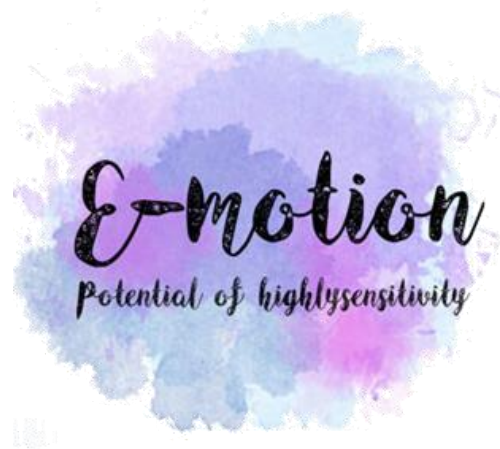


SENSORY PROCESSING SENSITIVITY: A REVIEW IN LIGHT OF RECENT RESEARCH

UA Team



**Final Meeting
Alicante
16th July 2021**

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1. WHAT IS SPS?

SPS is a personality trait that represents the differences among individuals in relation to the perception of environmental stimuli

SPS is associated with a more deeply cognitive, sensory and emotional information processing; maybe due to a more sensitive central nervous system

1. WHAT IS SPS?

SPS is a continuum, not a disorder

Sensitivity continuum

LOW

MEDIUM

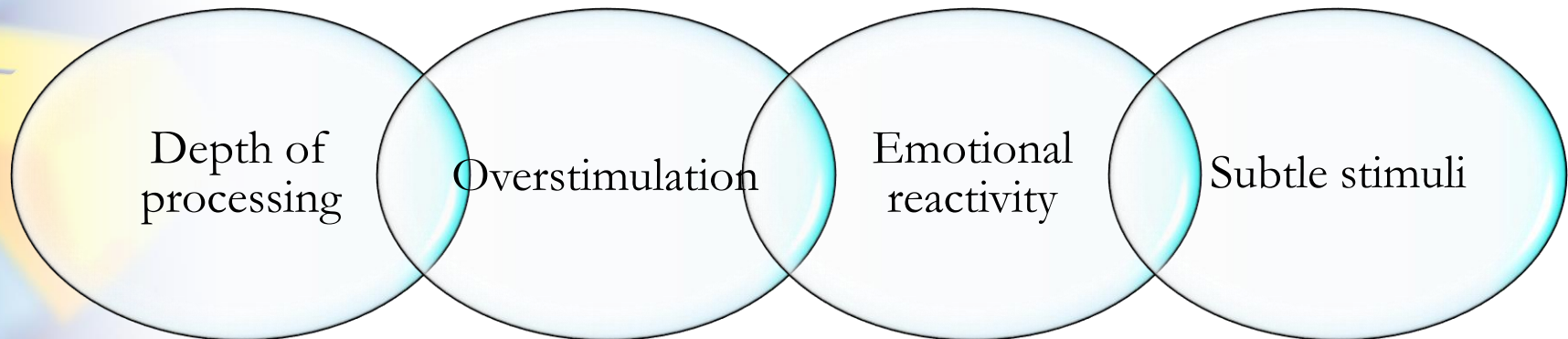
HIGH

SPS does not imply communicating, socializing and mobility complications, nor lack of coordination or disorientation to sensory signals either

SPS has a variety of degrees and people may find their own threshold modulated by the environment

2. DIMENSIONS OF SPS

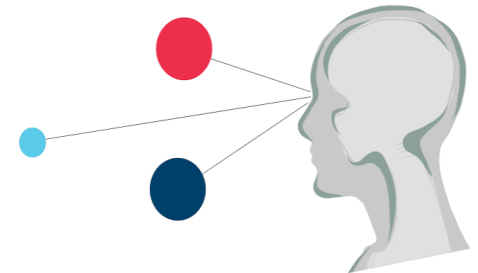
SPS could present four dimensions:



2. DIMENSIONS OF SPS

1. Depth of processing

Great amount of detailed information processed in relation to a stimulus



2. Overstimulation

Processing situations including the actions and behaviors of other people more deeply and thoroughly than their peers

