

Antisociality and psychopathy:

do their faces reflect their
emotional experiences
when recalling personal
memories?

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ANTISOCIAL PERSONALITY DISORDER (ASPD)

Failure to conform to social norms

Deceitfulness

Impulsivity

Irritability and aggressiveness

Reckless disregard for safety of self or others

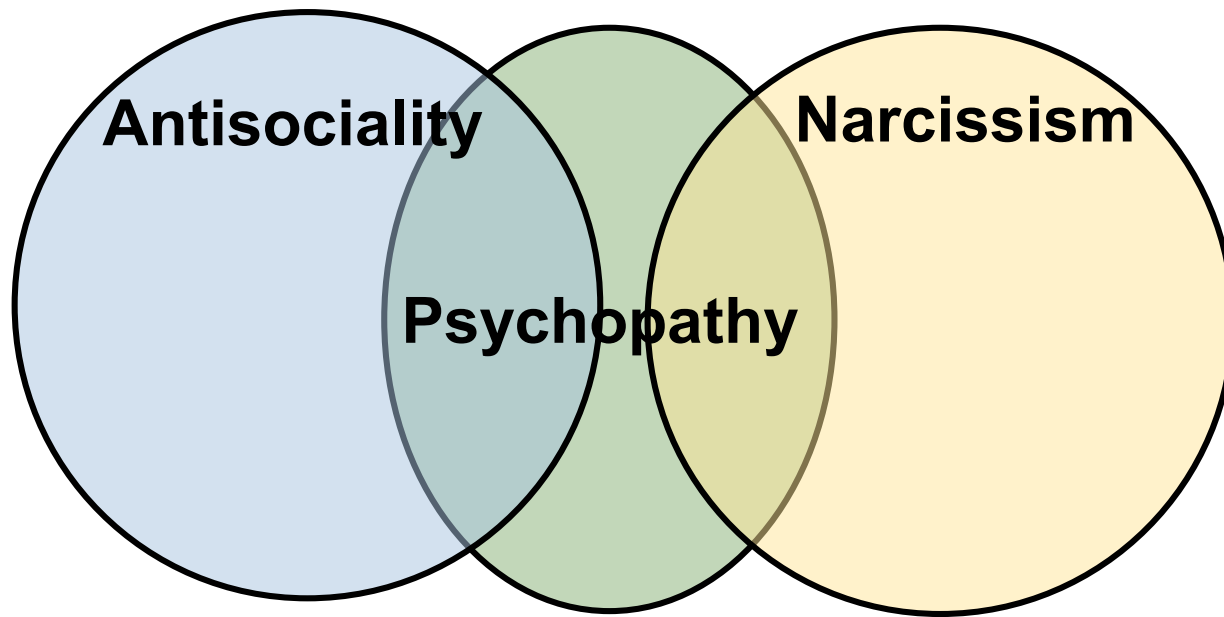
Consistent irresponsibility

Lack of remorse



50 - 80% in prison
38 - 56% in forensic population

PSYCHOPATHIC PERSONALITY DISORDER (PPD)



- Emotional coldness
- Great lack of empathy
- Sadism

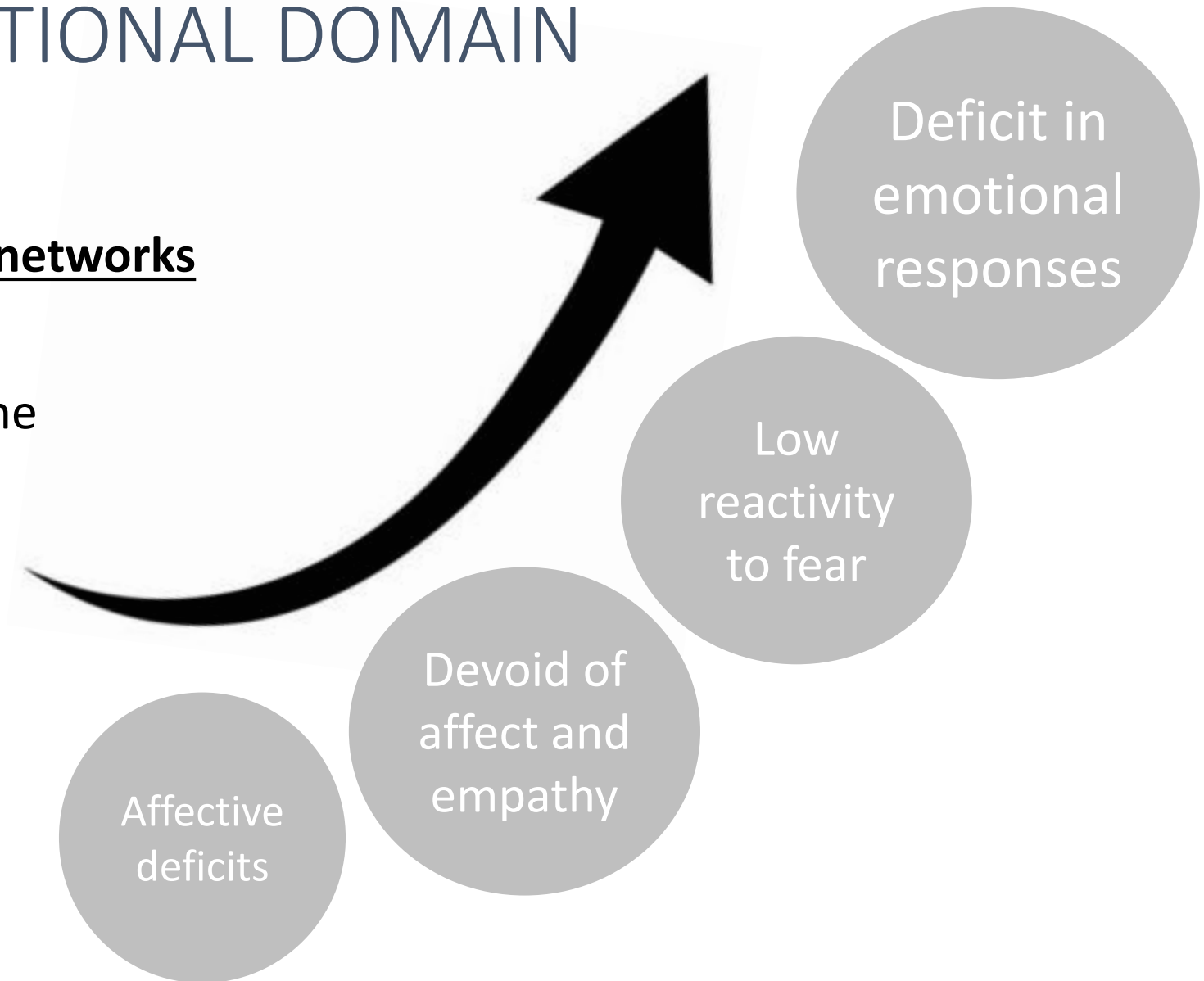


>1% in general population
5-10% in forensic population

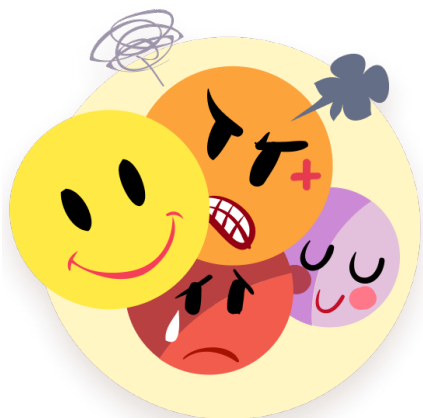
EMOTIONAL DOMAIN

Interpersonal relationship/social networks

- The skill to identify and interpret the emotions
- The facial expressions



EMOTIONAL FACIAL EXPRESSIONS (EFE)



(de Wied et al., 2012; Fanti et al., 2017; Hagenmuller et al., 2012; Jütten, 2012; Lavalée et al., 2022; Schönenberg et al., 2014 ; Smeijers et al., 2017; Steuerwald et al., 2017)

EMOTIONAL FACIAL EXPRESSIONS (EFE)



ASPD

More angry EFE

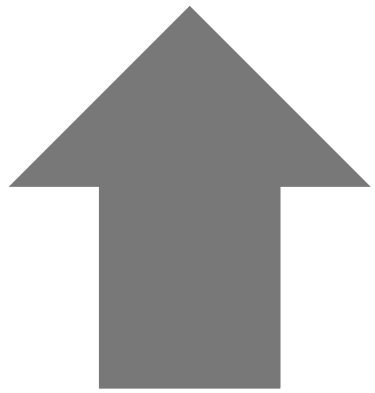
(hostile attribution bias)

