HIGHLY SENSITIVE PERSONS Trait

(Also known as Sensory Processing Sensitivity (SPS)

A Brief Summary of Key Facts

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A BRIEF PREAMBLE

The body of work on the Highly Sensitive Person's (HSP) trait is relatively recent. (More recently the term SPS Sensory Processing Sensitivity is being used). Dr Elaine Aron[1] began researching the trait in 1991 (she calls it HSP), and is author of a number of research publications and self-help books.

Elaine Aron's research found that 15-20% of the population are HSP and that up to 80% of general therapist clients could relate to HSP. I decided to explore HSP for two reasons: firstly for my own self-development (I discovered I am HSP) and secondly to offer more support for my clients. I completed the HSP Certification and am listed on the HSP website as a coach.

Awareness is our number one tool in personal and professional development. Finding out whether or not you're an HSP could be a helpful part of that awareness and it could have implications on your career and life.

Being "highly sensitive" is not a weakness of character (and may I add what a relief it was for me to learn that fact). That said, every brain is different, every person is different and every HSP is different.

HSP or SPS? MUSING ABOUT NAMES

I use both SPS and HSP in this document – I'm talking about the same thing. Dr Elaine Aron is arguably the best known author and researcher in this area and she calls it HSP. However, more recent research is using Sensory Processing Sensitivity as an alternative and some of my clients definitely prefer the latter.

ARE YOU AN HSP?

Self-test: http://hsperson.com/test/

Notes: If you're unsure about the quiz, there is more information available about the research behind the how the test was developed, trialled and refined. For example, it started as a 60 question test before being refined to the short online test currently offered.[2]

KEY FACTS

It's a trait. It's a bit like having blue or brown eyes. It's just the way some people are wired. It's not a disorder; that is, there's nothing "wrong" with you if you're an HSP, although it may feel like that from the inside.

Key facts[3] include:

Your trait is normal. It is found in 15 to 20% of the population — too many to be a disorder, but not enough to be well understood by the majority of those around you.

It is innate. In fact, biologists have found it in more than 100 species (and probably many more) from fruit flies, birds, and fish to dogs, cats, horses and primates. This trait reflects a certain type of survival strategy; being observant before acting. The brains of HSPs actually work a little differently than others'.

The key marker is about depth of processing. This is one of the fundamental differences. HSP's are deeply reflective. They stand on the sidelines so to speak, observe, and reflect before acting. (Although this can lead to difficulties such as avoidance, fear of action, procrastination and over analysis — and noting that these all things many people, HSP or not, may relate to).

More aware than others of subtleties. This is mainly because an HSP's brain processes information and reflects on it more deeply.

More easily overwhelmed. Those who notice more are likely more naturally going to be overstimulated when things are intense, complex, chaotic or novel for a long time.

This trait is not a new discovery, but it has been misunderstood. Because HSPs prefer to look before entering new situations, they are often called "shy". But shyness is learned, not innate. In fact, 30% of HSPs are extroverts, although the trait is often mislabelled as introversion. It has also been called inhibited-ness, fearfulness or neuroticism. Some HSPs behave in these ways, but it is not innate to do so and not the basic trait.

Sensitivity is valued differently in different cultures. In cultures where it is not valued, HSPs tend to have low self-esteem.

30% of HSPs are extroverted and roughly 50/50 male/female. Being Highly Sensitive is not the same as being introverted. 30% of HSPs are extroverted and get energised by people interaction. (Introverts need people interaction too, but they prefer to recharge batteries with down time).

HSPs benefit more from skilled parenting and are harmed more from poor parenting. A skilled mother (parent) is more likely to offer support self-awareness, arousal, self-control and calm. All are helpful to HSPs when learning about responding to emotion-laden situations. This of course is true for any child/person, but the research suggests that HSPs may be more affected. However, that means there's also a positive flip side: HSPs pick up especially well on good things. This means that positive actions and support may have a more positive impact on HSPs than non-HSPs.

The DOES model – the four key dimensions of the HSP trait

- D **is for depth of processing.** This is the fundamental characteristic. Highly sensitives observe and reflect before taking action. We process everything more, whether we are conscious of it or not.
- O **is for being easily overstimulated**, because if you are going to pay more attention to everything you are bound to tire sooner.
- E **is for giving emphasis to our emotional reactions and having strong empathy**, which among other things helps us notice and learn.
- S **is for being sensitive to all the subtleties** around us, and could include noise, activity, smells and food sensitivities.