2. DIMENSIONS OF SPS

3. Emotional reactivity

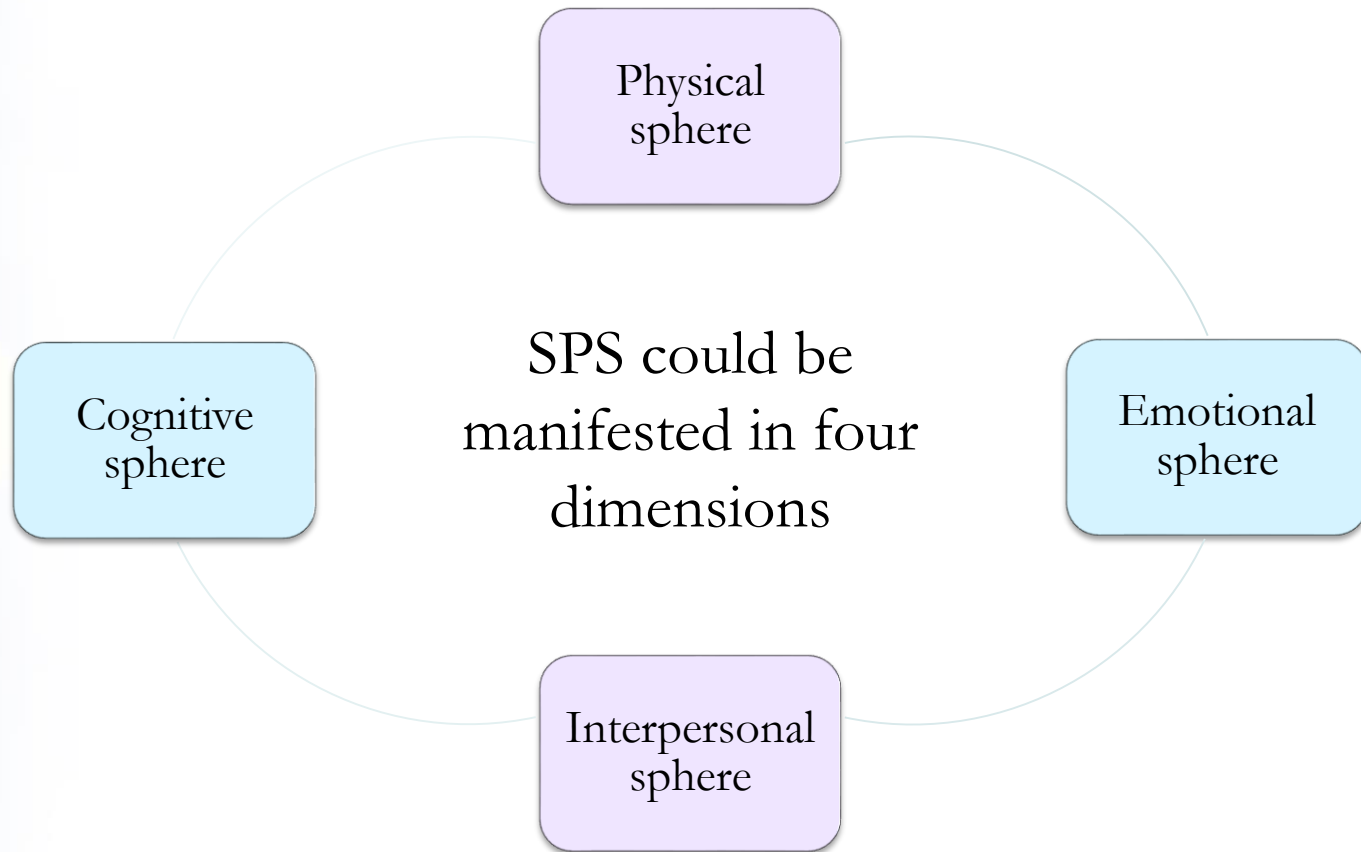
Intensive reactions to both positive and negative emotional life events