EMOTIONAL FACIAL EXPRESSIONS (EFE)

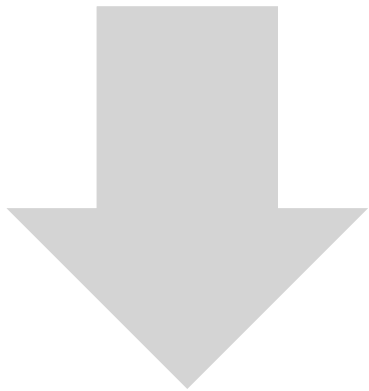


ASPD	PPD
More angry EFE (hostile attribution bias)	Less angry EFE
	Deficit in EFE imitation (yawning and laughter)
	Few EFE react to emotional stimuli

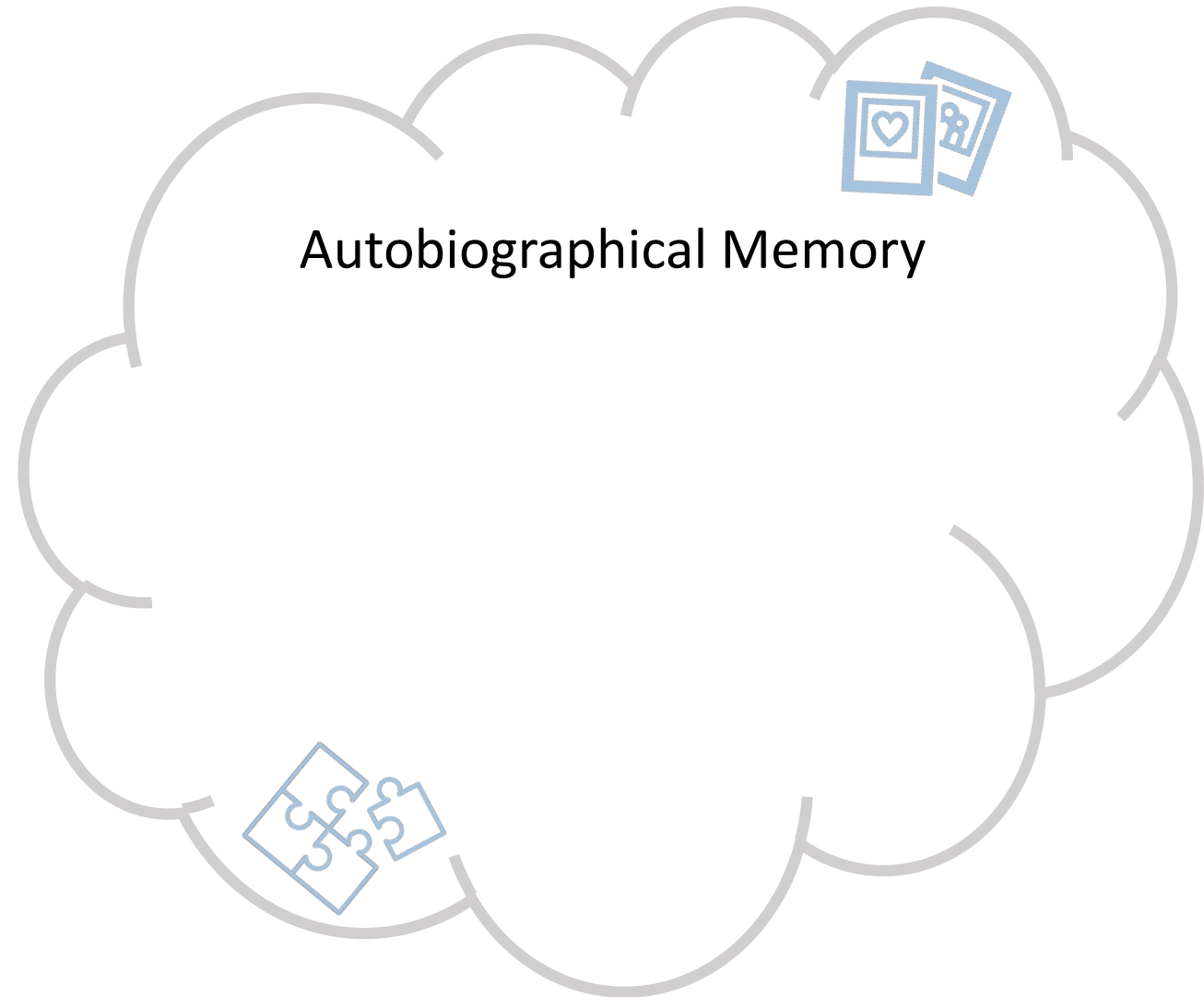
ISSUE



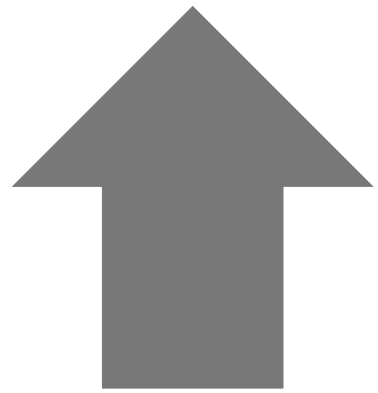
Reduced emotional
response capacity?



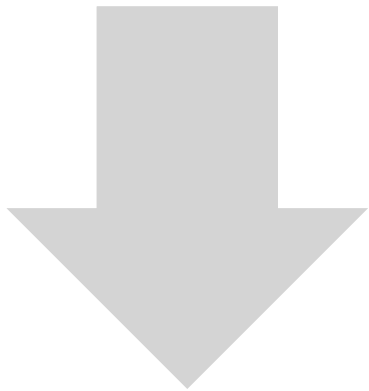
Important lack of
motivation?