Individuals differ in their exact profile and what they're sensitive to, but overall highly sensitive people will express or feel sensitivities in each of the four "DOES" areas. (See Appendix for more research on DOES).

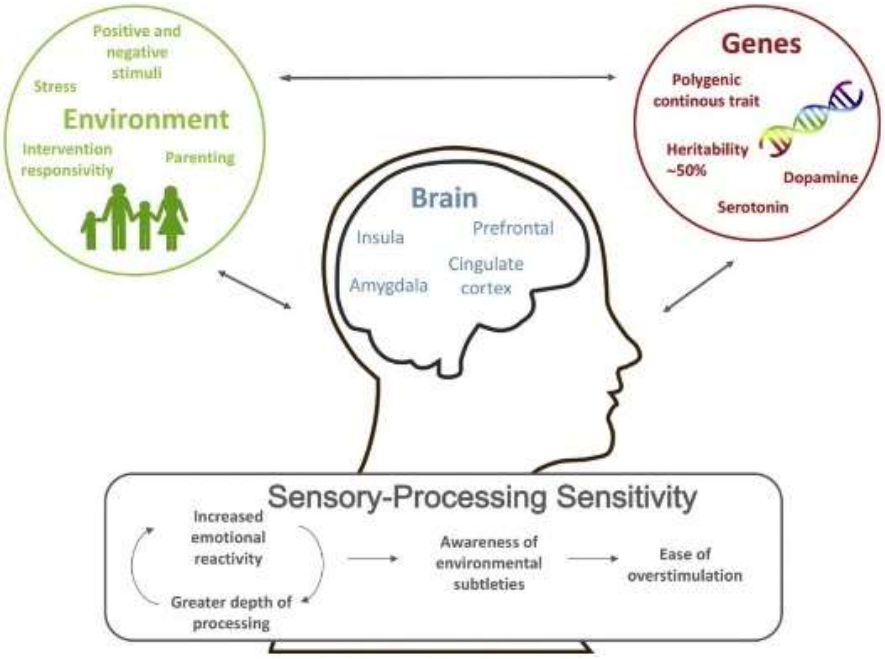
WHAT IT'S NOT

Being an HSP does not excuse you from being responsible for your own development and owning your own behaviour and thinking processes. Neuroscience research show us that our brains are capable of learning and changing – at all ages and for everyone. We are never too old to learn and grow and I think that's fantastically hopeful and inspirational news.

RESEARCH UPDATE AND LINKS TO PERSONALITY FACTORS

New neuroscience research emerging about the relatively new area of SPS - Sensory Processing Sensitivity (aka HSP).

"Sensory Processing Sensitivity is [a] .... (temperament) trait characterised by greater depth of information processing, increased emotional reactivity and empathy, greater awareness of environmental subtleties, and ease of overstimulation (Aron et al., 2012; Homberg et al., 2016). Early studies estimate that about 15—20% of the population can be considered high on the SPS trait."



https://www.sciencedirect.com/science/article/pii/S0149763418306250

IS HPS LINKED CLOSELY WITH ANXIETY?

The short answer, from Elaine Aron's research, is yes. But, it's complicated. SPS is a different and distinct trait. Current research is looking at how HSP links to the big 5 factors of Personality (OCEAN – Openness, Conscientiousness, Agreeableness, Extraversion and Neuroticism) and shows some correlation between HSP and Neuroticism (a very unfortunate term). However, Aron explains that part of this may be around how the trait is observed. An HSP may approach a situation more cautiously, need time to think, or be stimulated by environment or others emotions.

On top of that, research has found that HSP's are affected more negatively by adverse support (eg bad parenting) but more positively by skilled. And you'd never know by observing the skilled individuals.

Here is an article, quoting Aron, explaining some of the typical myths about the HSP/SPS trait.

https://www.huffpost.com/entry/highly-sensitive-people-m_n_6179484

[1] https://hsperson.com/ and http://hsperson.com/about-dr-elaine-aron/

[2] Aron, Elaine. Psychotherapy and the Highly Sensitive Person: Improving Outcomes for the minority of people who are the majority of clients. Published by Routledge, Taylor and Francis Group LLC, 2010.