4. Subtle stimuli

More awareness of details, subtle sounds, touch, smell and other delicate stimuli



3. HIGHLY SENSITIVE PERSON PROFILE



3. HIGHLY SENSITIVE PERSON PROFILE

SPS could be manifested in physical, emotional, interpersonal and cognitive spheres

Physical sphere

- More reactive to both external and internal stimuli (odors, sounds, changes in tone of voice)
- Low sensitivity threshold
- Physical fatigue
- Well-developed sensory perception abilities



3. HIGHLY SENSITIVE PERSON PROFILE

SPS could be manifested in physical, emotional, interpersonal and cognitive spheres

Emotional sphere

- Maladaptive emotional responses
- Low self-esteem
- High emotional intelligence
- Well emotional coping strategies



3. HIGHLY SENSITIVE PERSON PROFILE

SPS could be manifested in physical, emotional, interpersonal and cognitive spheres

Interpersonal sphere

- HS parents facilitate non-optimal parenting styles
- Social distraction, poor social relationships
- Supportive environment promotes resilience and resistance to stressful events and negative health consequences



3. HIGHLY SENSITIVE PERSON PROFILE

SPS could be manifested in physical, emotional, interpersonal and cognitive spheres

Cognitive sphere

- Cognitive inflexibility, need of control
- Control fatigue
- Enhanced creativity, enriched imagination
- Highlighted ability of detecting subtleties and memorizing a great number of details



3. HIGHLY SENSITIVE PERSON PROFILE

‘Dark side’ of SPS

SPS as vulnerability when people experience many negative life events, being more likely to decrease well-being in highly sensitive children and adolescents

‘Bright side’ of SPS

SPS should be interpreted as a susceptibility

Highly sensitive children and adolescents could also improve their well-being through supportive life events

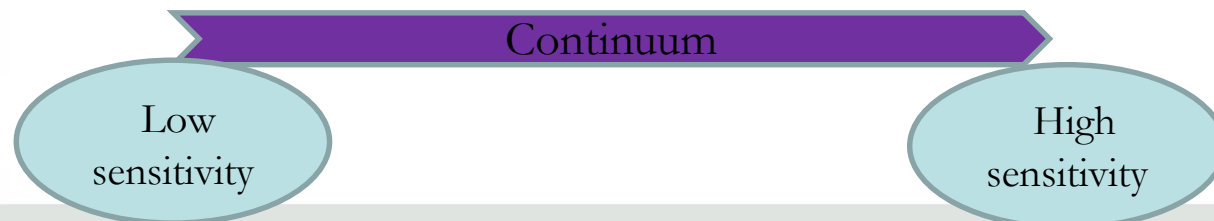
4. PERSONALITY AND HSP

According to Aron, the number of people with high sensitivity is too high to treat this trait as a disorder, but not large enough for them to be understood and supported by the environment in a manner adequate to their needs.

The high sensitivity is not a disorder.

In the population, differences can be observed on the continuum from low to high sensitivity to the environment.

People differ in their sensitivity to the environment, and only a small part of the population (around 15-20%) is highly sensitive.



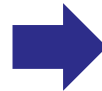
4. PERSONALITY AND HSP

Highly sensitive people they are often called “shy” (they prefer to first observe before entering new situations)

This trait is often wrongly identified as introversion

High sensitivity was also referred to as inhibition, timidity or neuroticism.

but..



Shyness is learnable and sensitivity is innate

30% of highly sensitive people are extroverts

This is not a fundamental feature demonstrating high sensitivity or equivalent to it

4. PERSONALITY AND HSP

Unidimensional Construct



Ease of Excitation (EOE)

- Being easily overwhelmed by external and internal stimuli.



Aesthetic Sensitivity (AES)

- Aesthetic awareness or being deeply moved by music and arts



Low Sensory Threshold (LST)

- Unpleasant sensory arousal to external stimuli

4. PERSONALITY AND HSP

Aron and Aron (1997) considered that, although SPS differs from other constructs of temperament and personality, could be significantly related with some of them.