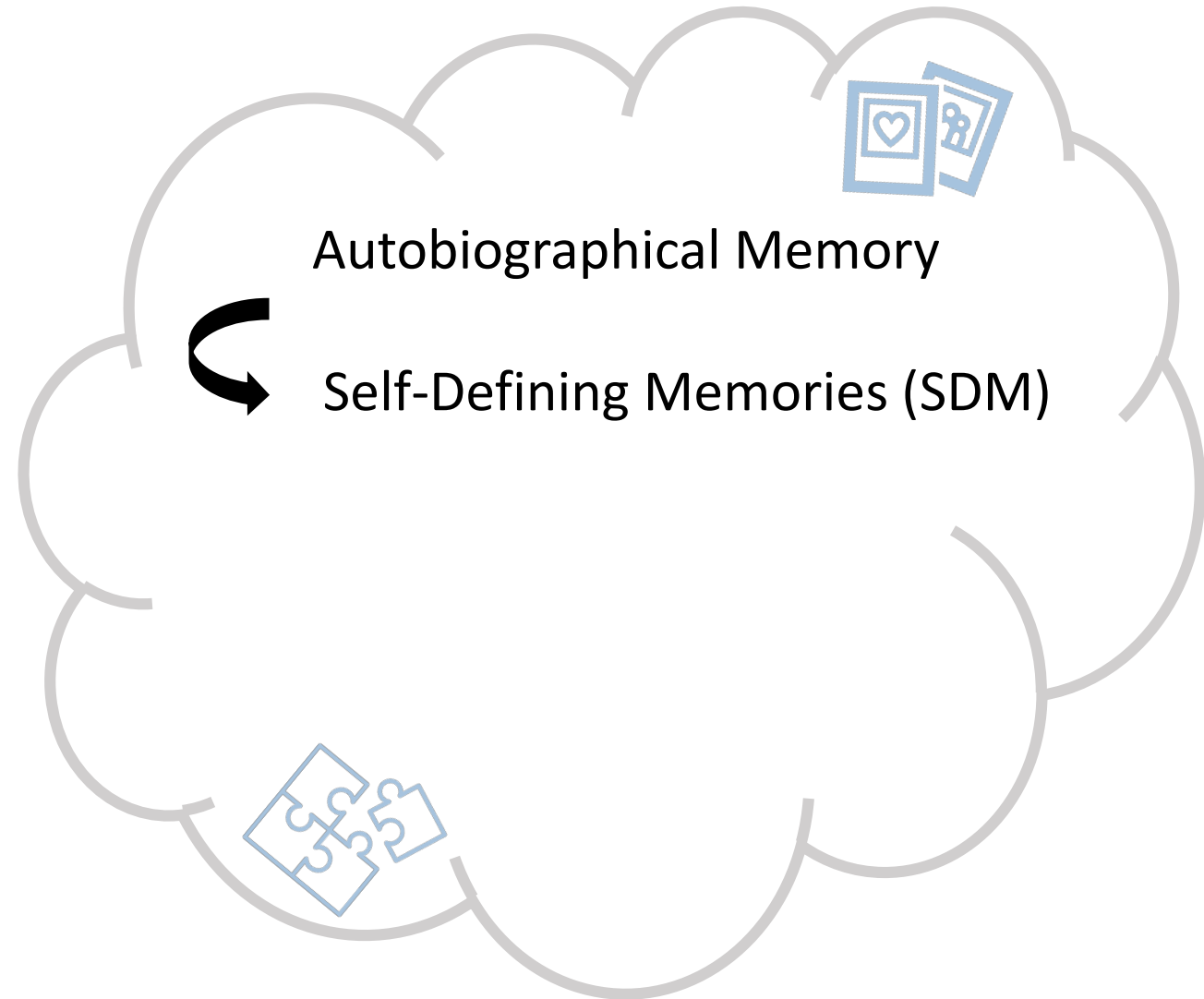
ISSUE



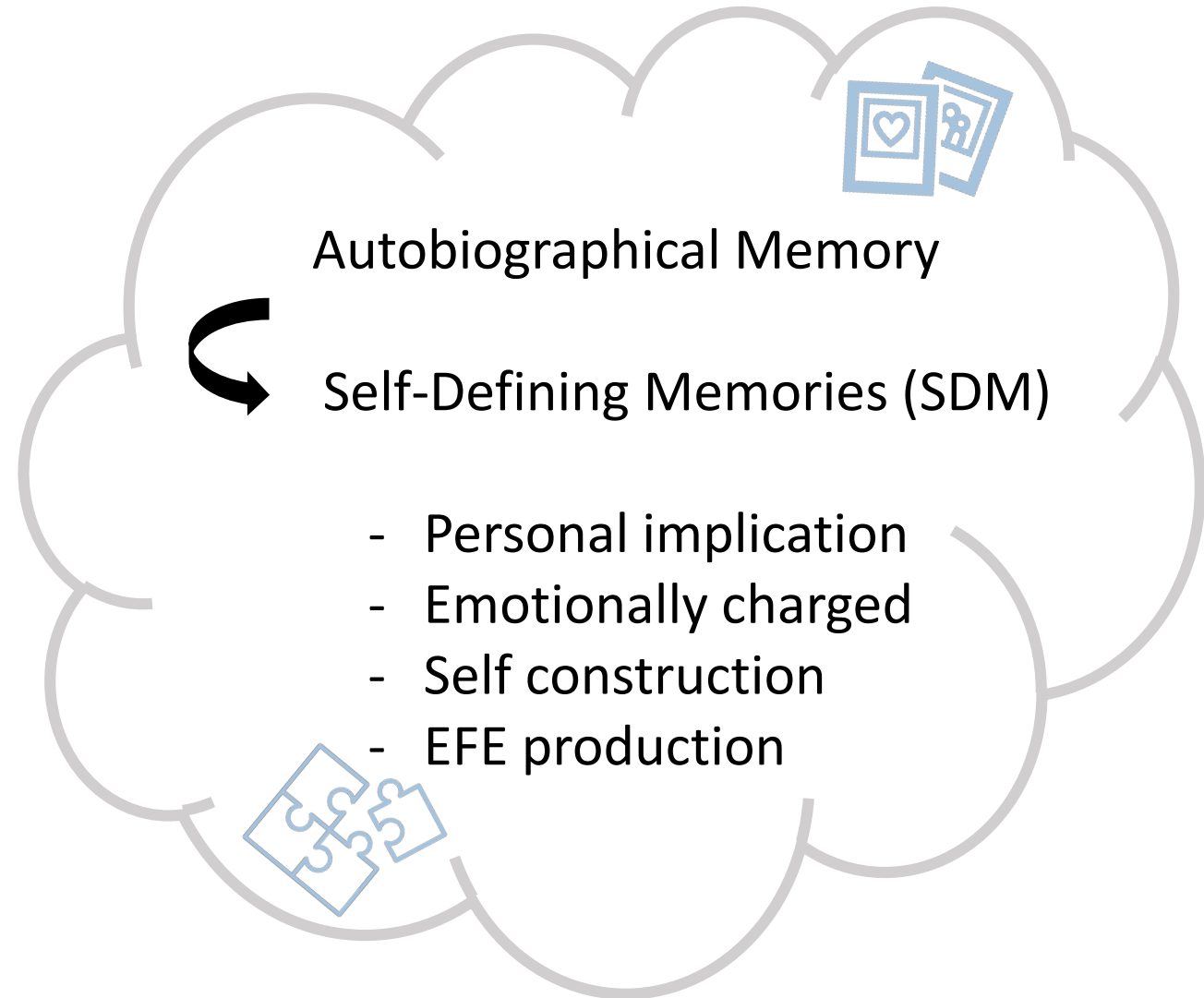
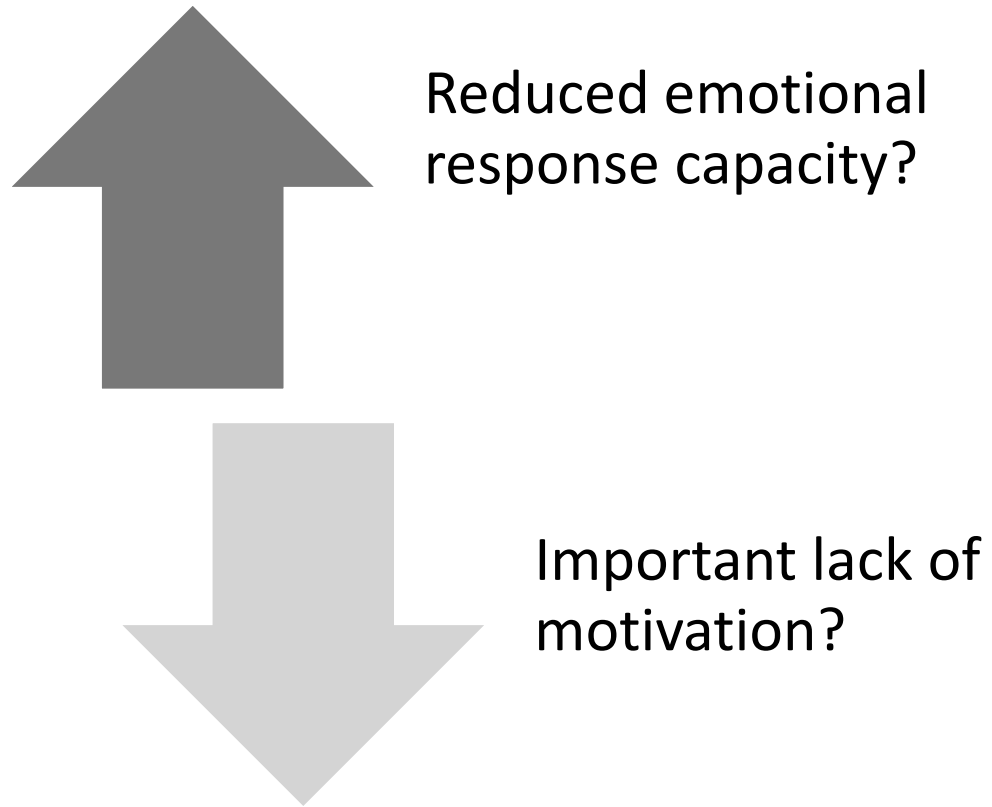
Reduced emotional
response capacity?

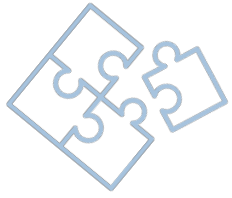


Important lack of
motivation?



ISSUE

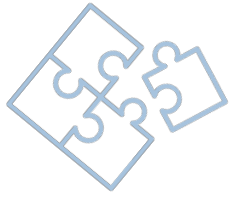




OBJECTIVE

Analyze the EFEs of people with ASPD with/without PPD, in comparison with control people, during the retrieval of autobiographical memories, namely SDMs.



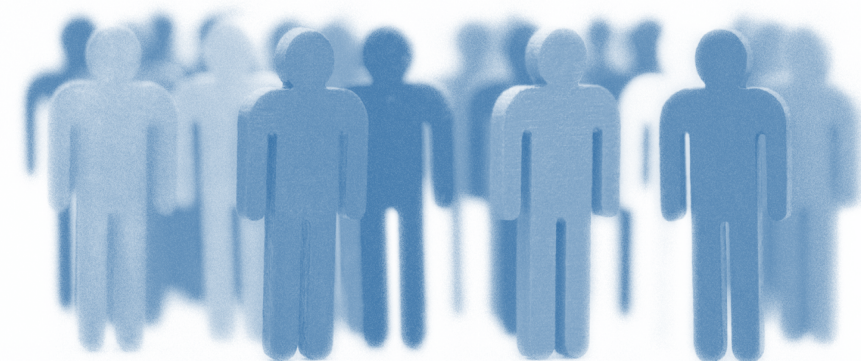


OBJECTIVE

Analyze the EFEs of people with ASPD with/without PPD, in comparison with control people, during the retrieval of autobiographical memories, namely SDMs.

