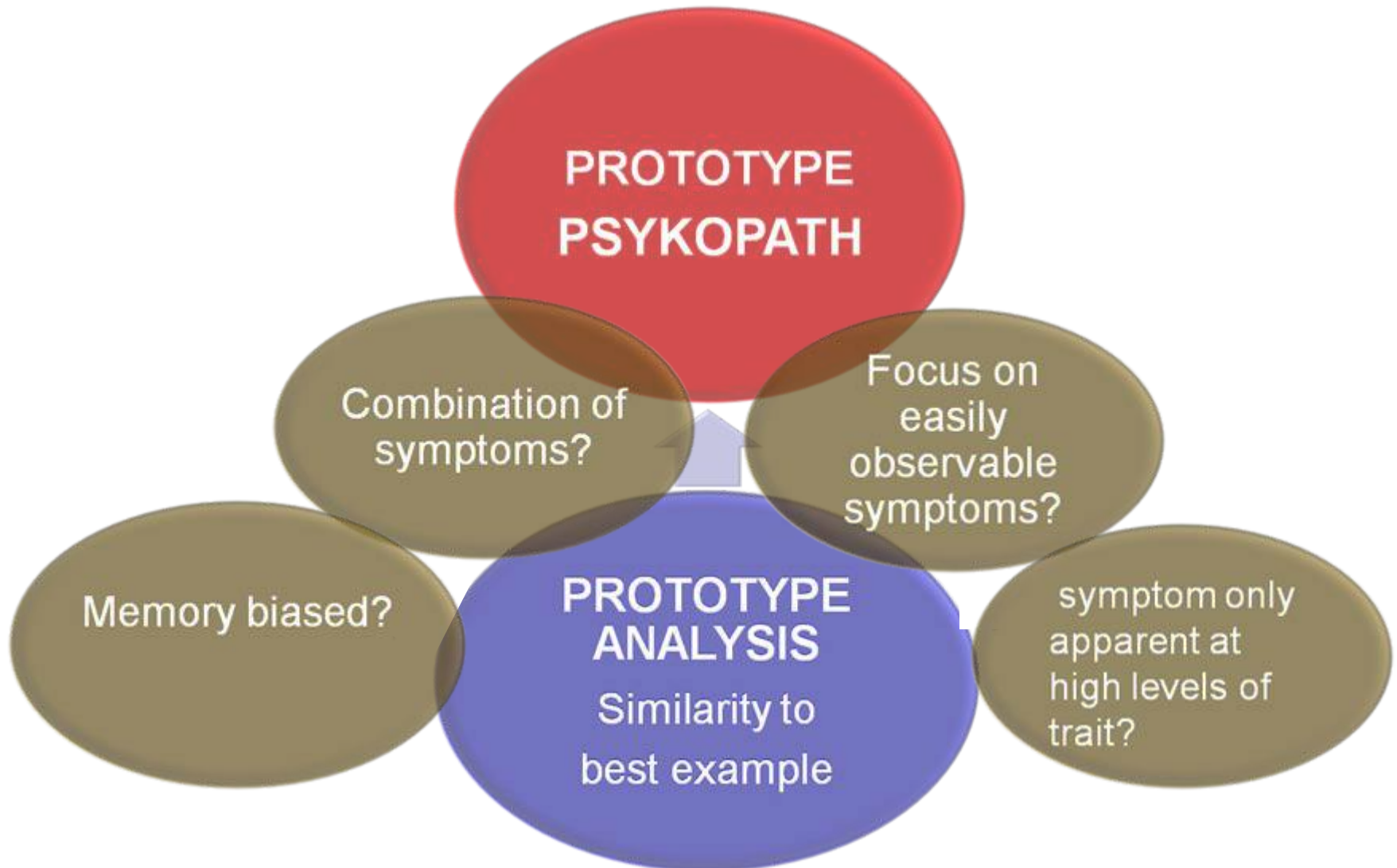


Conclusions....

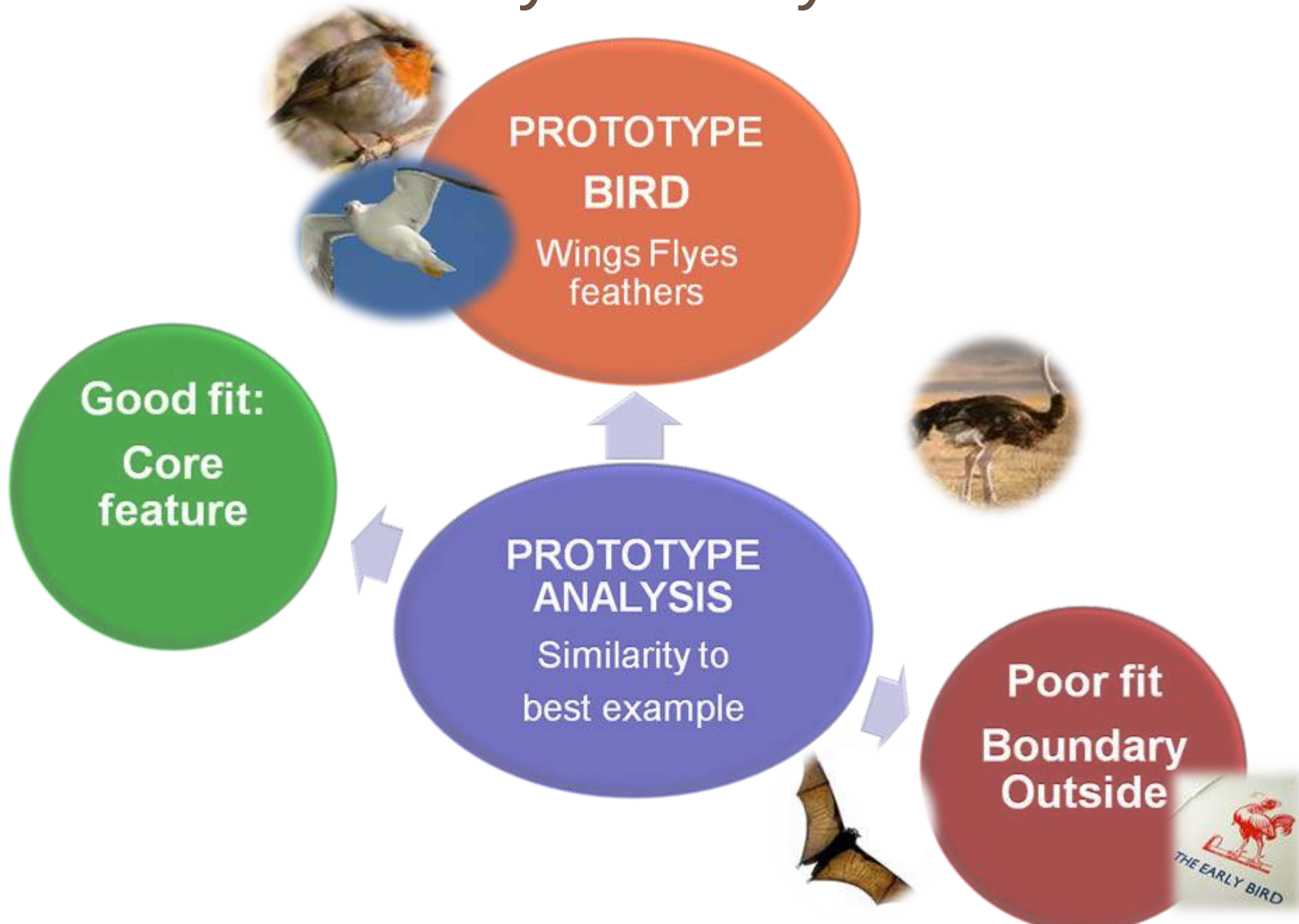
What do we **NOT** think about when we think about psychopathy?



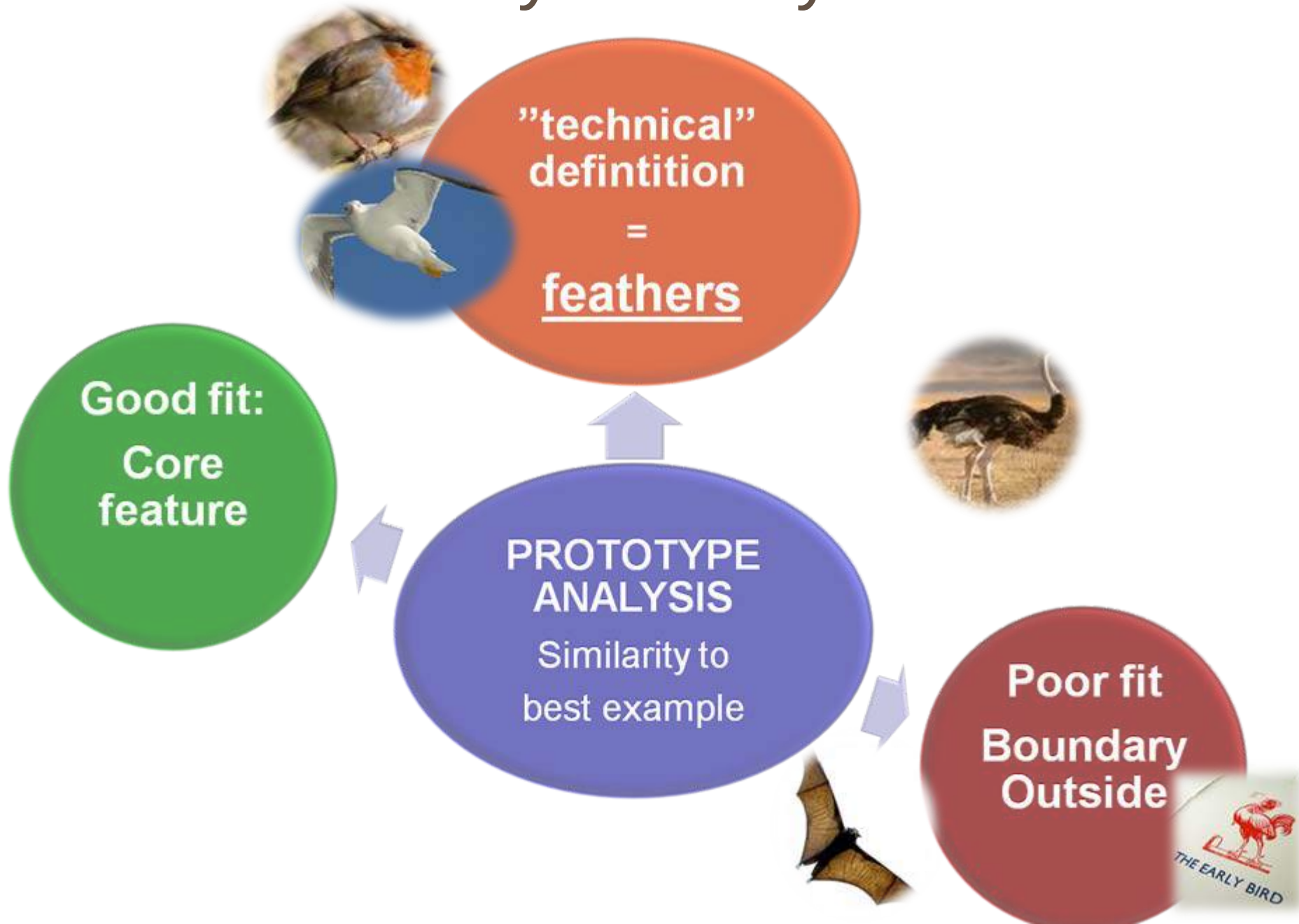
Prototypicality limitations.....



By the way!