SPS was modestly correlated with the dimension of introversion of the EPQ-R. Qualitative studies also seem to indicate that not all highly sensitive persons display the profile of being socially introvert.

4. PERSONALITY AND HSP

It is possible that acting in an introverted manner can be associated with the strategy of social withdrawal for HSP as a way to reduce an uncomfortable level of stimulation.

They claimed that Eysenck's model which treats all facets of introversion as a consequence of cortical arousability, does not explain high SPS.

4. PERSONALITY AND HSP



Openness

This trait includes an appreciation for art, excitement, adventure, unusual ideas, curiosity and variety of experience. Openness reflects the degree of intellectual curiosity, creativity and a preference for novelty and variety.



Extraversion

This trait is characterized by high energy, positive emotions, talkativeness, assertiveness, sociability, and the tendency to seek stimulation in the company of others.



Neuroticism

High neuroticism is characterized by the tendency to experience unpleasant emotions, such as anger, anxiety, or depression. People high in neuroticism tend to experience emotional instability.



Conscientiousness

This trait refers to one's tendency toward self-discipline, competence, thoughtfulness, and achievement-striving (such as goal-directed behavior). Prefer planned rather than spontaneous behavior and are often organized, hardworking.

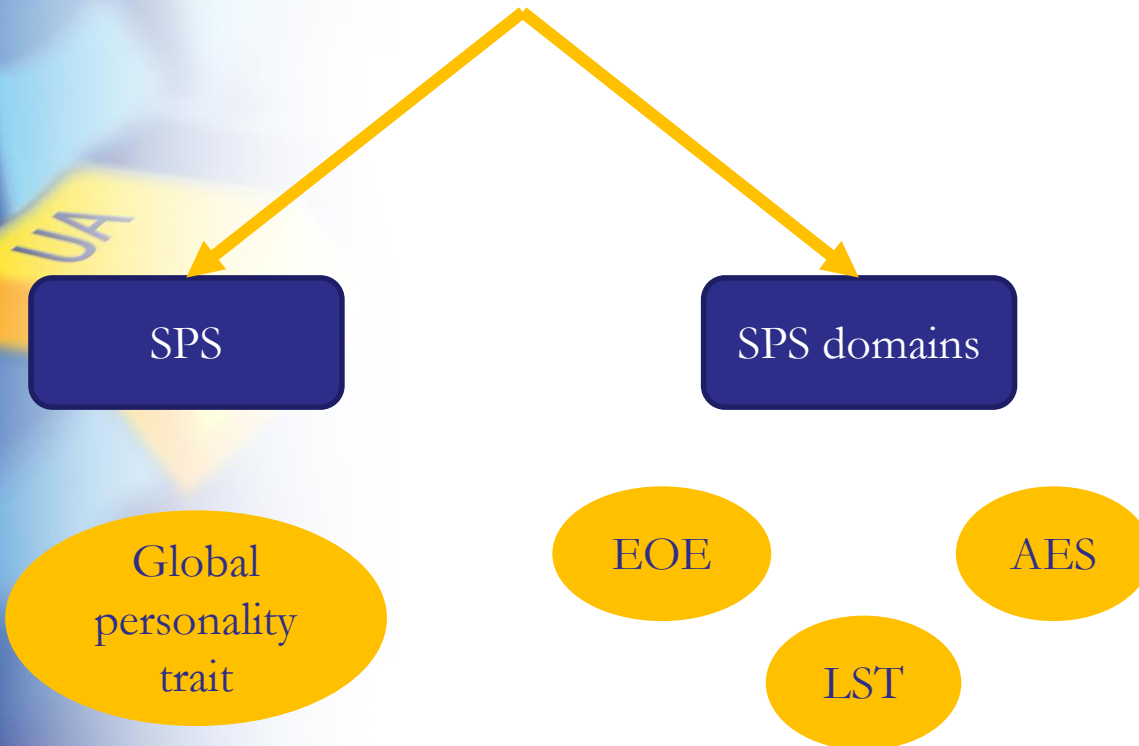


Agreeableness

This trait measures one's tendency to be compassionate and cooperative rather than suspicious and antagonistic towards others. It is also a measure of a person's trusting and helpful nature and whether that person is generally well-tempered.