Main hypothesis:

- People with ASPD: MORE angry EFEs
- People with PPD: MORE emotional neutrality



PARTICIPANTS

74 participants.

Including 50 hospitalized under the law of May 5, 2014 relating to the internment of persons



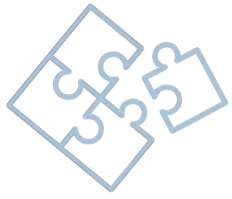
	ASPD	PPD	FC	GC
Mean age (years) (SD)	46,04 (15,47)	41,76 (12,10)	39,59 (13,13)	32,83 (10,47)
Mean level of education (years) (SD)	8,83 (2,94)	7,13 (1,96)	8,08 (1,84)	14,33 (2,58)
Mean duration of hospitalization (years) (SD)	9,62 (9,26)	7,89 (7,34)	6,06 (7,43)	

ASPD – Antisocial Personality Disorder

PPD – Psychopathic Personality Disorder

FC – Forensic Controls

GC – General population Controls



METHOD

Using the SDM task

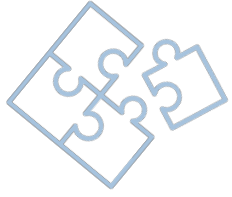
4 features

- Specificity
- Integration
- Valence
- Theme

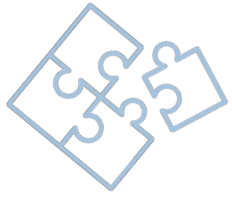
EFE measurements with
Facereader:

Emotional valence

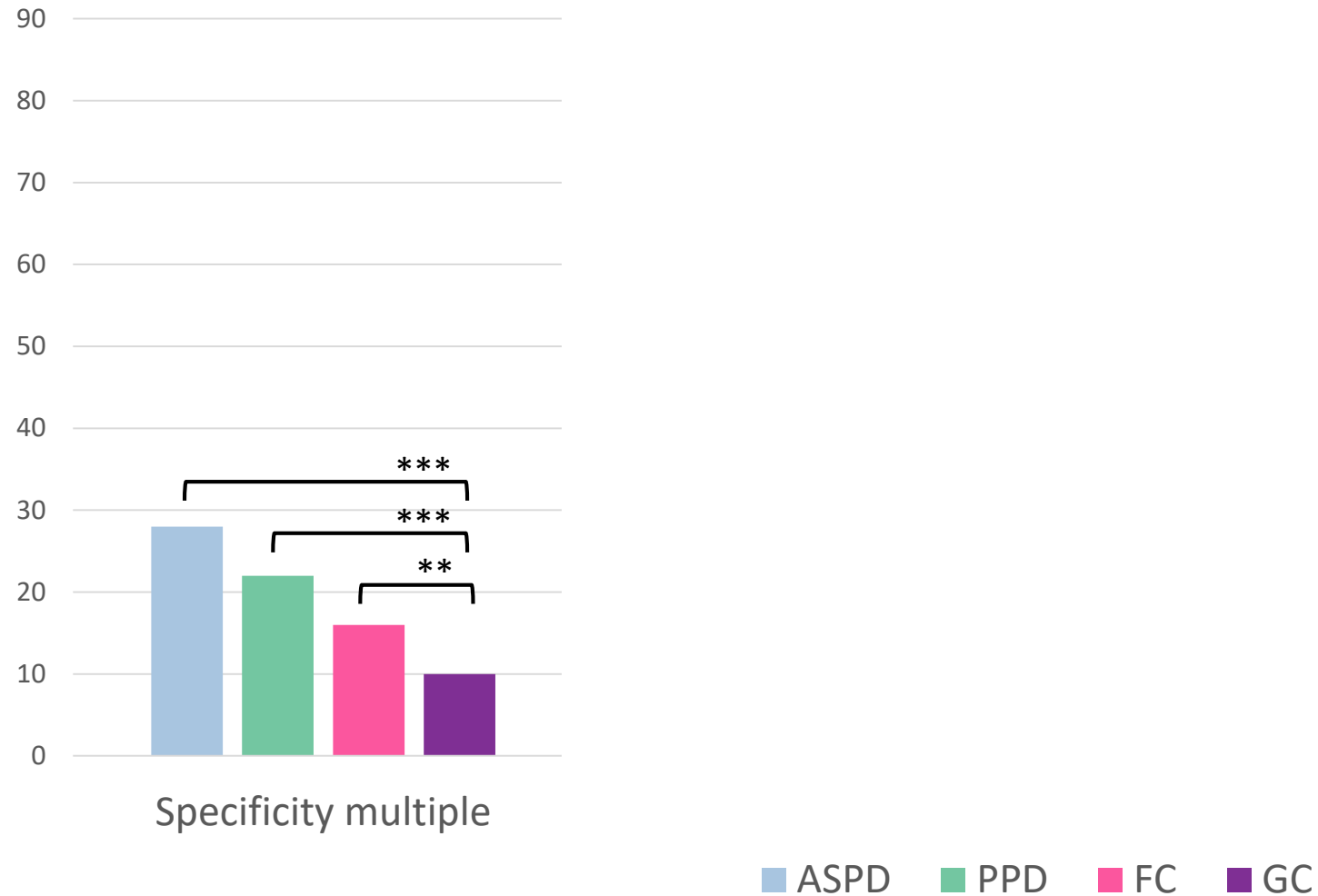
Neutral	Joy	Sadness
Anger	Fear	Disgust



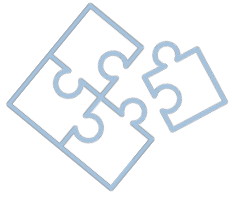
RESULT 1: SDM CHARACTERISTICS



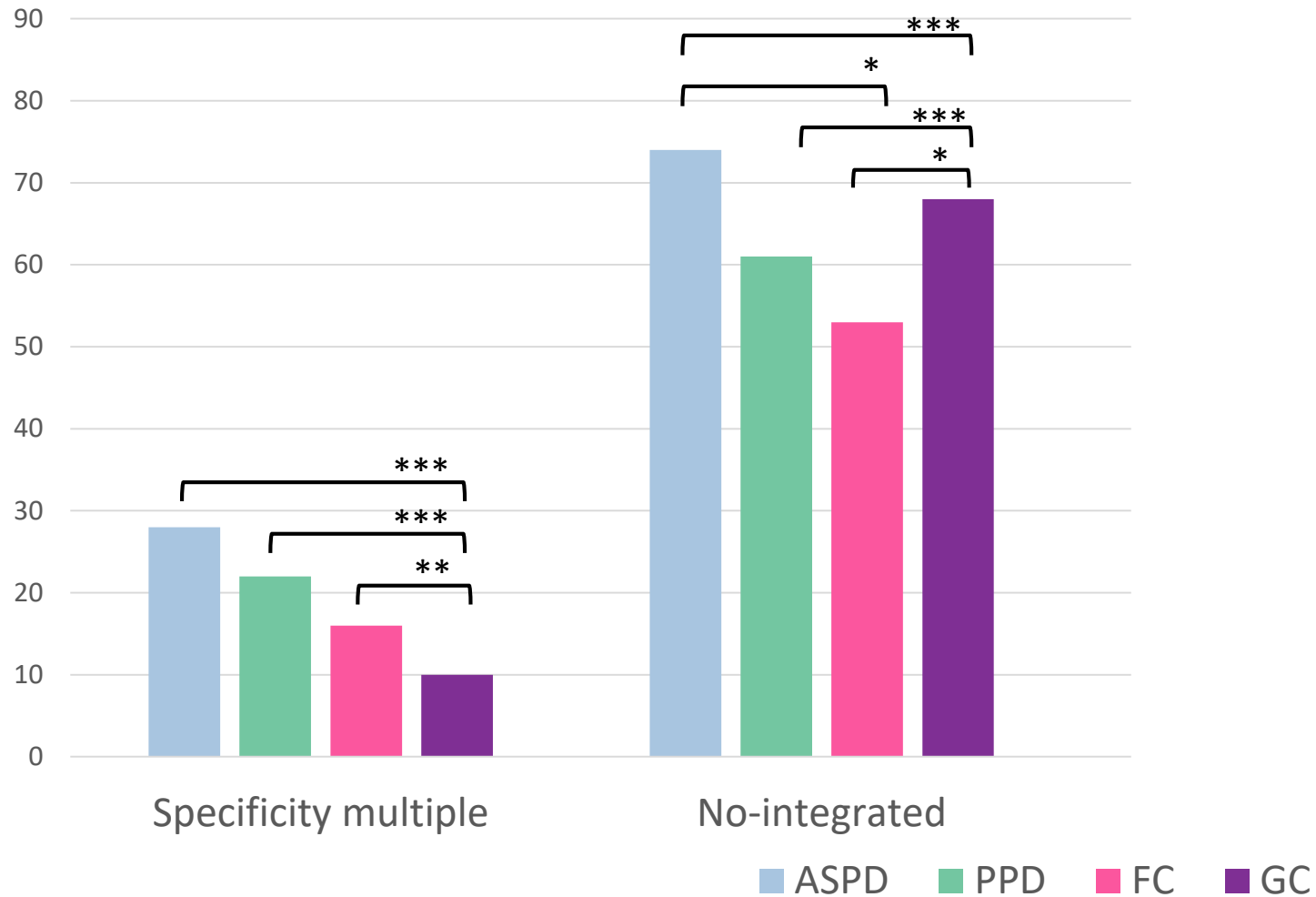
RESULT 1: SDM CHARACTERISTICS



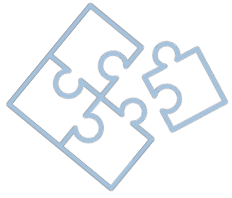
* $p < .05$; ** $p < .01$; *** $p < .001$



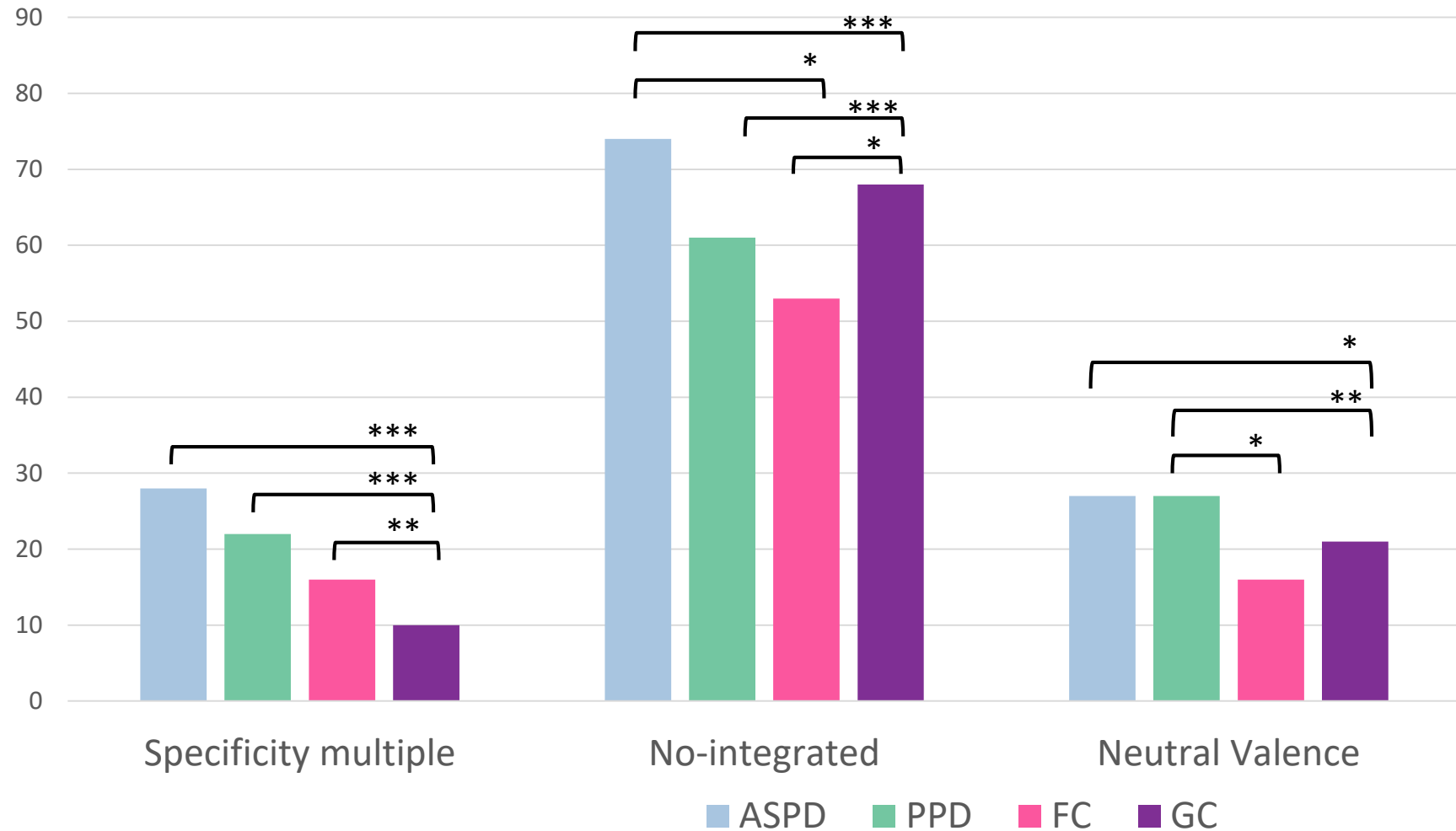
RESULT 1: SDM CHARACTERISTICS



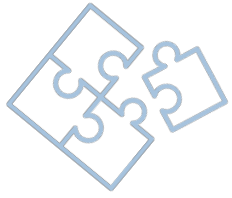
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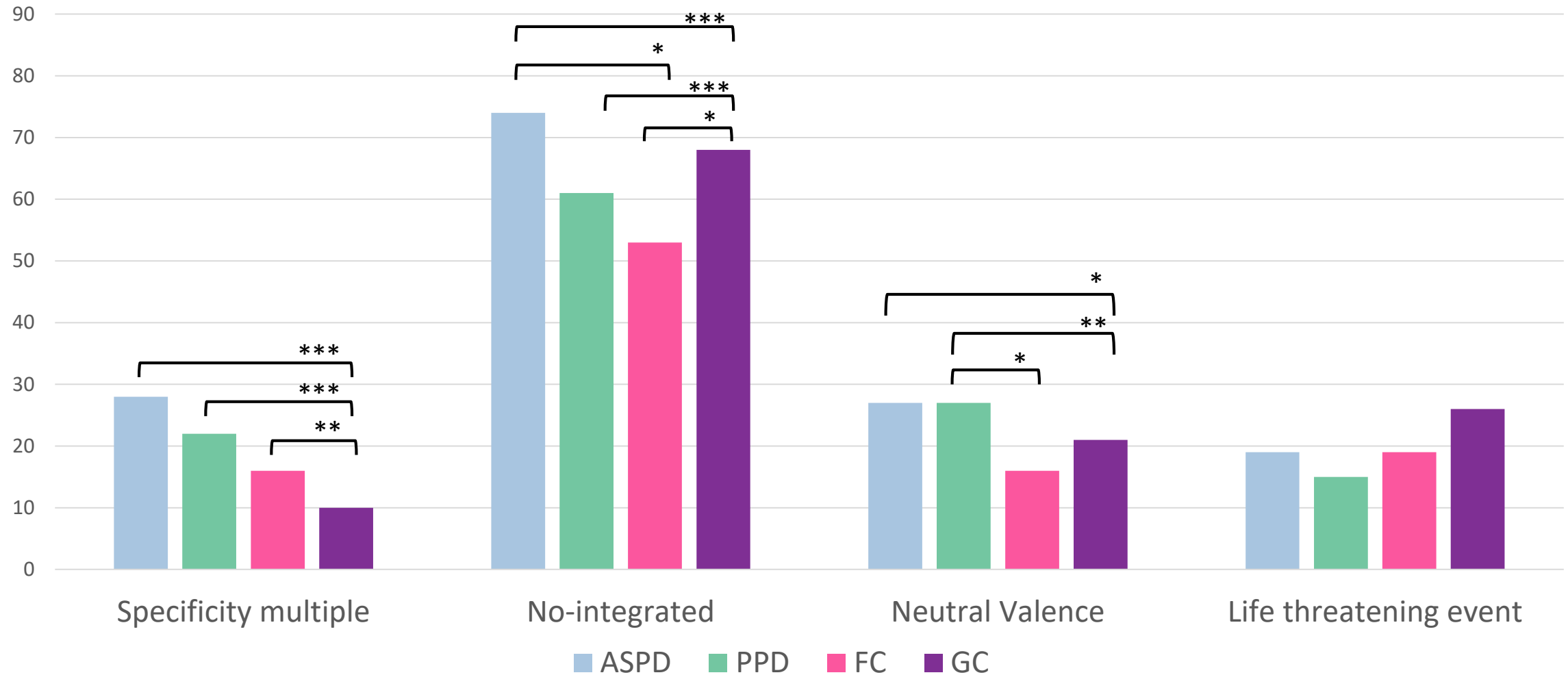
RESULT 1: SDM CHARACTERISTICS