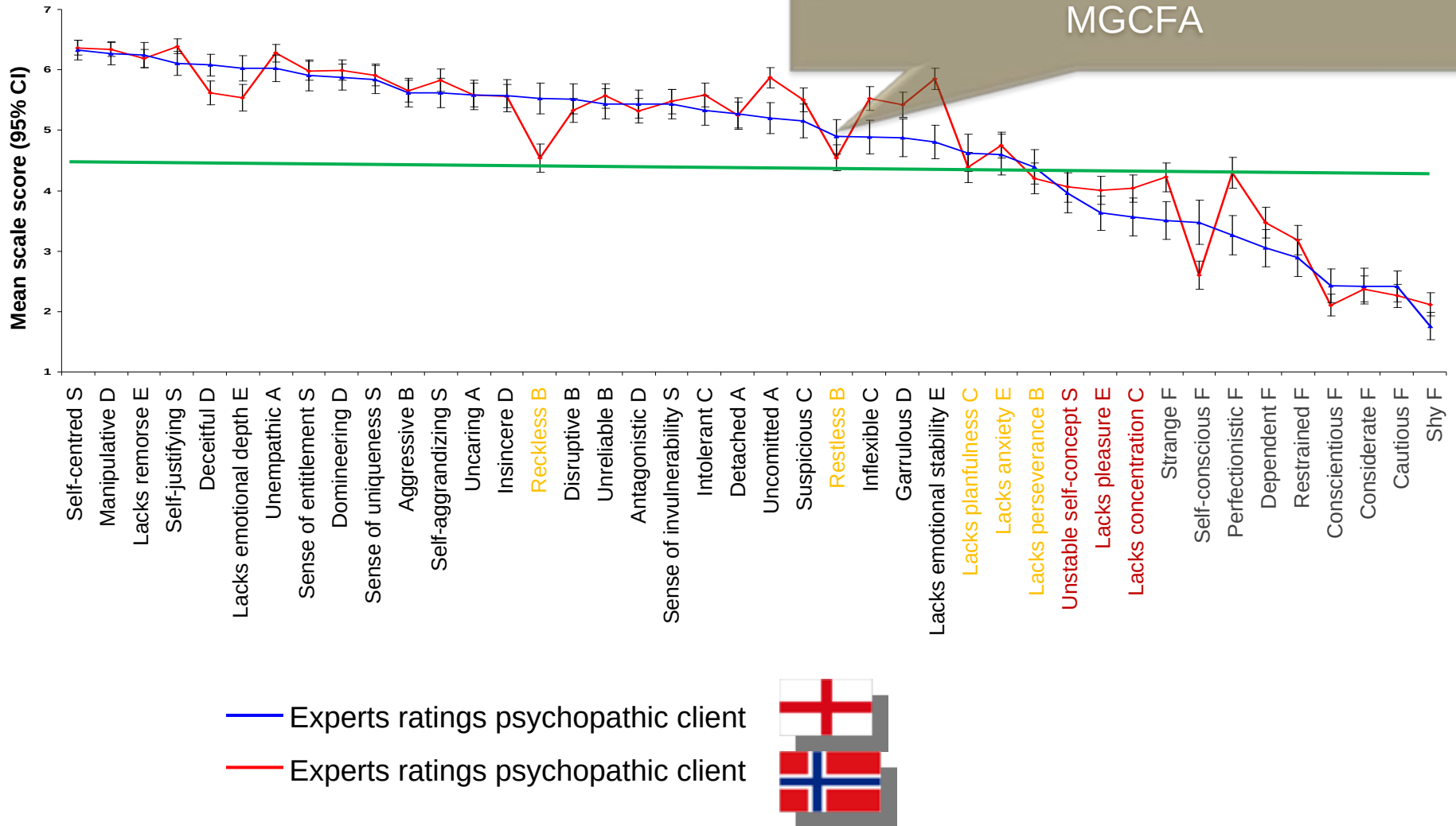


By the way!



Tricky questions

Do a similar rating equal similar perception of the item – or construct?
MGCFA



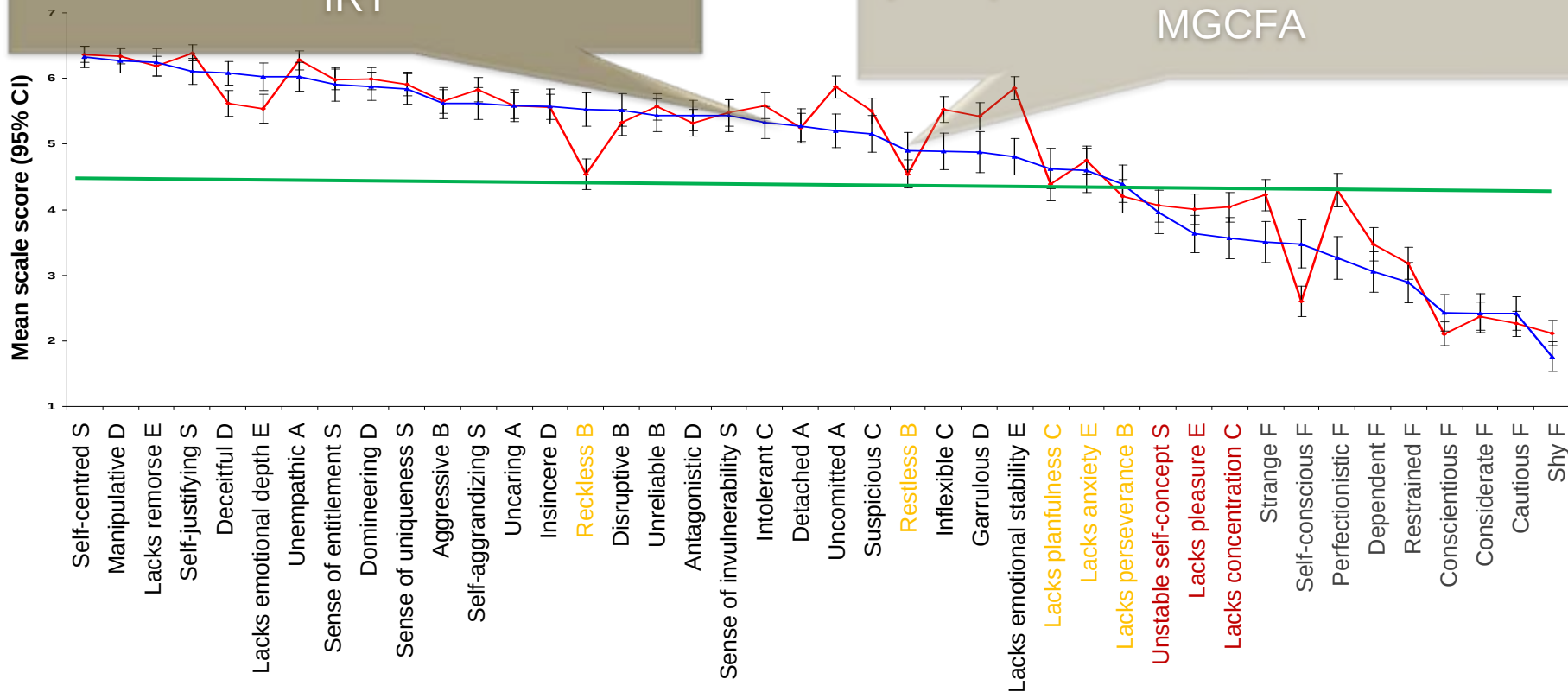
Tricky questions

Do similar ratings equal identical level of the underlying trait?

IRT

Do a similar rating equal similar perception of the item – or construct?

MGCFA

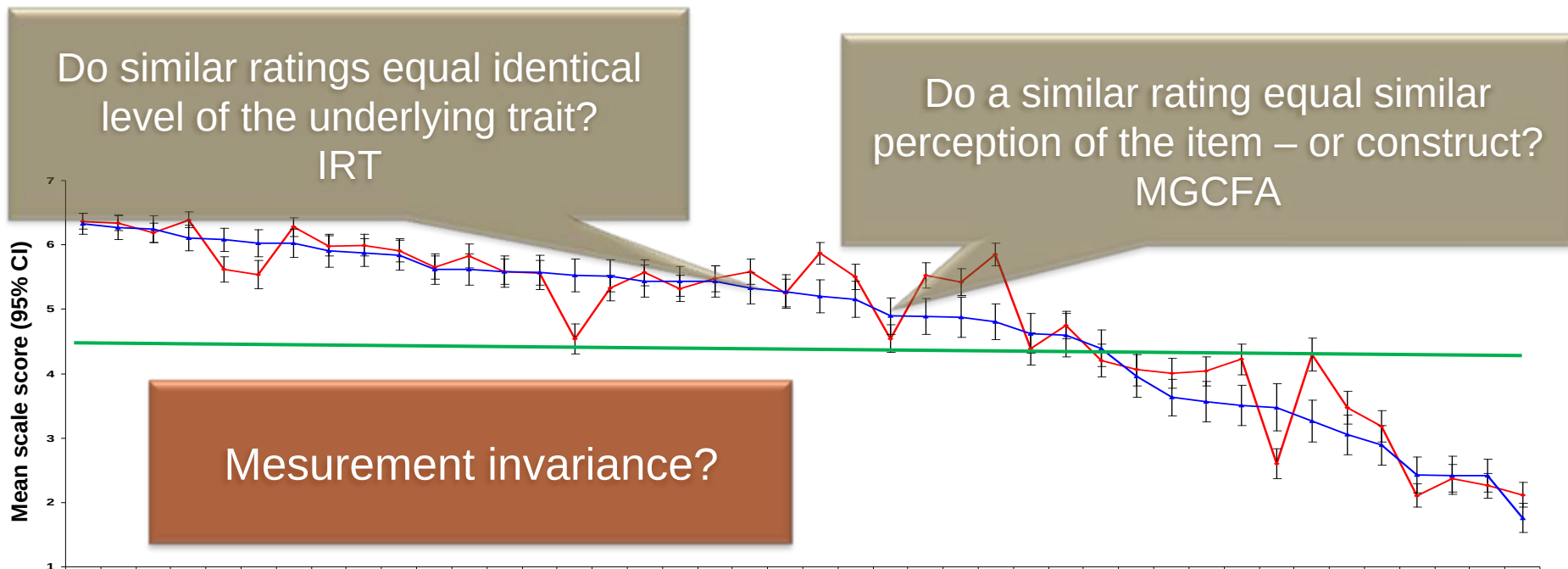


— Experts ratings psychopathic client

— Experts ratings psychopathic client



Tricky questions



To come (hopefully):

Hoff et al: “Cross Language Preservation of the CAPP – lost (or found?) in translation?”

Thanks!

What do we think about
when we think about psychopathy?

CAPP validation by prototypicality analysis

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Thanks!

CAPP validation by prototypicality analysis

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impulsivitet

- Cleckley sitat
- Impulsivity = a general reduction in the ability to control one's behaviour (Jolliffe & Farrington, 2009)
 - low self control
 - hyperactivity
 - Inattention
 - Poor ability to delay gratification
 - Risk taking – sensation seeking
 - Not considering consequences before acting
- Direct link to violence: Less time and cognitive energy available for considering potential responses - > Select the option that provides the most immediate perceived benefit

- Indirect link to violence:
 - Impulsive child -> Challenge to parents - > poor parenting - > challenge to schools
 - Ie: Impulsivity indirectly influences peoples interaction with important people and institutions (Moffit, 1993) -> increased likelihood of offending due to reduced opportunity to succeed in conventional ways.
 -

- Pratt & Cullen (2000): 21-study Meta study on the link between low self-control and crime. Mean effect size (cohens d) ranging from .47 - .58
- Or – 73% of offenders had low self-control compared to 50% of non offenders (at d value 0.47).
- but: impulsivity measured retrospectively

- Perhaps a meaningful separation into categories of the impulsivity construct
 - Hyperactivity/Low attention ($d=.26$)
 - Concentration problems ($d=.34$)
 - Restlessness ($d=.40$)
 - Risk taking ($d=.50$)
 - (Hawkins et al 1998) review of longitudinal studies on the link to violence in youth

- Motor restlessness vs concentration problems?