4. PERSONALITY AND HSP

What is the relationship between the SPS and the five personality factors?



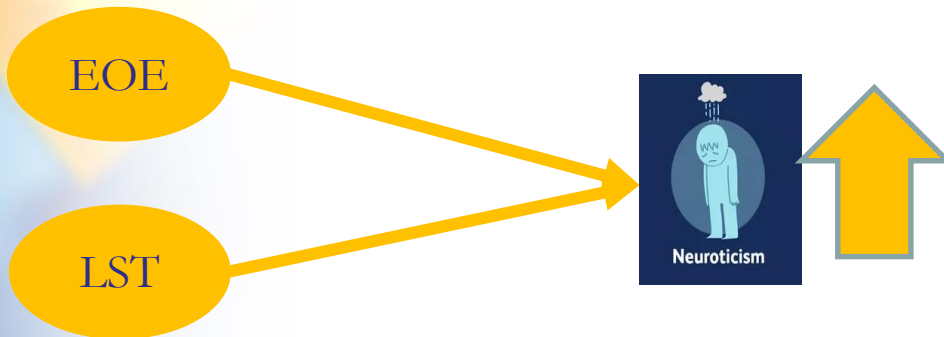
Previous research has related SPS with the 5 personality traits from two perspectives:

1. SPS as a general and global personality trait.
2. Domains of SPS:
 - Ease of Excitation (EOE)
 - Low Sensory Threshold (LST)
 - Aesthetic Sensitivity (AES)

4. PERSONALITY AND HSP



SPS as a global personality trait has been related to higher levels of neuroticism



EOE and LST have been related to higher levels of neuroticism, but not AES.

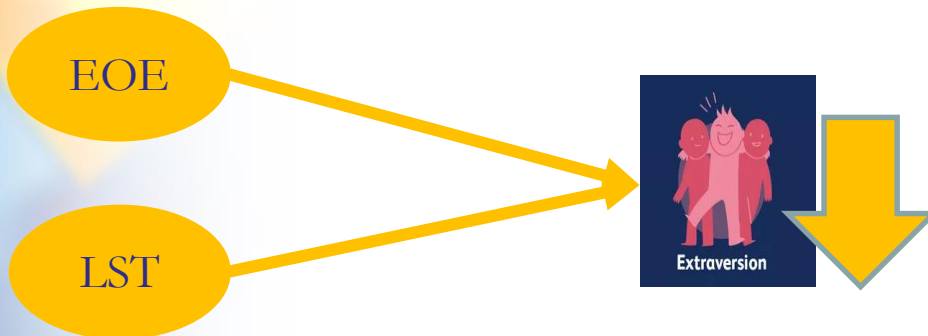
Individuals with high SPS trait could be prone to negative affect (neuroticism) compared to other individuals.

However, they also appear to show a stronger emotional response to positive experiences and be more sensitive to the positive experiences from the environment.

4. PERSONALITY AND HSP



SPS as a global personality trait has been related to lower levels of extraversion