* $p < .05$; ** $p < .01$; *** $p < .001$



RESULT 1: SDM CHARACTERISTICS



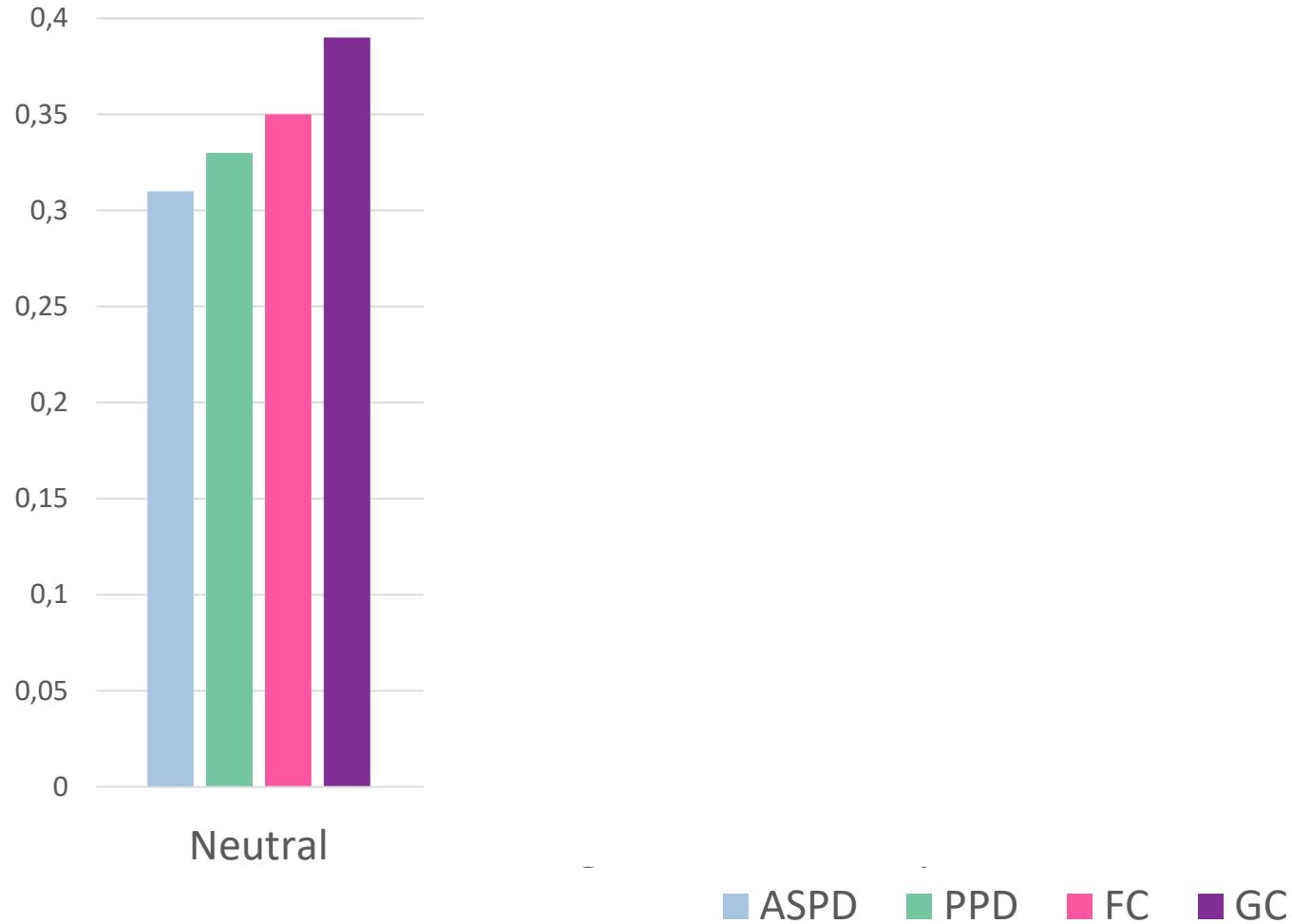
* $p < .05$; ** $p < .01$; *** $p < .001$