- Satisfy immediate urges (and confuses want's with needs) at the risk of later, uncertain and hypothetical consequences (Farrington & Welsch, 2007)
- Jolliffe & Farrington (2009) Review & Metaanalysis of prospective studies of impulsivity in childhood and later violence: "quite strong" predictive relationship.

- Hva med å legge inn pcl:sv faktor 2 ledd inn som markør?
- If Hicks & patrick, 2006 are right in that PCL taps into to two distinct entities:
 - one corresponding phenotypically to low stress reaction and an agentic interpersonal style and genotypically to a core weakness in defensive (fear) reaktivitet
 - The other phenotypically to an impulsive-aggressive behaviourstyle and genoethypically to a basic weakness in inhibitory control systems
- Then reckless in peoples perception is more linked low fear than to inhibitory control-systems?
- That is is the psychopath no more ngry than the rest of us but control the emotion less effectively?

- Indicate that psychopaths in peoples perception is more controlled (but still reckless and aggressive) than have hitherto been considered 'psychopathic'.
 - More "well socialized" (less cognitively impulsive?) variant of psychopaths than PCL-R F2?
- Impulsivity not among cleckleys criteria (Balckburn, 2005)
- Agressive linked more to narsistick traits high self-esteem, Isck of anxiety (?)

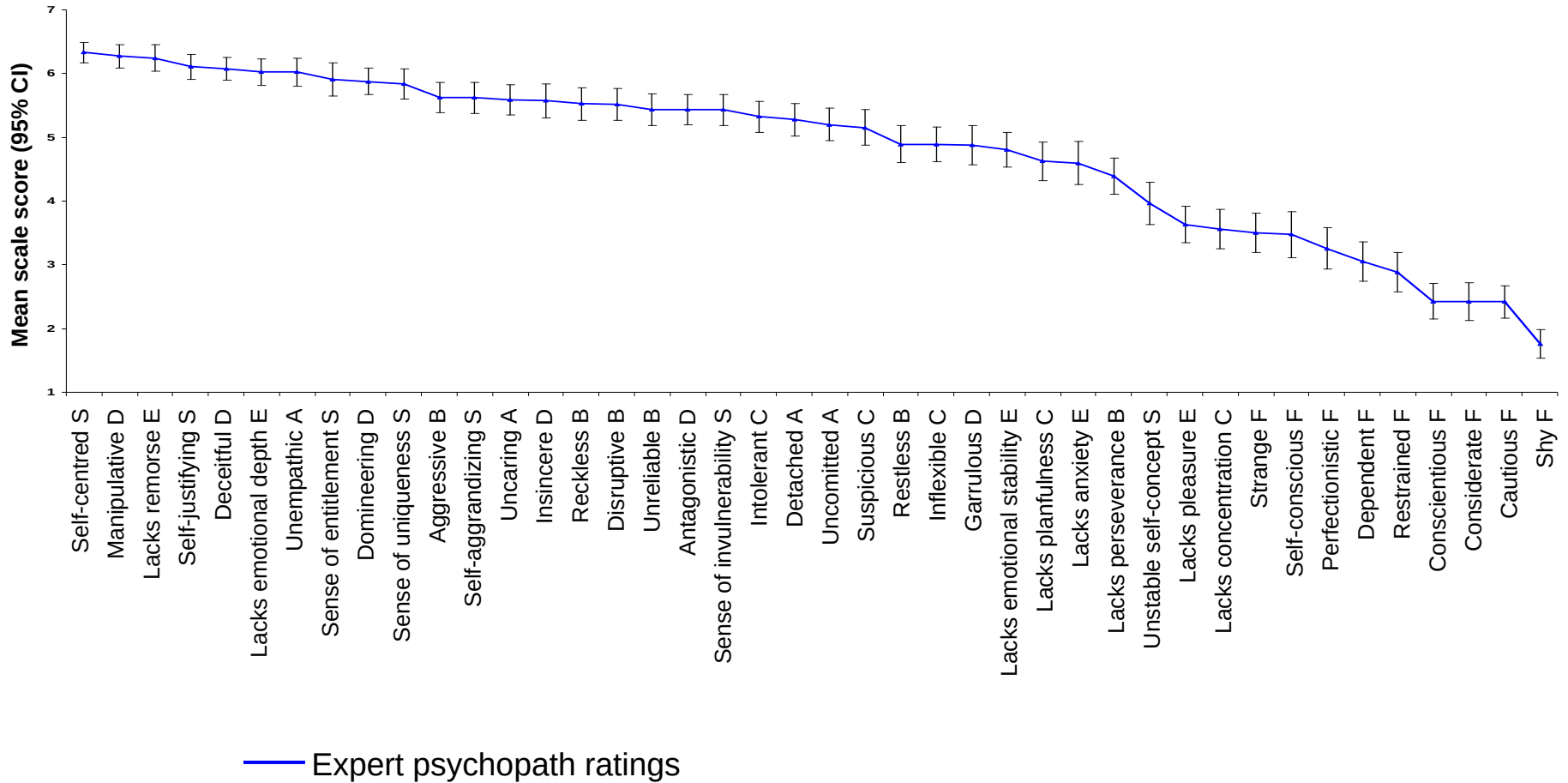
Slides BCTP 2011

Grafer – alt sortert etter Mette

- Mettes data (English language version)
 - Graf 1: Proto-rating PP-client
 - Graf 2: PP-client + NPP-client
- Så: Våre data :
 - Graf 3: Mettes PP + vår PP-client
 - Graf 4: Mettes PP + NPP + vår PPclient + NPPclient
 - Graf 5: Mettes PP + våre PP-client + PP lay
- Så de tyske dataene:
 - Graf 6: mette PP + Norsk PP-client+ tysk PP-client
 - **HUSK:** Graf 7: Mette PP + Norsk PP lay + **Tysk PP lay**
- Så til slutt:
 - **HUSK:** Graf 8: prototypiskhet etter domener for alle tre samples for PP client (ikke NPP). TYSK MANGLER – DRIT I OM CI MANGLER

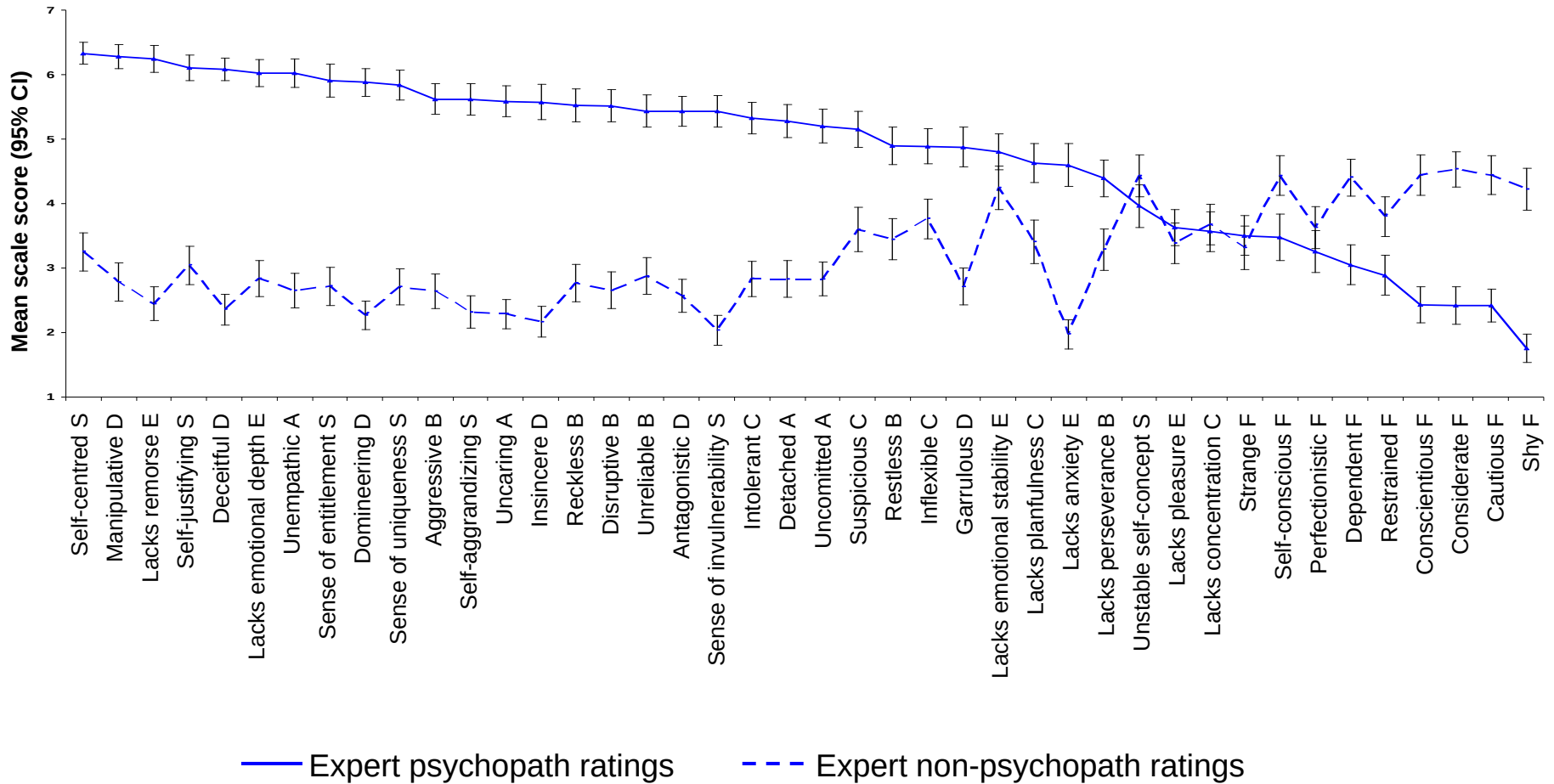
1: Prototypical psychopath ratings by Capp-items