[3] *Based on research by Dr Elaine Aron – read more at https://hsperson.com/ and http://hsperson.com/some-new-research-on-sensory-processing-sensitivity-sps/*

Learn more:

- Listen to Elaine Aron: Recorded in 2011, in three parts.
  PART 1 https://www.youtube.com/watch?v=FQLBnUBKggY&feature=youtu.be
  PART 2 https://www.youtube.com/watch?v=xYTeeytvuwo&feature=youtu.be
  PART 3 https://www.youtube.com/watch?v=qIHveOz2AX0&feature=youtu.be
- Buy the book: https://www.fishpond.co.nz/Books/Highly-Sensitive-Person-Elaine-N-Aron/9780553062182
- https://hsperson.com/research/

APPENDIX: DOES MODEL RESEARCH

https://hsperson.com/research/

D is for Depth of Processing

At the foundation of the trait of high sensitivity is the tendency to process information more deeply. When people are given a phone number and have no way to write it down, they will probably try to process it in some way in order to remember it, by repeating it many times, thinking of patterns or meanings in the digits or noticing the numbers' similarity to something else. If you don't process it in some way you know you will forget it. HSPs simply process everything more, relating and comparing what they notice to their past experience with other similar things. They do it whether they are aware of it or not. When we decide without knowing how we came to that decision, we call this intuition and HSPs have good (but not infallible!) intuition. When you make a decision consciously, you may notice that you are slower than others because you think over all the options so carefully. That's depth of processing too.

Studies supporting the depth of processing aspect of the trait have compared the brain activation of sensitive and non-sensitive people doing various perceptual tasks. ***Research by Jadzia Jagiellowicz*** found that HSPs use more of those parts of the brain associated with "deeper" processing of information, especially on tasks that involve noticing subtleties. ***In another study, by ourselves and others***, sensitive and non-sensitive persons were given perceptual tasks that were already known to be difficult (require more brain activation or effort) depending on the culture a person is from. The non-sensitive persons showed the usual difficulty, but the highly sensitive subjects' brains apparently did not have this difficulty, regardless of their culture. It was as if they found it natural to look beyond their cultural expectations to how things "really are".

Research by Bianca Acevedo and her associates has shown more brain activation in HSPs than others in an area called the insula, a part of the brain that integrates moment to moment knowledge of inner states and emotions, bodily position and outer events. Some have called it the seat of consciousness. If we are more aware of what is going around inside and outside, this would be exactly the result one would expect.

O is for Over-stimulation

If you are going to notice every little thing in a situation, and if the situation is complicated (many things to remember), intense (noisy, cluttered, etc.) or goes on too long (a two-hour commute), it seems obvious that you will also have to wear out sooner from having to process so much. Others, not noticing much or any of what you have, will not tire as quickly. They may even think it quite strange that you find it too much to sight-see all day and go to a nightclub in the evening. They might talk blithely on when you need them to be quiet a moment so that you can have some time just to think, or they might enjoy an "energetic" restaurant or a party when you can hardly bear the noise. Indeed, this is often the behaviour we and others have noticed most—that HSPs are easily stressed by overstimulation (including social stimulation), or having learned their lesson, that they avoid intense situations more than others do.

A recent study by Friederike Gerstenberg in Germany compared sensitive and non-sensitive people on a task of deciding whether or not a T turned in various ways was hidden among a great many Ls turned various ways on a computer screen. HSPs were faster and more accurate, but also more stressed than others after doing the task. Was it the perceptual effort or the emotional effect of being in the experiment? Whatever the reason, they were feeling stressed. Just as we say a piece of metal shows stress when it is overloaded, so do we.

High sensitivity, however, is not mainly about being distressed by high levels of stimuli, as some have suggested - although that naturally happens when too much comes at us. Be careful not to mix up being an HSP with some problem condition: sensory discomfort can by itself be a sign of disorder due to problems with sensory processing, rather than having unusually good sensory processing. For example, sometimes persons with autistic spectrum disorders complain of sensory overload, but at other times they under-react Their problem seems to be a difficulty recognising where to focus attention and what to ignore. When speaking with someone, they may find the person's face no more important to look at than the pattern on the floor or the type of light bulbs in the room. Naturally, they can complain intensely about being overwhelmed by stimulation. They may even be more aware of subtleties, but in social situations especially they are more often noticing something irrelevant, whereas HSPs would be paying more attention to subtle facial expressions, at least when not over aroused.

E is for Emotional Reactivity

Data from surveys and experiments had already found some evidence that HSPs react more to both positive and negative experiences, but a *series of studies done by Jadzia Jagiellowicz* found that HSPs particularly react more than non-HSPs to pictures with a "positive valence". This was even truer if they had had a good childhood. In her studies of the brain, this reaction to positive pictures was not only in the areas associated with the initial experience of strong emotions, but also in "higher" areas of thinking and perceiving - in some of the same areas as those found in the depth-of-processing brain studies. This stronger reaction to positive pictures being even more enhanced by a good childhood fits with *a new concept suggested by Michael Pluess and Jay Belsky*, the idea of "vantage sensitivity", which they created in order to highlight the specific potential for sensitive people to benefit from positive circumstances and interventions.