RESULT 2: EMOTIONAL FACIAL EXPRESSIONS



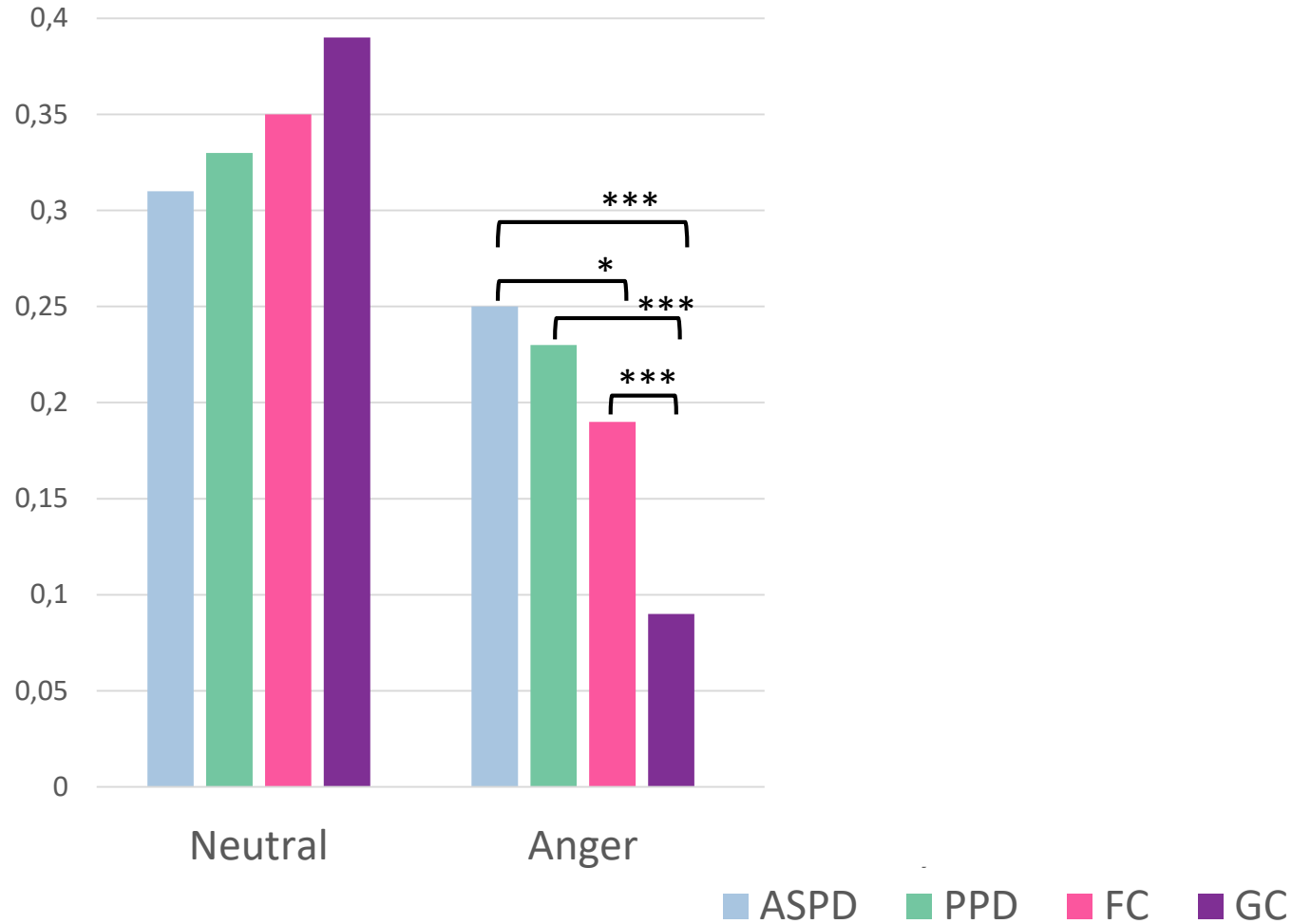
RESULT 2: EMOTIONAL FACIAL EXPRESSIONS



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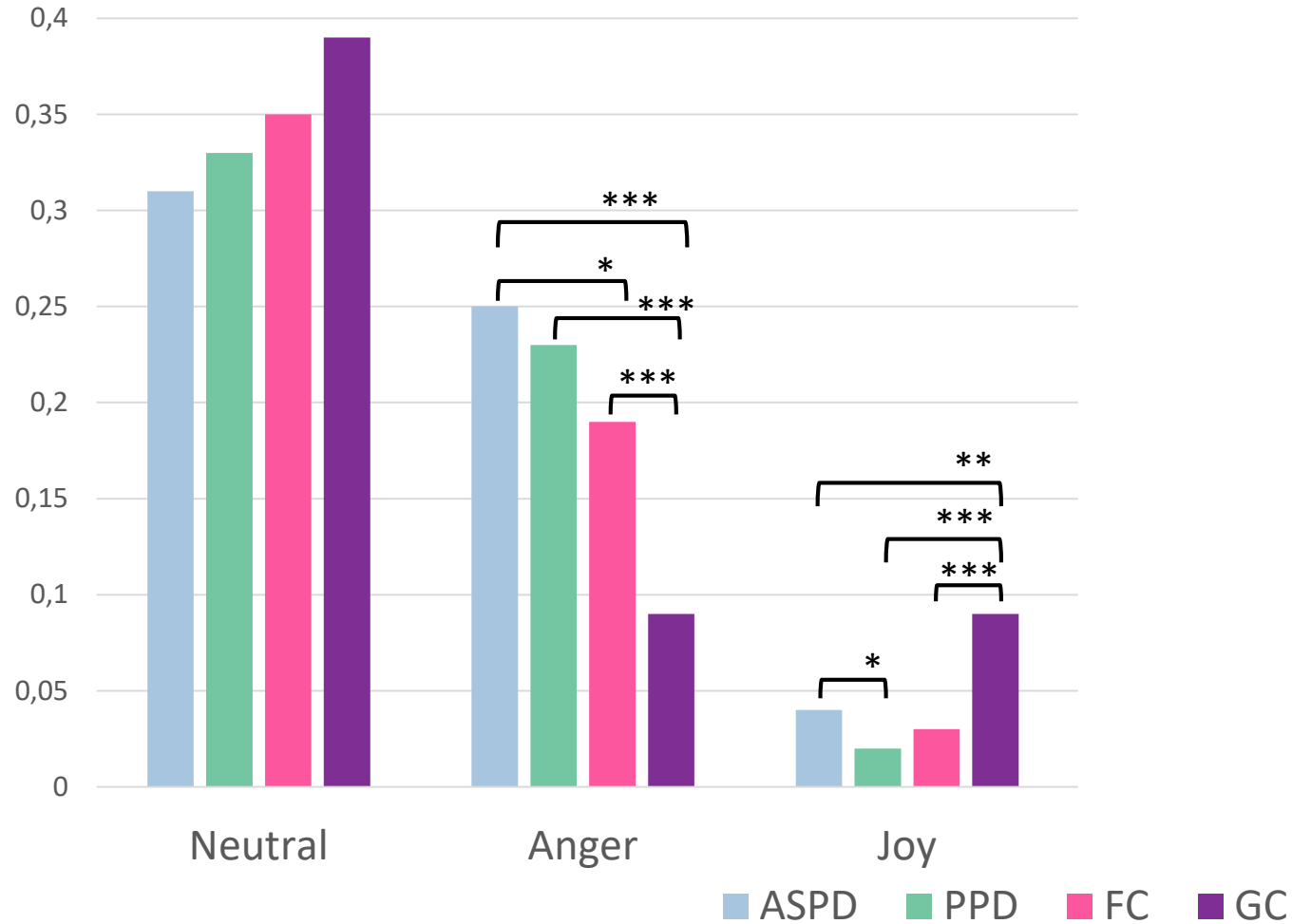
RESULT 2: EMOTIONAL FACIAL EXPRESSIONS



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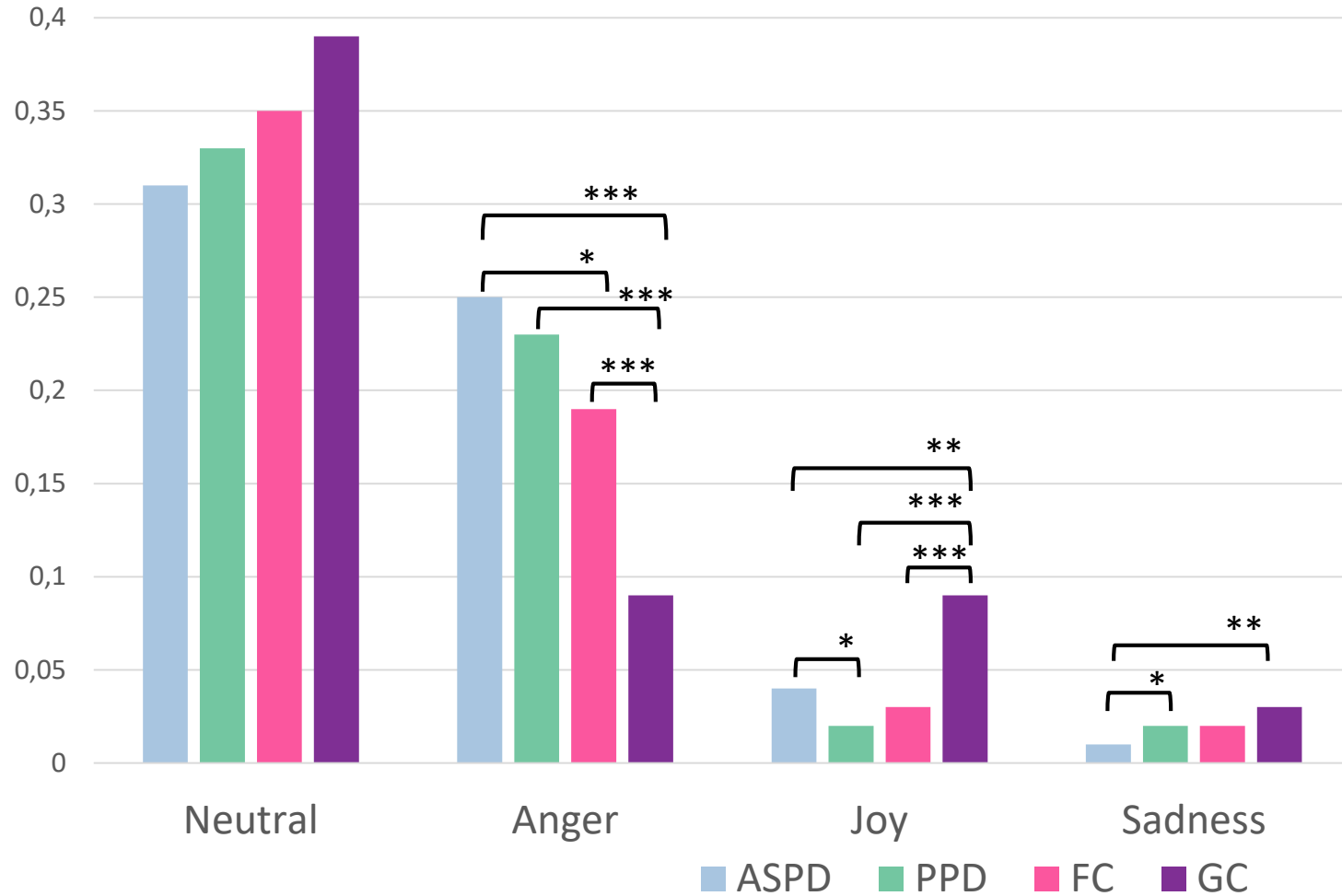
RESULT 2: EMOTIONAL FACIAL EXPRESSIONS