Mette



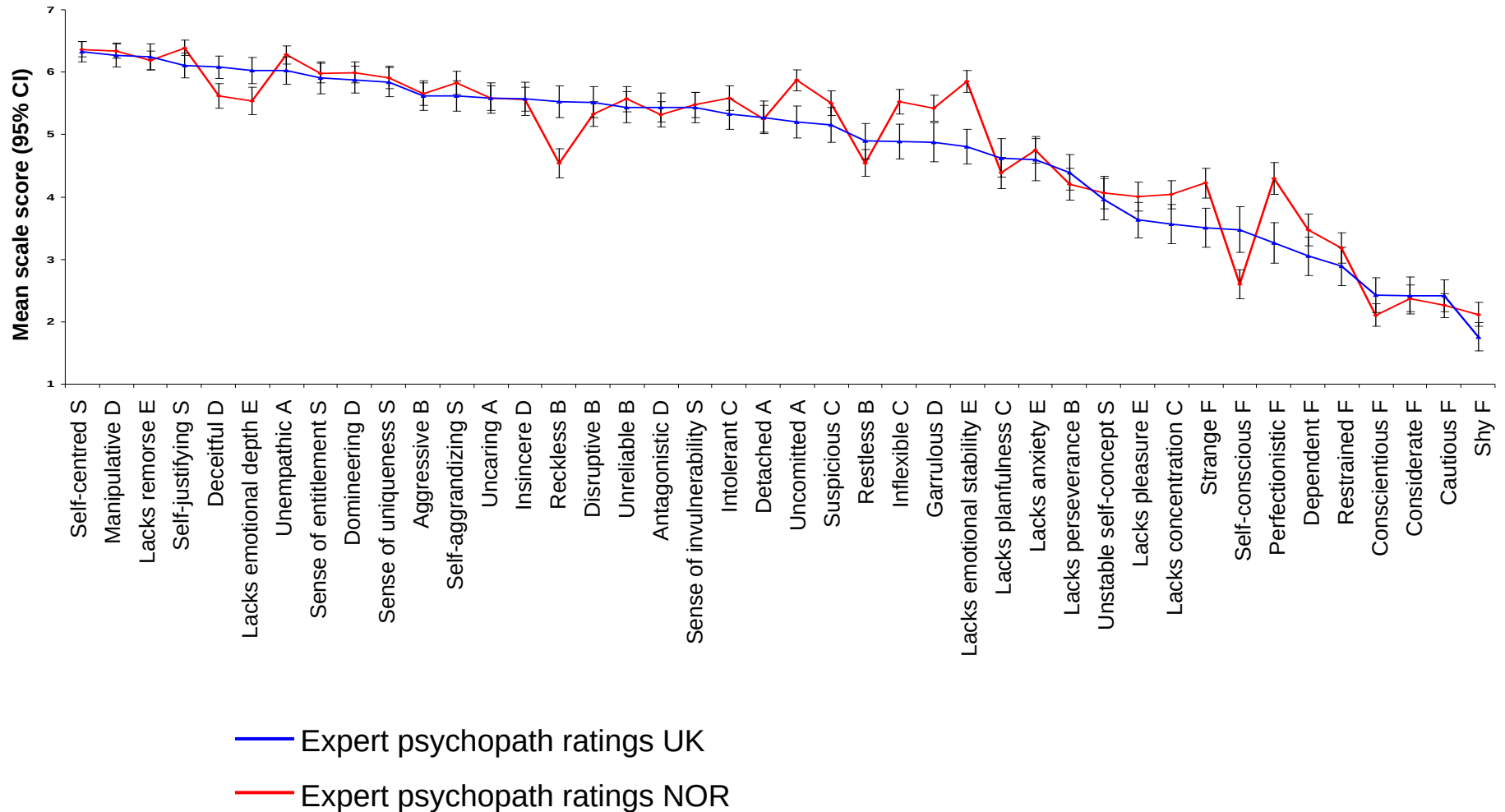
2: Prototypical psychopath ratings by Capp-items

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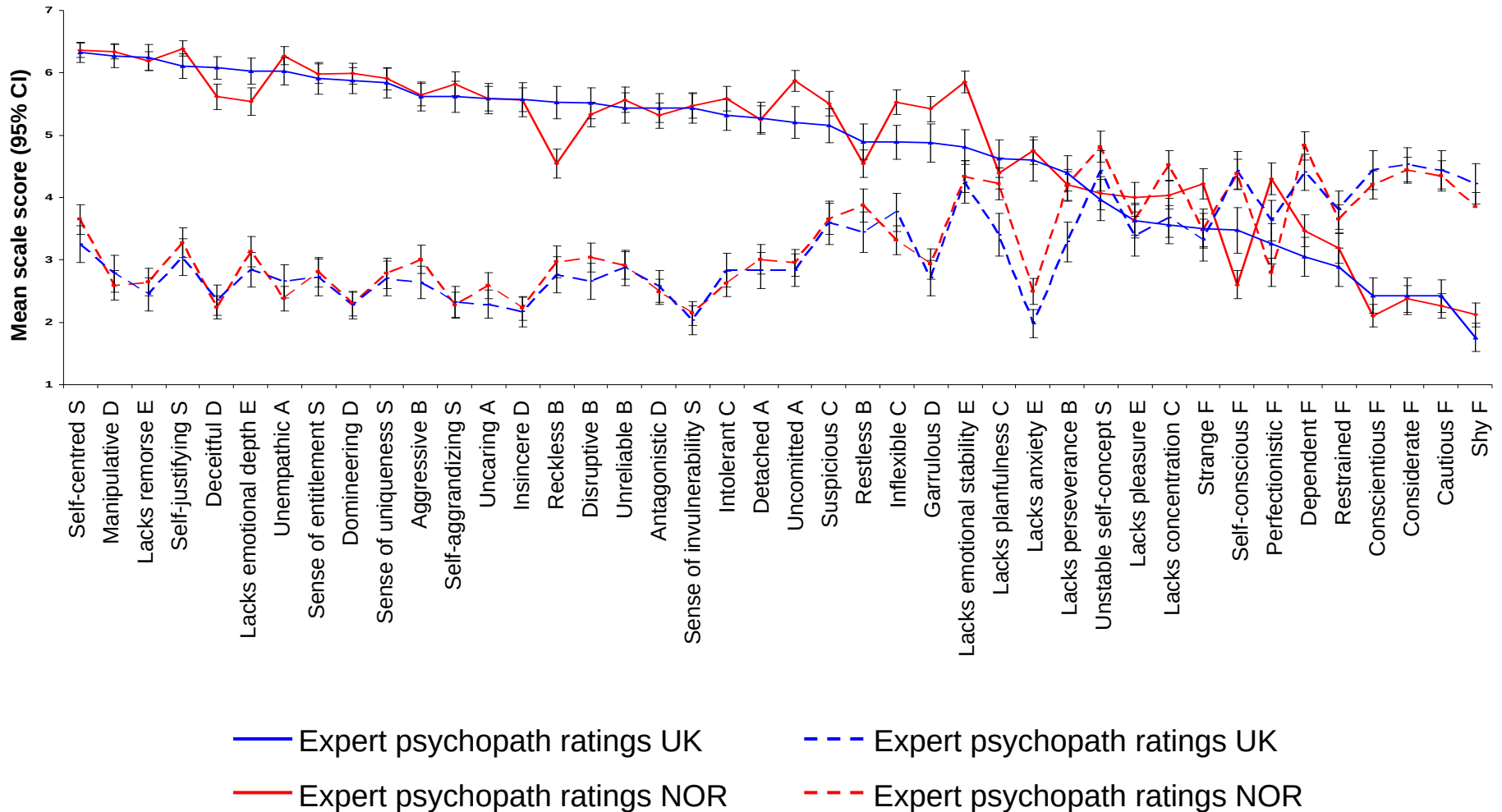


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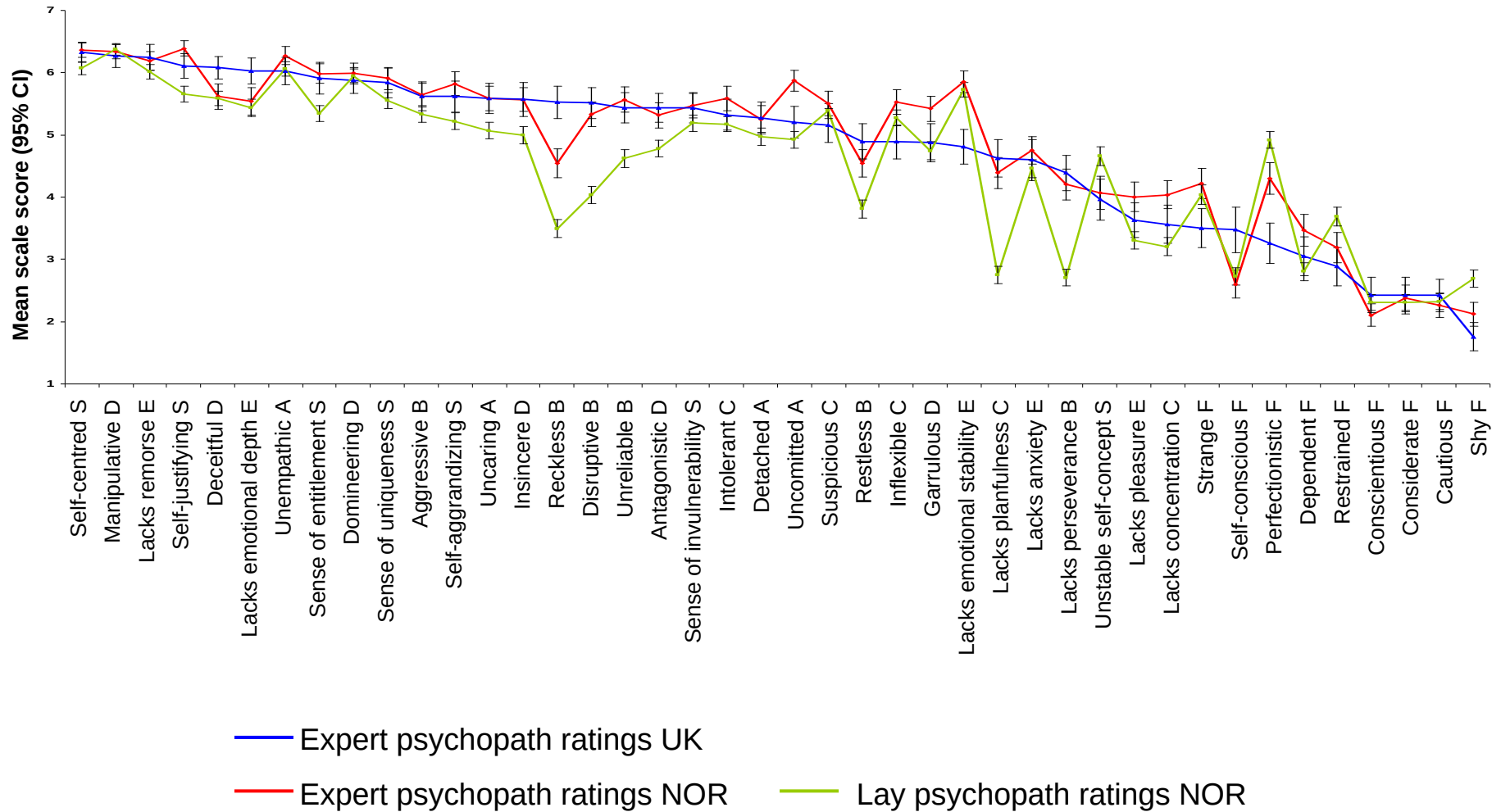
Mette+Helge