EOE and LST have been related to lower levels of extraversion

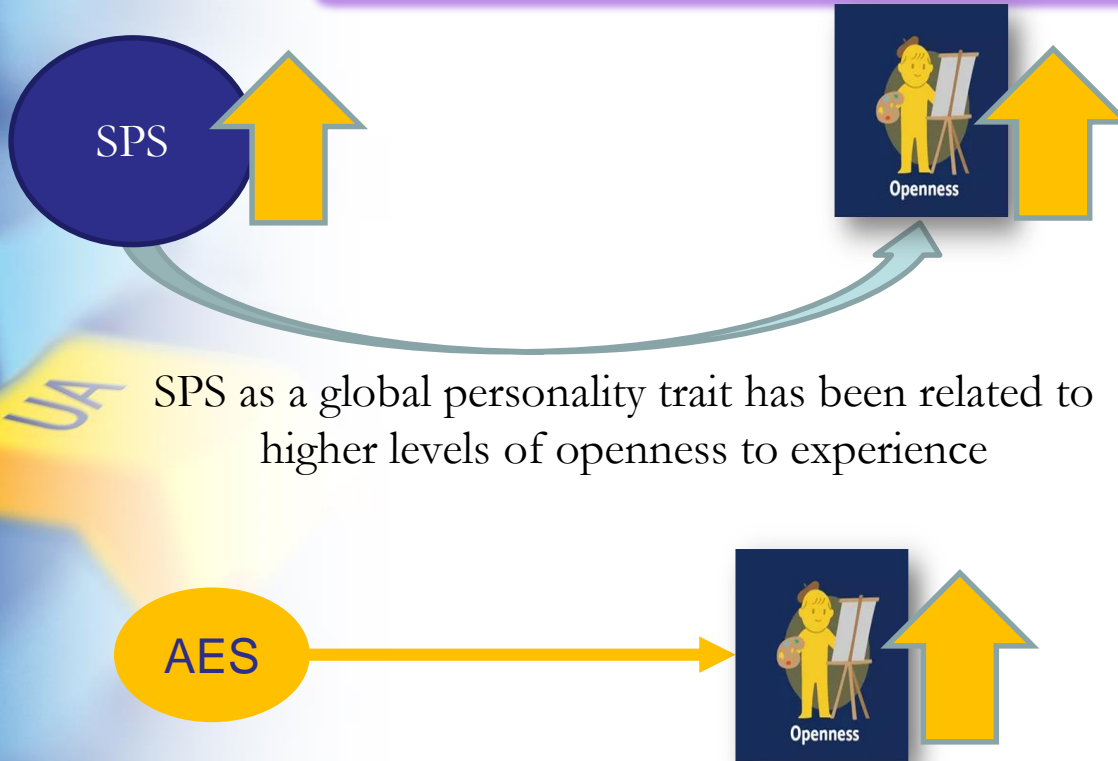
As highly sensitive individuals are more aware of their surroundings, and are more easily aroused, it would be natural to respond to environmental stimuli in a cautious manner.

People who get easily excited act cautiously facing environmental stimuli and tend to avoid sensory stimuli.

Social withdrawal would be a natural strategy for reducing stimulation for highly sensitive people.

This avoidance could in some cases limit their social interactions (Liss et al., 2008).

4. PERSONALITY AND HSP



SPS as a global personality trait has been related to higher levels of openness to experience

AES has been related to higher levels of openness.

People with high scores in the AES have rich experiences and positive emotions and these are among traits of persons with high scores in the openness to new experience (it can be expected that as aesthetic sensitivity increases, level of openness to new experience increases, too) (Ahadi et al., 2010).

4. PERSONALITY AND HSP

- SPS is significantly associated with 3 of the 5 personality factors of Costa's and McCrae's theory: neuroticism, extraversion and openness.
- The three subscales of SPS (EOE, AES and LST) correlate in a unique way with these personality traits.
- SPS has been related to higher levels of **Neuroticism**. EOE and LST have been often reported to be positively associated with this trait, and also with anxiety and depression.
- In general, HSP tend to experience emotions with a higher intensity, both negative and positive.
- Regarding **Extraversion**, HSP may seek solitude (social withdrawal) and stimuli reduction in order to prevent psychological distress caused by being exposed to overwhelming stimulus. However, social withdrawal and solitude may be less culturally accepted.