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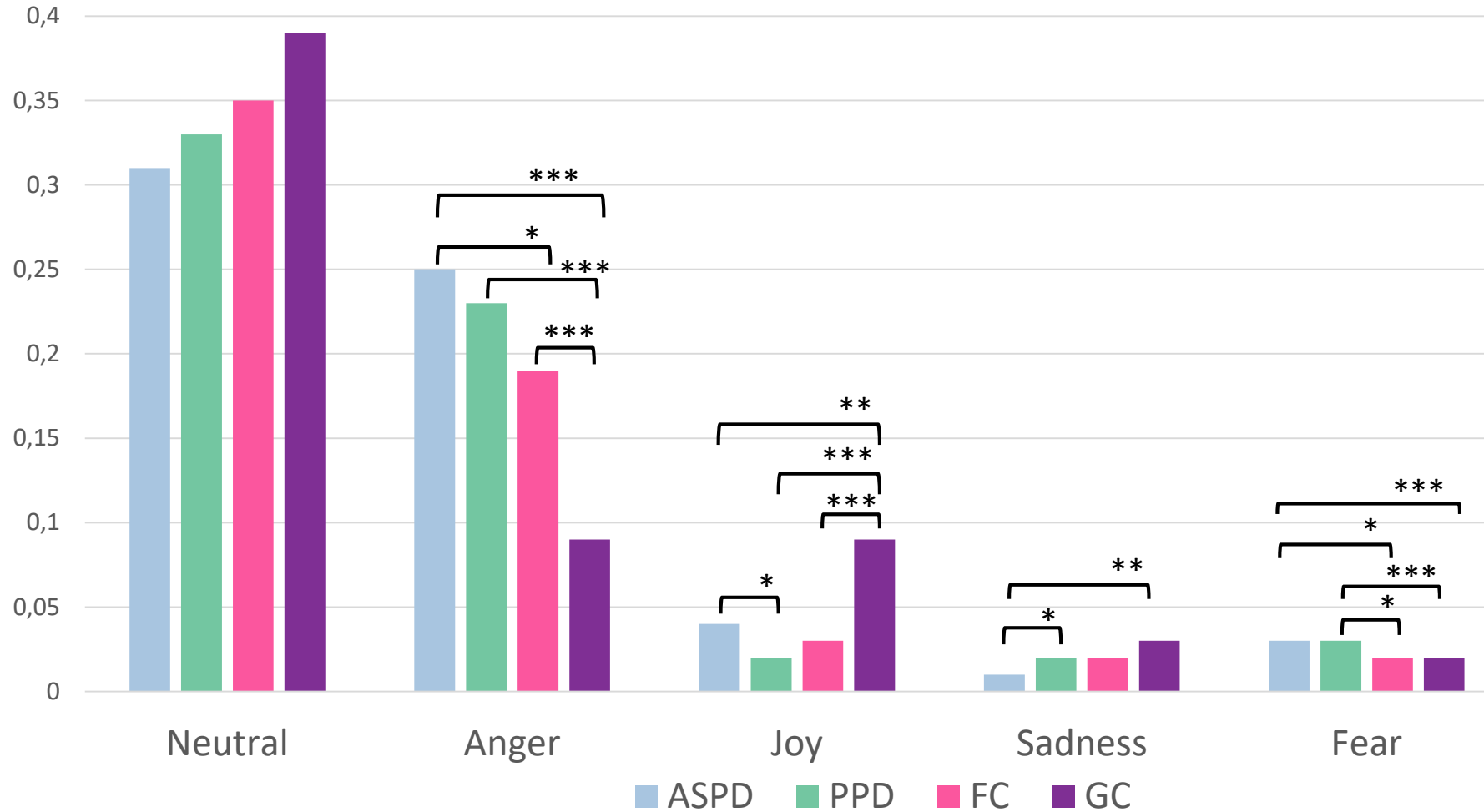
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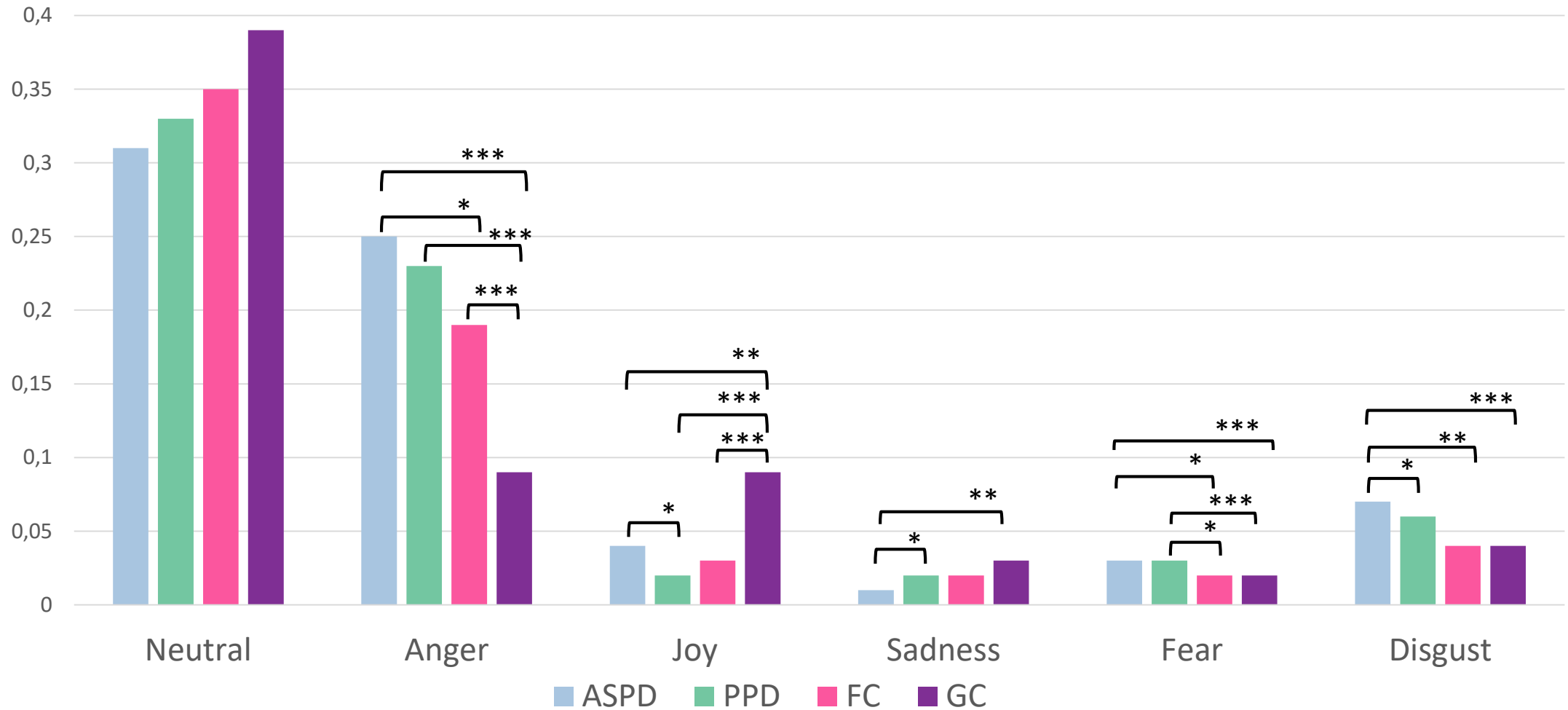
RESULT 2: EMOTIONAL FACIAL EXPRESSIONS



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RESULT 2: EMOTIONAL FACIAL EXPRESSIONS



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Discussion



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graph LR; D((Discussion)) --- L1((Ability or motivation?)); D --- L2((The role of the "environment" variable)); D --- L3((Specific characteristics of people with violent behavior)); D --- L4((Presence of traumatic antecedents (adversity))); D --- L5((Role of joy));
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Ability or motivation?

The role of the "environment" variable

Specific characteristics of people with violent behavior

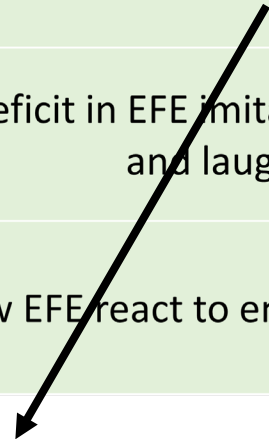
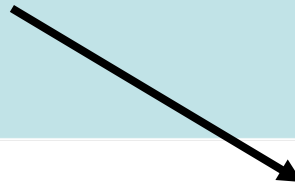
Presence of traumatic antecedents (adversity)

Role of joy

TAKE HOME MESSAGE



ASPD	PPD
More angry EFE (hostile attribution bias)	Less angry EFE
	Deficit in EFE imitation (yawning and laughter)
	Few EFE react to emotional stimuli



No distinction on
anger



Importance of the Self-Defining Memories task



Thank you for your attention

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APPENDIX 1: RESULT OF EFE ACCORDING TO SDM CHARACTERISTICS

	<i>EFE</i>	ASPD	PPD
Specificity multiple	<i>Joy</i>	+ than TPP	- than GC
	<i>Sadness</i>	- than FC	- than FC
		<i>FI express more sadness than GC</i>	
No-integrated	<i>Disgust</i>	+ than PPD and FC	
	<i>Sadness</i>	+ than FC	+ than FC
	<i>Anger</i>	<i>FC express more anger than the GC</i>	
Neutral valence	<i>Joy</i>	+ than FC	
	<i>Disgust</i>	+ than PPD and FC - than GC	
	<i>Anger</i>	+ than GC	- than GC
	<i>Fear</i>	+ than GC	+ than GC