4: Prototypical psychopath ratings by Capp-items Mette+Helge

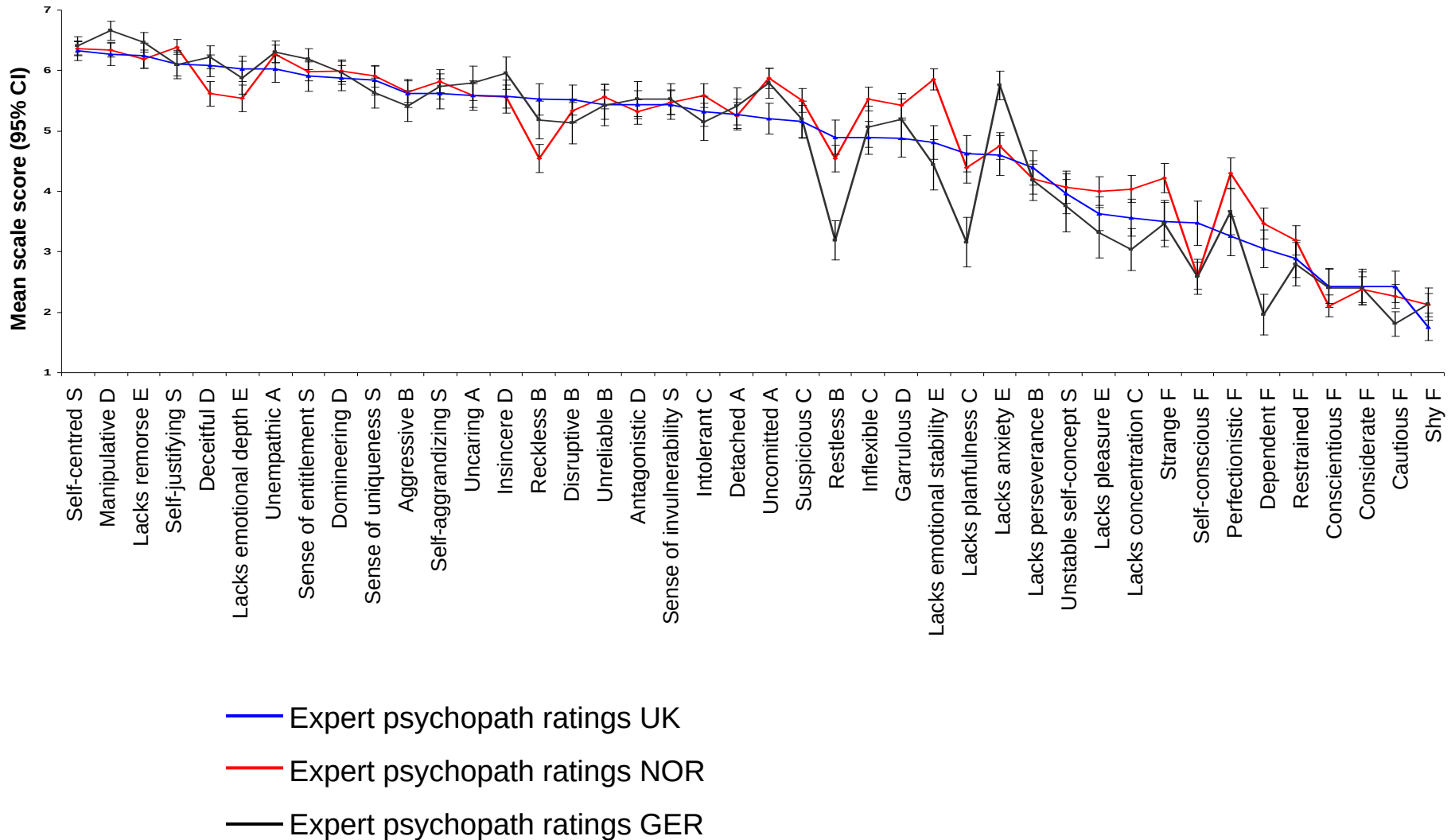


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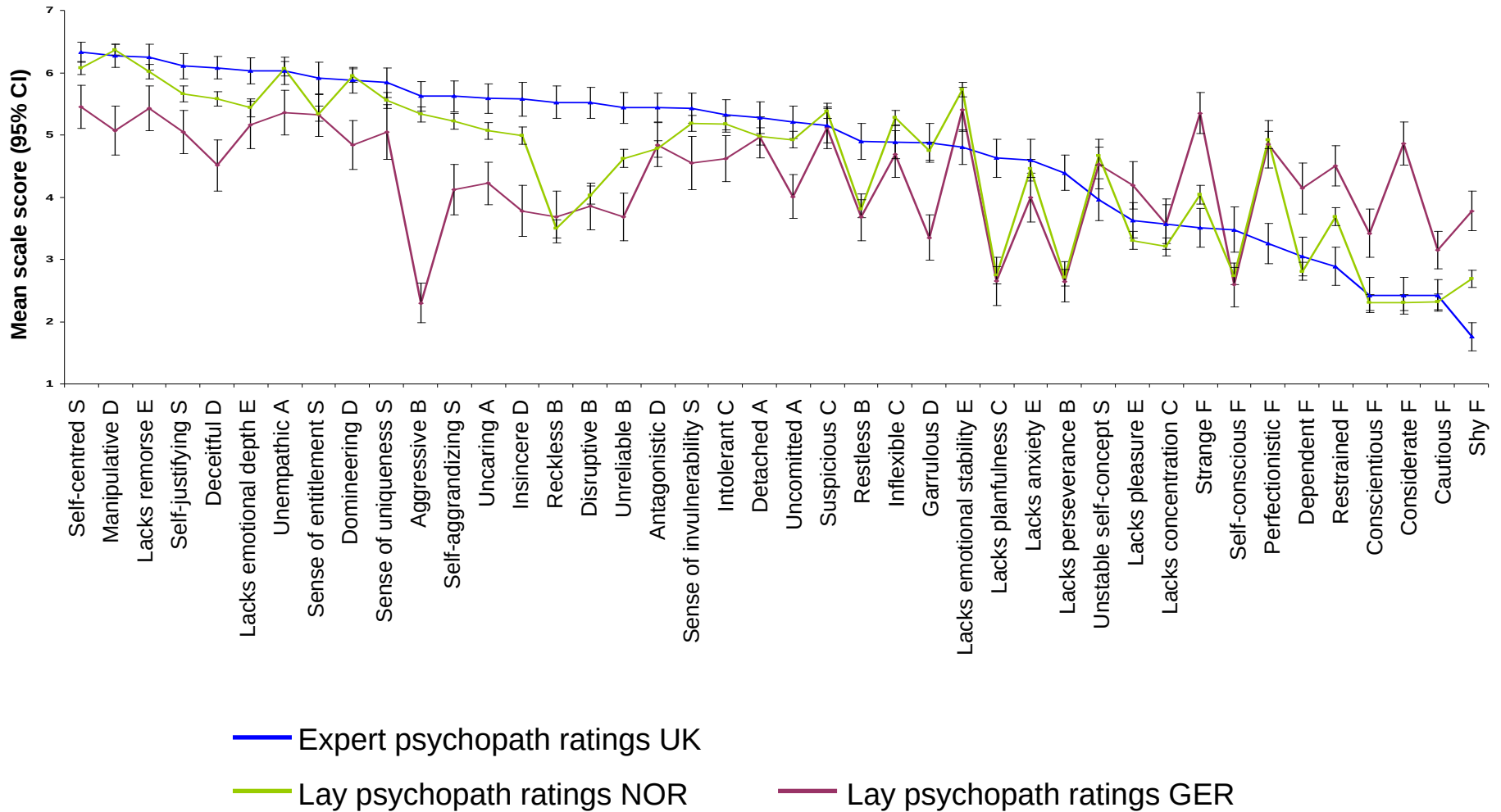