E is also for Empathy. A *study by Bianca Acevedo* [Bianca P. Acevedo, B., Aron, E., Aron, A., Sangster, M., Collins, N., & Brown, L. (2014): The highly sensitive brain. A fMRI study of sensory processing sensitivity and response to others' emotions. *Brain and Behavior, 4, [580-594.*] Sensitive and non-sensitive persons looked at photos of both strangers and loved ones expressing happiness, sadness or a neutral feeling. In all situations when there was emotion in the photo, sensitive persons showed increased activation in the insula, but also more activity in their mirror neuron system, especially when looking at the happy faces of loved ones—again that greater responsiveness to the positive. *The brain's mirror neurons* were only discovered in the last twenty years or so. When we are watching someone else do something or feel something, this clump of neurons fires in the same way as some of the neurons in the person we are observing. As an example, the same neurons fire to varying degrees, whether we are kicking a soccer ball, seeing someone else kicking a soccer ball, hearing the sound of someone kicking a soccer ball or hearing or saying the word "kick". Not only do these amazing neurons help us learn through imitation, but in conjunction with the other areas of the

brain that were especially active for HSPs, they help us know others' intentions and how they feel. Hence they are largely responsible for the universal human capacity for empathy. We do not just know how someone else feels, but actually feel that way ourselves to some extent. This is very familiar to sensitive people. Sad faces tended to generate more activity in these mirror neurons in HSPs than others.

When seeing photos of their loved ones being unhappy, sensitive persons also showed more activation in areas suggesting they wanted to do something, to act, even more than in areas involving empathy (perhaps we learn to cool down our intense empathy in order to help). But overall, brain activation indicating empathy was stronger in HSPs than non-HSPs when looking at photos of faces showing strong emotion of any type.

There is a common misunderstanding that emotions cause us to think illogically. But recent scientific thinking, reviewed by psychologist *Roy Baumeister and his colleagues*, has placed emotion at the centre of wisdom. One reason is that most emotion is felt after an event, which apparently serves to help us remember what happened and learn from it. The more upset we are by a mistake, the more we think about it and will be able to avoid it the next time. The more delighted we are by a success, the more we think and talk about it and how we did it, causing us to be more likely to be able to repeat it.

Other studies discussed by Baumeister that explore the contribution of emotion to clear thinking find that unless people have some emotional reason to learn something, they do not learn it very well or at all. This is one reason why it is easier to learn a foreign language in the country where it is spoken—we are highly motivated to find our way, converse when spoken to and generally not seem foolish. From this point of view, it would seem almost impossible for an HSP to process things deeply without having stronger emotional reactions to motivate them. And remember, when HSPs react more, it is as much or more to positive emotions, such as curiosity, anticipation of success (using that short cut others don't know about), a pleasant desire for something, satisfaction, joy or contentedness. Perhaps everyone reacts strongly to negative situations, but maybe HSPs have evolved so that we especially relish a good outcome and figure out more than others how to make it happen. I imagine that we can plan an especially good birthday celebration, anticipating the happiness it will bring.

S is for Sensing the Subtle

Most of the studies already cited required perceiving subtleties. This is often what is most noticeable to us personally, the little things we notice that others miss. Given that, and because I called the trait high sensitivity, many have thought this is the heart of the trait. (To correct this confusion and emphasise the role of processing, we used "sensory *processing* sensitivity" as its more formal, scientific designation). However, this trait is not so much about extraordinary senses—after all, there are sensitive people who have poor eyesight or hearing. True, some sensitive people report that one or more senses are very acute, but even in these cases it could be that they process the sensory information more carefully rather than having something unusual about their eyes, nose, skin, taste buds or ears. Again, the brain areas that are more active when sensitive people perceive are those that do the more complex processing of sensory information. Not so much the areas that recognise alphabet letters by their shape or even that read words, but the areas that catch the subtle meaning of words.

Our awareness of subtleties is useful in an infinite number of ways, from simple pleasures in life to strategising our response based on our awareness of others' nonverbal cues (that they may have no idea they are giving off), about their mood or trustworthiness. Of course, on the other hand, when we are worn out we may be the least aware of anything, subtle or gross, except our own need for a break.