4. PERSONALITY AND HSP

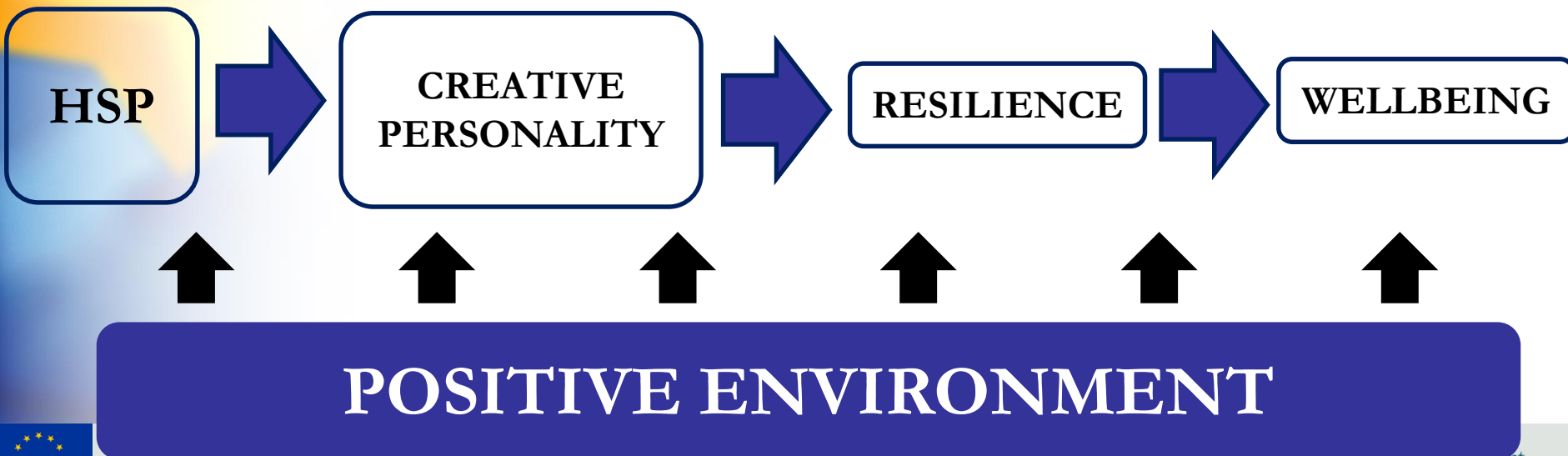
- SPS has been also reported to positively correlate with **Openness**, an association that seems to be mainly driven by the AES factor.
- AES factor shares qualities with the openness factor of personality, including openness to aesthetic experiences such as music and art.
- Individuals with a high score on openness are often imaginative, witty and have a strong aesthetic sense.
- **This is a strong potential of HSP**

5. ASSESSMENT OF SPS: Previous scales used to assess SPS

- ***Highly Sensitive Person Scale*** (HSPS) developed by Aron & Aron (1997). It is composed by 27 items including positive and negative cognitive and emotional responses to environmental stimuli.
- ***Highly Sensitive Child Scale*** (HSCS) developed by Pluess et al. (2018). It is composed by 12 or 21 questions (revised version). Presents a parent-report format to assess sensitivity in kindergarten and preschool children. Adaptation of items to each population.
- ***Parent-Report Questionnaire*** for SPS in Children developed by Aron (2002). Composed of 23 items.

6. FINAL REMARKS

- ✓ Sensitive individuals who tend to experience positive environments gain benefits of higher creativity primarily through mechanisms of (Bridges & Schendan, 2019):
 - ✓ Openness (with resilience)
 - ✓ Disinhibition
 - ✓ Sensitive orienting to novelty





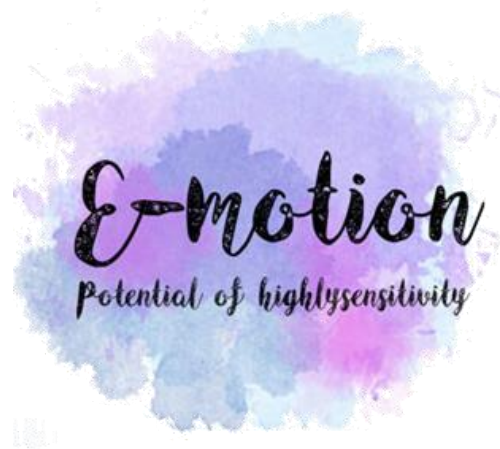
Emotion
Potential of high sensitivity



**Thank you for
your attention!**

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