Prototypical psychopath ratings by Capp-items

Mette+Helge-Hanna

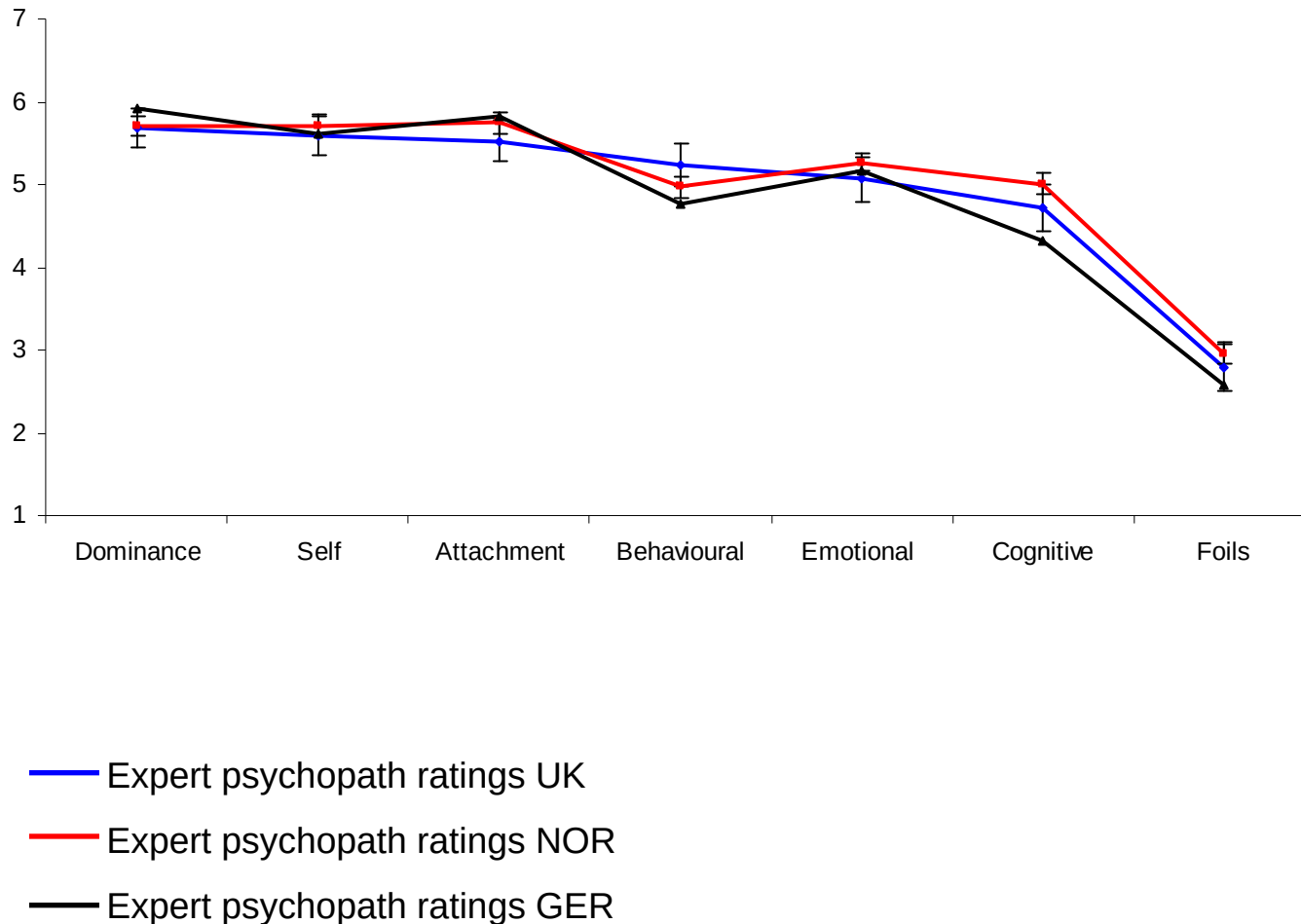


5: Prototypical psychopath ratings by Capp-items Mette+Helge+Hanna



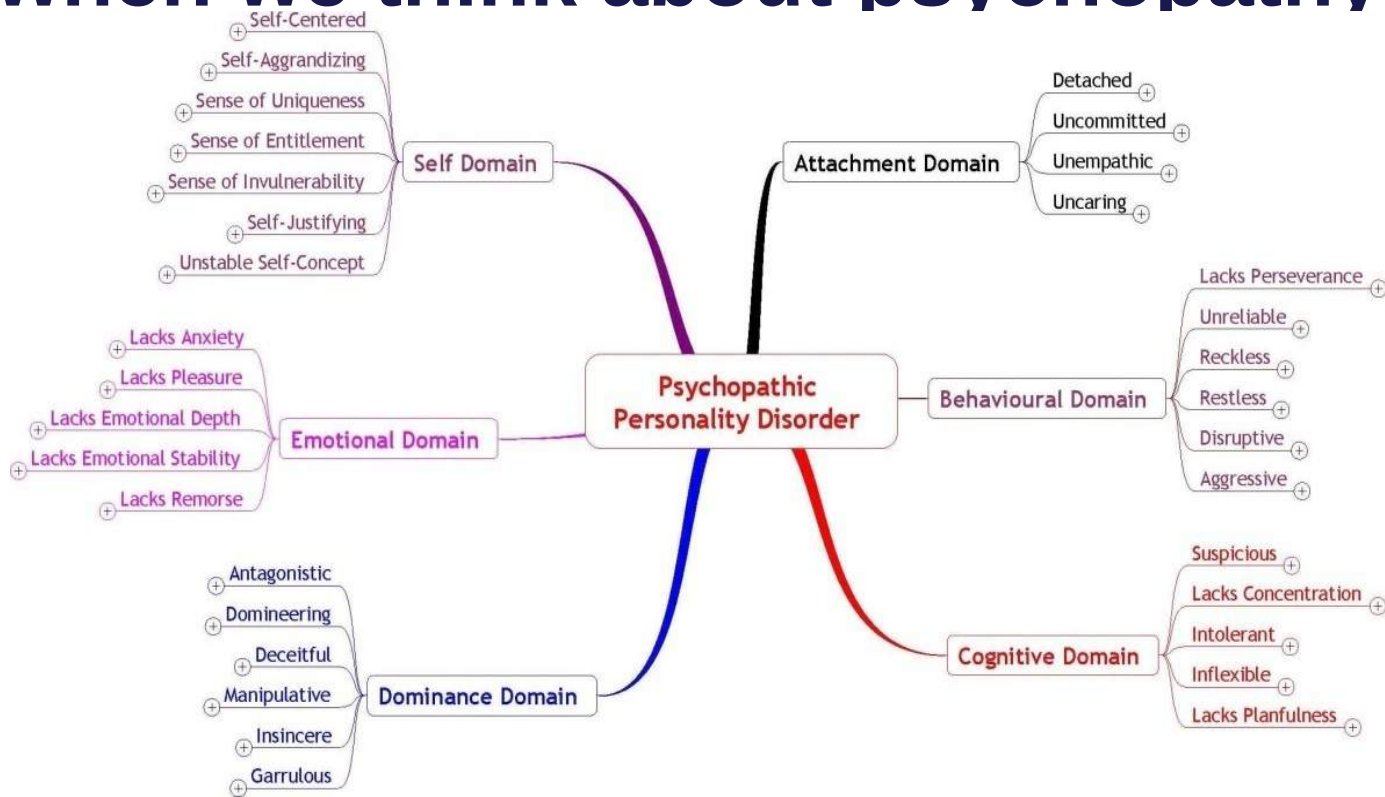
Domain Expert PP

Mette+Helge+Hanna

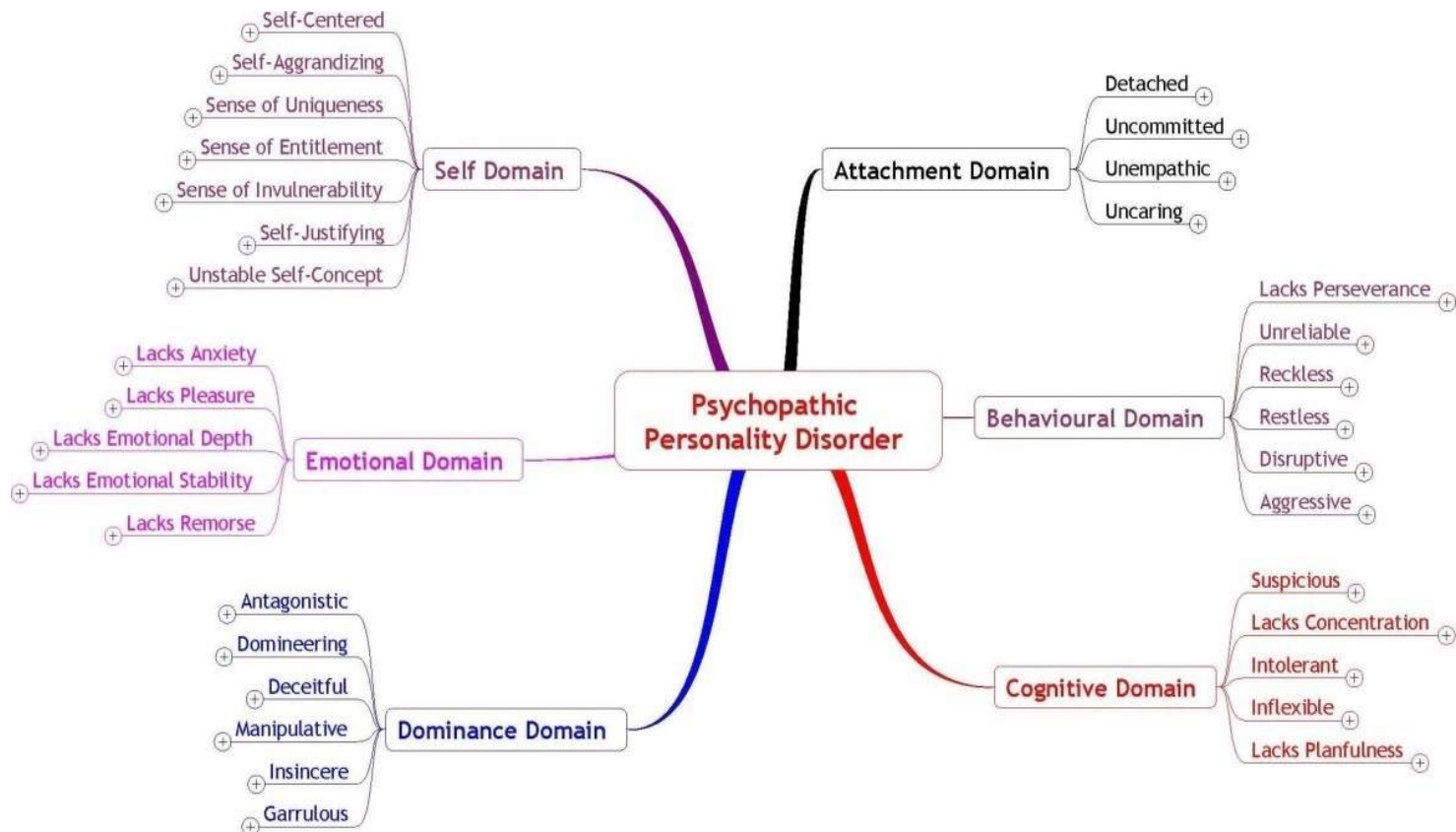


Conclusions....

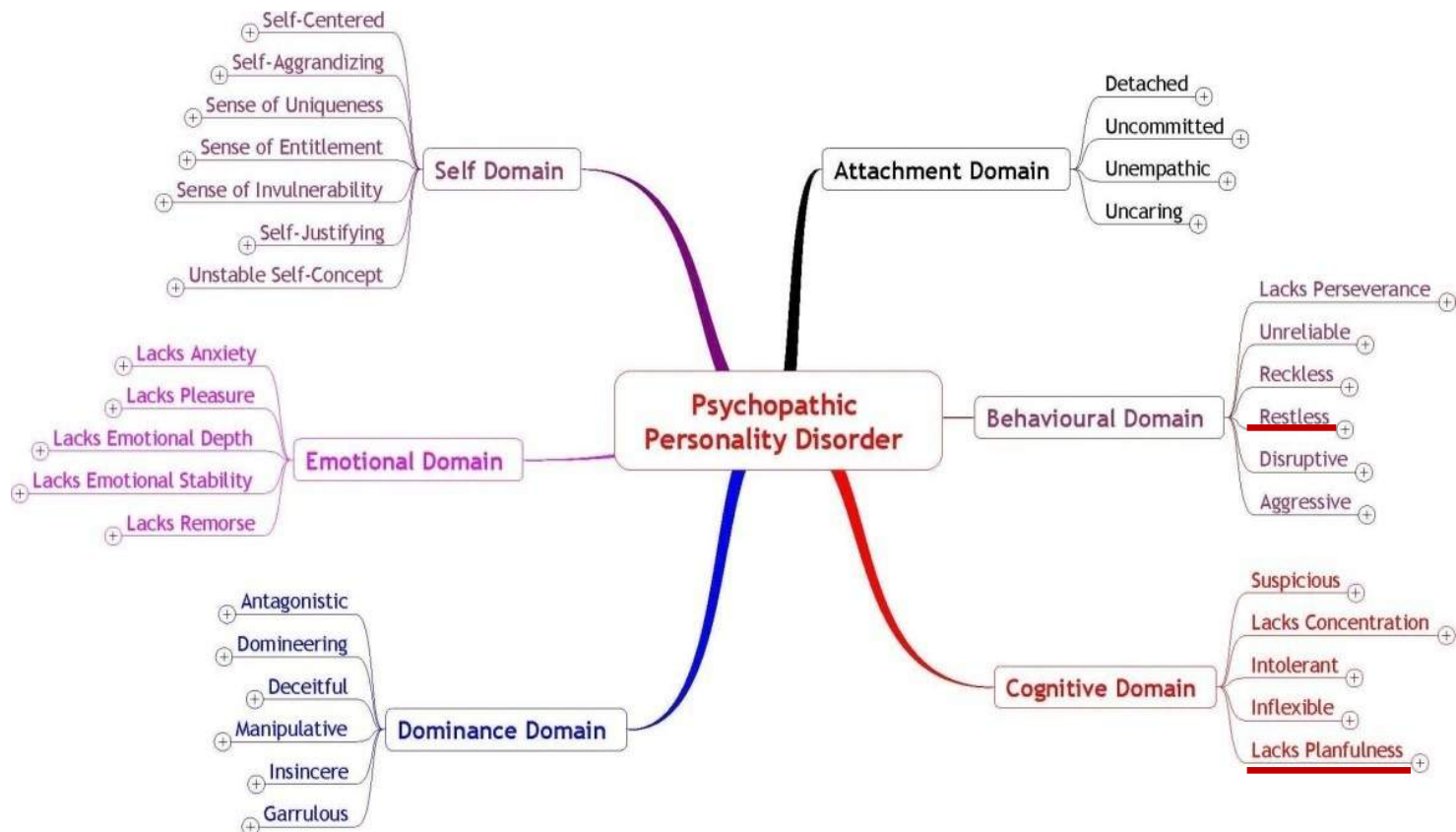
What do we think about
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Conclusions: What do we think about when we think about psychopathy?



Conclusions: What do we think about when we think about psychopathy?



Takk og takk

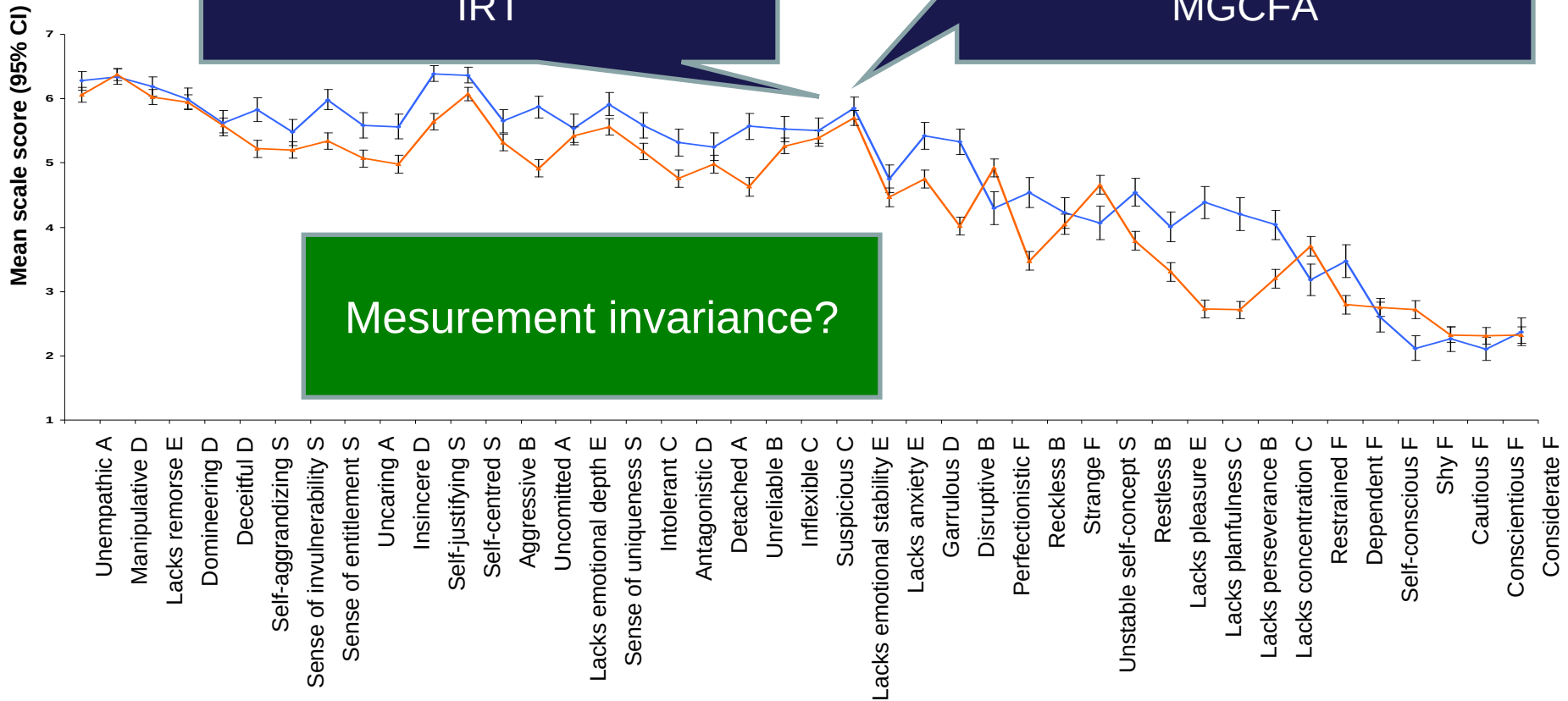
BUT.....

Similar rating equals similar
level of underlying trait?

IRT

Similar rating equals similar
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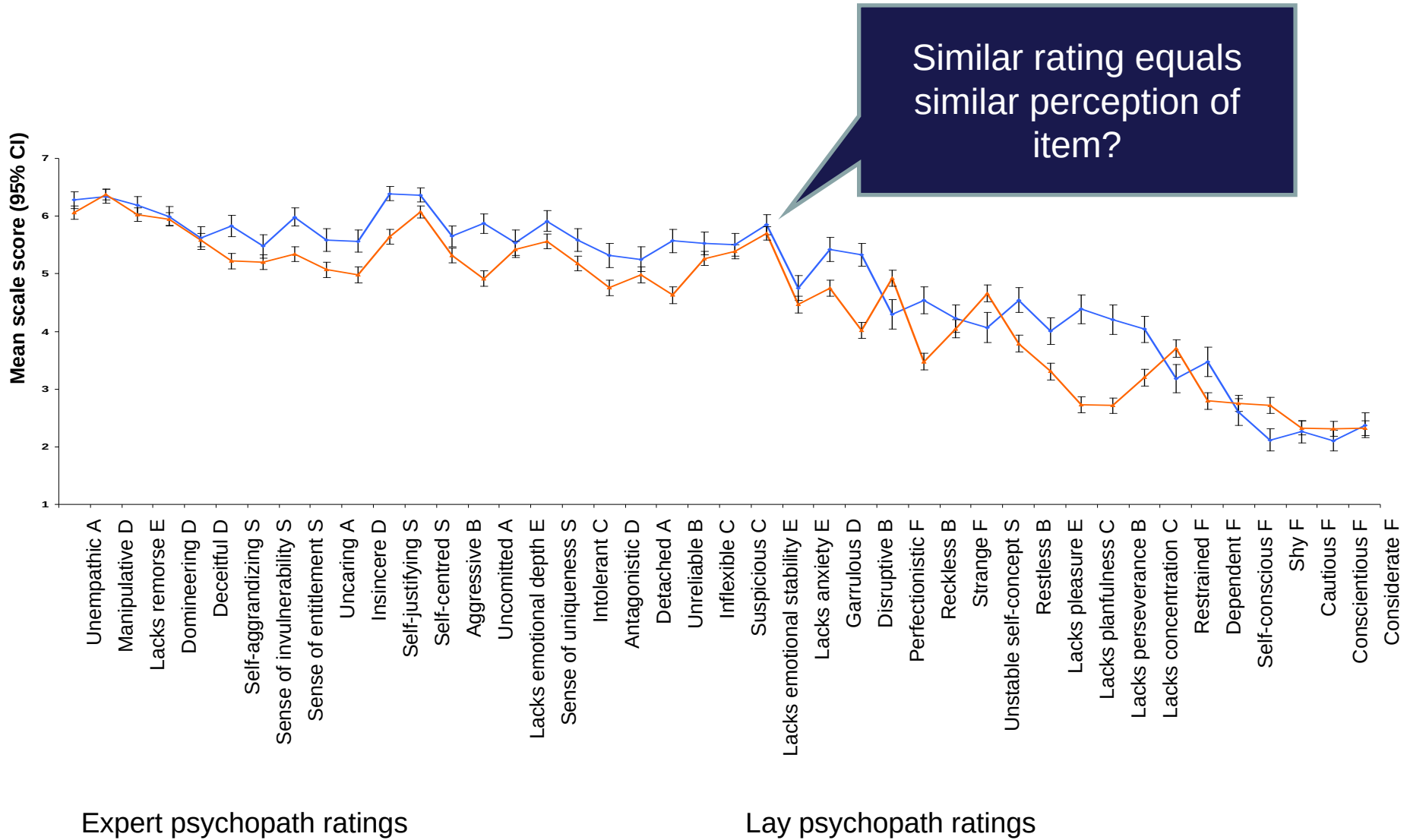
MGCFA



Expert psychopath ratings

Lay psychopath ratings

BUT.....



BUT.....

- Are people across language versions and cultures thinking about the same thing when we think about the capp symptoms?
 - Similar perception of items in the CAPP?
 - Similar rating equal level of underlying trait?

Validation by CFA

Is each domain underpinned by unidimensional constructs?

"Homogenous constructs improves clarity of clinical description" (Smith et al, 2009)

Validation by CFA

Is each domain underpinned by undimensional constructs?

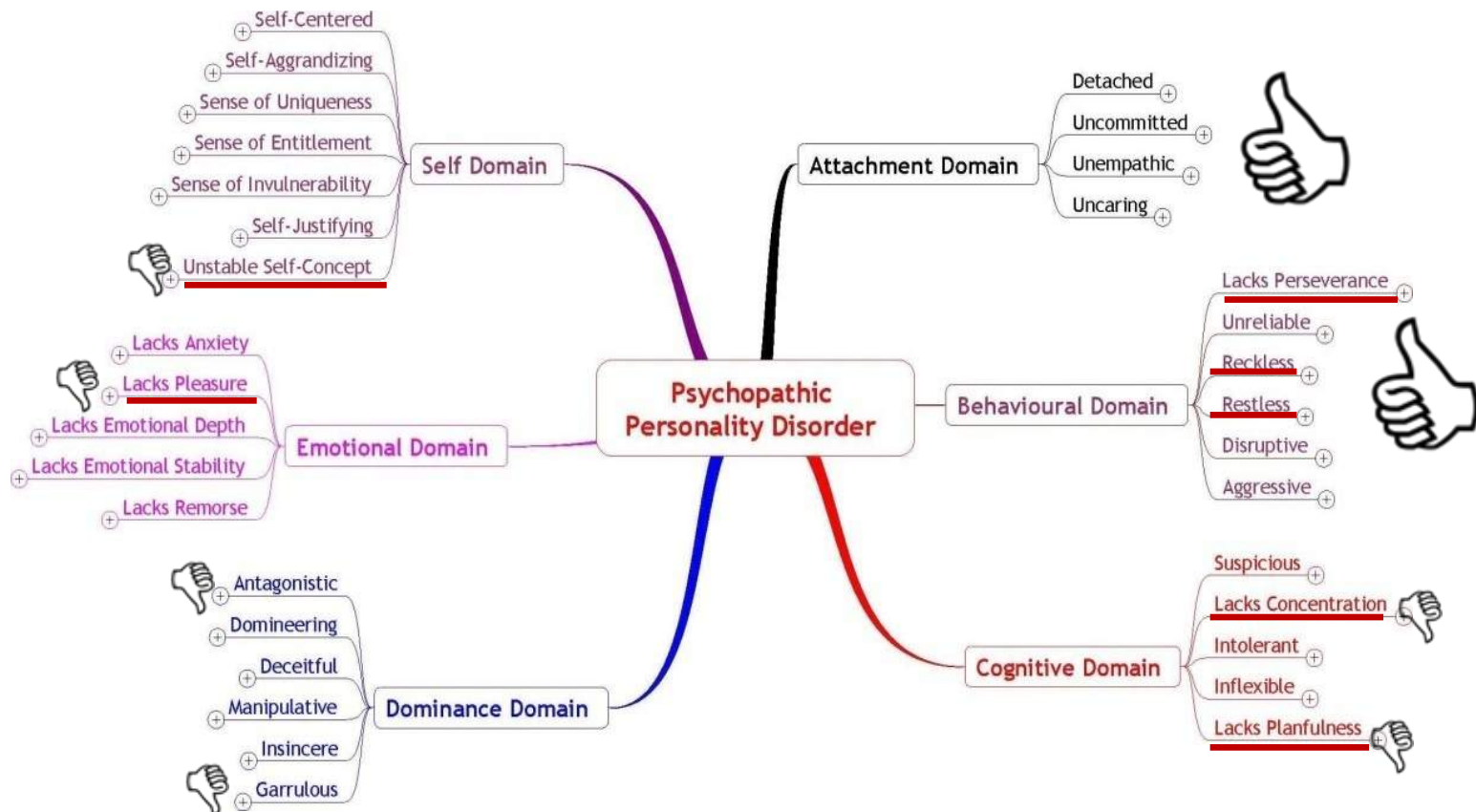
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Domain	Fit Statistics							
	Community sample				Forensic psychiatry sample			
	χ^2	df	CFI	RMSEA	χ^2	df	CFI	RMSEA
A	1.7 ^{ns}	2	1.00	0.00	0.8 ^{ns}	2	1.00	0.00
B	10.1 ^{ns}	9	1.00	0.02	10.8 ^{ns}	9	0.99	0.03
C	104.1***	5	0.65	0.19	33.3***	5	0.82	0.16
C - C2	0.4 ^{ns}	2	1.00	0.00	5.9 ^{ns}	2	0.97	0.10
C - C5	1.7 ^{ns}	2	1.00	0.00	1.8 ^{ns}	2	1.00	0.00
D	37.7***	9	0.96	0.08	38.3***	9	0.95	0.12
D - D1	12.1**	5	0.99	0.05	30.2***	5	0.95	0.16
D - D1, D6	9.5*	2	0.99	0.08	3.1 ^{ns}	2	1.00	0.05
E	8.6 ^{ns}	5	0.98	0.04	26.5***	5	0.78	0.14
E - E2	2.8 ^{ns}	2	1.00	0.03	1.4 ^{ns}	2	1.00	0.00
S	20.4 ^{ns}	14	1.00	0.03	30.3**	14	0.99	0.08
S - S7	17.1*	9	1.00	0.04	20.6*	9	0.99	0.08

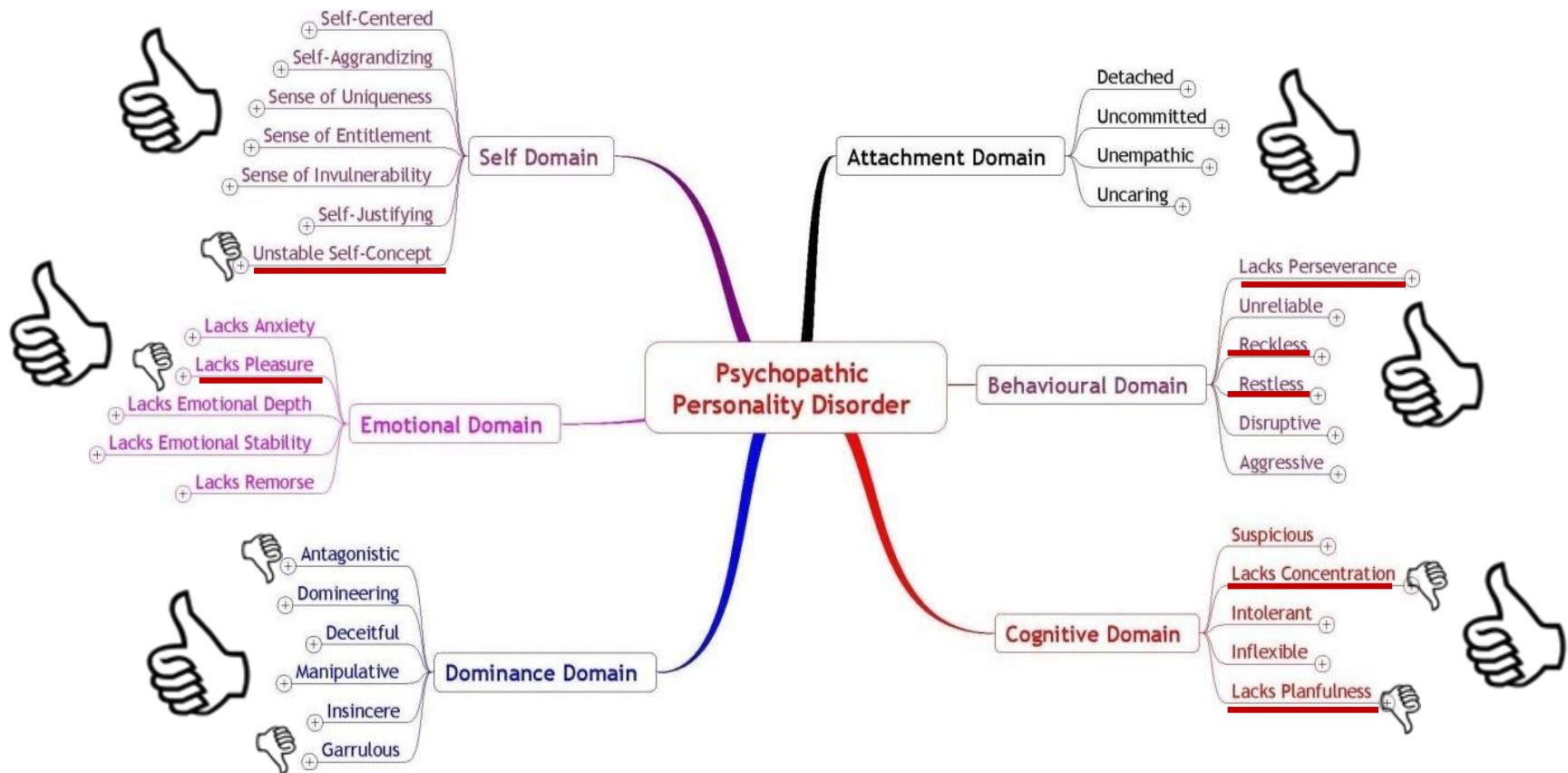
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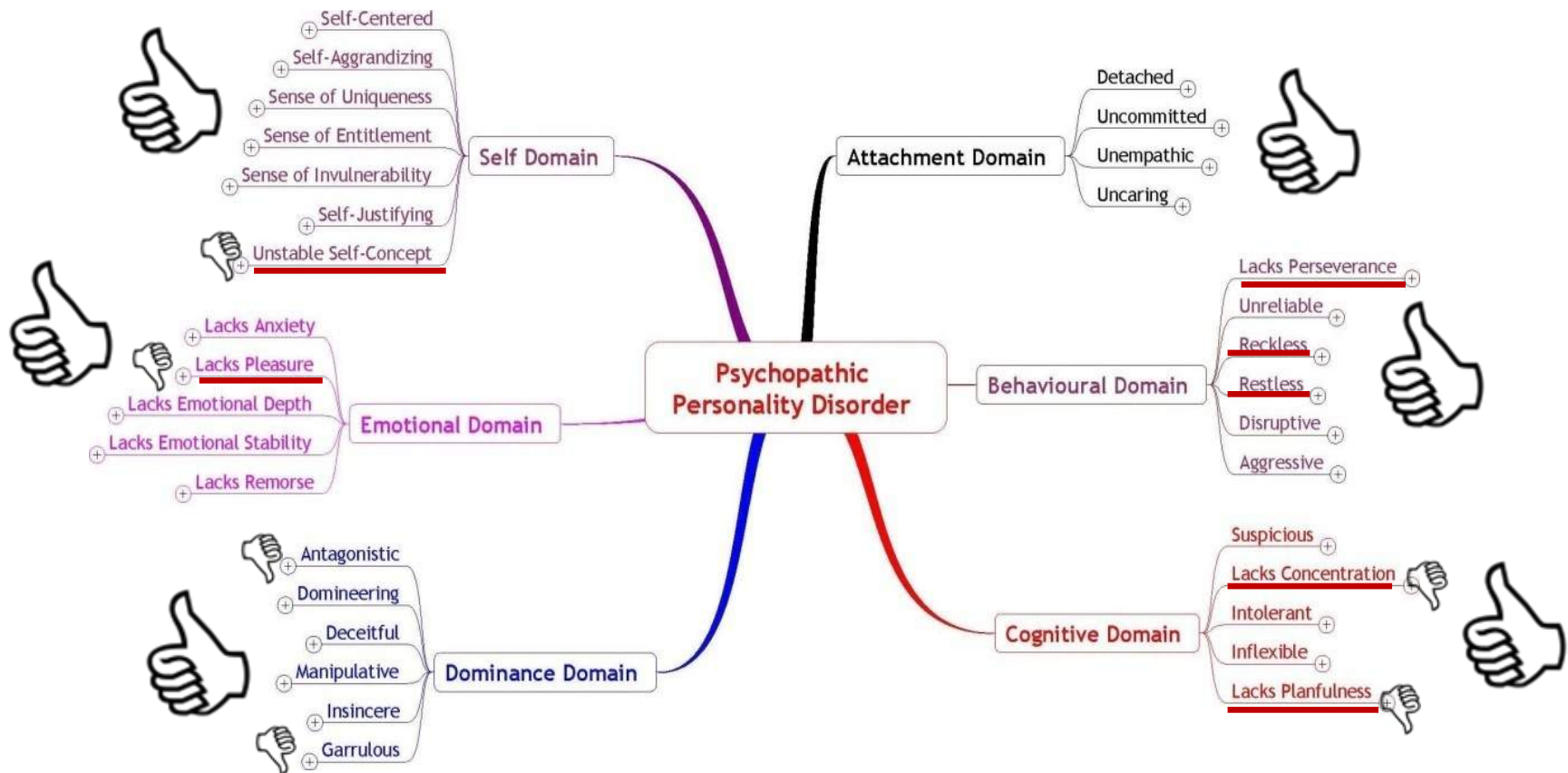


Validation by CFA



Overall conclusion

Good content validity!



Takk for meg! (Thanks!)

Helge.hoff@helse-bergen.no



Sample characteristics of raters

	Community	Forensic psychiatry	Prison
Total	553	211	32
Men	180 (32.5)	104 (51.2)	16 (50.0)
Age			
25 or below	281 (50.8)	10 (5.0)	4 (13.3)
26-35	167 (30.2)	47 (23.5)	12 (40.0)
36-50	74 (13.4)	97 (48.5)	11 (36.7)
Above 50	23 (4.2)	46 (23.0)	3 (10.0)
Education			
High school or less	110 (19.9)	27 (13.2)	11 (36.7)
Bachelor or equivalent	367 (66.4)	104 (51.0)	18 (60.0)
Master or equivalent	73 (13.2)	73 (35.8)	1 (3.3)
Victim history*	120 (21.7)	37 (25.9)	6 (19.7)
Native language Norwegian	533 (97.1)	197 (95.2)	29 (93.5)

Note. * "Have you in your personal life ever been victim of a harmful act or acts by someone you consider a psychopath?"

Domain	Fit Statistics							
	Community sample				Forensic psychiatry sample			
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A	1.7 ^{ns}	2	1.00	0.00	0.8 ^{ns}	2	1.00	0.00
B	10.1 ^{ns}	9	1.00	0.02	10.8 ^{ns}	9	0.99	0.03
C	104.1***	5	0.65	0.19	33.3***	5	0.82	0.16
C - C2	0.4 ^{ns}	2	1.00	0.00	5.9 ^{ns}	2	0.97	0.10
C - C5	1.7 ^{ns}	2	1.00	0.00	1.8 ^{ns}	2	1.00	0.00
D	37.7***	9	0.96	0.08	38.3***	9	0.95	0.12
D - D1	12.1**	5	0.99	0.05	30.2***	5	0.95	0.16
D - D1, D6	9.5*	2	0.99	0.08	3.1 ^{ns}	2	1.00	0.05
E	8.6 ^{ns}	5	0.98	0.04	26.5***	5	0.78	0.14
E - E2	2.8 ^{ns}	2	1.00	0.03	1.4 ^{ns}	2	1.00	0.00
S	20.4 ^{ns}	14	1.00	0.03	30.3**	14	0.99	0.08
S - S7	17.1*	9	1.00	0.04	20.6*	9	0.99	0.08

Note. A = Attachment domain, B = Behavioral domain, C = Cognitive domain, D = Dominance domain, E = Emotional domain, S = Self domain; C2 = Lacks concentration, C5 = Lacks planfulness, D1 = Antagonistic, D6 = Garrulous, E2 = Lacks pleasure, S7 = Unstable self-concept ;
ns = non-significant, * = $p < .05$, ** = $p < .01$, *** = $p < .0001$

CAPP Prototypical Questionnaire

While thinking of the most psychopathic patient / person you can think of....

1) LACKS PLEASURE (*pessimistic, gloomy, unenthusiastic*)

How typical is this characteristic of psychopathy?

Not typical

Very typical

1

2

3

4

5

6

7

☐ I am unsure what the characteristic refers to

Please underline any of the words describing the characteristic you do not understand.

- 42 items: 33 CAPP symptoms – 9 foils

CAPP Prototypical Questionnaire

While thinking of someone you know who definitely is *not* a psychopath....

1) LACKS PLEASURE (*pessimistic, gloomy, unenthusiastic*)

How typical is this characteristic of a non-psychopath?

Not typical

Very typical

1

2

3

4

5

6

7

☐ I am unsure what the characteristic refers to

Please underline any of the words describing the characteristic you do not understand.

- 42 items: 33 CAPP symptoms – 9 foils