

Highly Sensitive Person Notes

Author's Note

- p. AN 1 *included a feature in Psychology Today: A. Bartz. "Touchy! A [Gentle] Guide to the Highly Sensitive Person.," Psychology Today 44 (2011): 72-79.*
- p. AN 1 *shorter discussion in Time: B, Walsh, "The Power of Introverts," Time 179 (2012): 43.*
- p. AN 2 *I published a good summary of the theory and research in 2012: Aron, E., Aron, A., & Jagiellowicz, J. (2012). Sensory processing sensitivity: A review in the light of the evolution of biological responsivity. Personality and Social Psychology Review, 16, 262-282.*
- p. AN 3 *The very first published studies: Aron, E. & Aron, A. (1997). Sensory-processing sensitivity and its relation to introversion and emotionality, Journal of Personality and Social Psychology, 73, 345-368.*
- p. AN 3 *our second series of studies, published in 2005: Aron, E., Aron, A., & Davies, K. (2005). Adult shyness: The interaction of temperamental sensitivity and a negative childhood environment. Personality and Social Psychology Bulletin, 31, 181-197.*
- p. AN 3 *A later study by Miriam Liss and others: Liss, M., Timmel, L., Baxley, K., & Killingsworth, P. (2005). Sensory processing sensitivity and its relation to parental bonding, anxiety, and depression. Personality and Individual Differences, 39, 1429-1439.*
- p. AN 3 *quite a few clinical studies: For a list of many of these articles see p. 13 of Aron, Aron, and J, 2012.*

- p. AN 4 *done in Denmark by Cecilie Licht and others:* Licht, C., Mortensen, E. L., & Knudsen, G. M. (2011). Association between sensory processing sensitivity and the serotonin transporter polymorphism 5-HTTLPR short/short genotype. *Biological Psychiatry*, 69, supplement for Society of Biological Psychiatry Convention and Annual Meeting, abstract 510.
- p. AN 4 *Now new research:* For a review of the many positive effects of this allele, see M. Pluess and J. Belsky, "Vantage Sensitivity: Individual Differences in Response to Positive Experiences," *Psychological Bulletin*, in press.
- p. AN 4 *rhesus monkeys with the same genetic variation:* Jedema, H. P., Gianaros, P. J., Greer, P. J., Kerr, D. D., Liu, S., Higley, J. D., et al. (2009). Cognitive impact of genetic variation of the serotonin transporter in primates is associated with differences in brain morphology rather than serotonin neurotransmission. *Molecular Psychiatry*, 15, 512-522.
- p. AN 4 *a study by Suomi:* Suomi, S. J. (1997). Early determinants of behaviour: Evidence from primate studies. *British Medical Bulletin*, 53, 170-184.
- p. AN 4 *a growing body of research by others:* Belsky, J. & Pluess, M. (2009). Beyond diathesis stress: Differential susceptibility to environmental influences. *Psychological Bulletin*, 135(6), 885–908;
- p. AN 5 *now we know it's over 100:* Wolf, M., Van Doorn, S., & Weissing, F. J. (2008). Evolutionary emergence of responsive and unresponsive personalities. *PNAS*, 105(41),

15825.

- p. AN 5 *in fact, 30% of HSPs are actually extraverts:* Aron, E. & Aron, A. (1997). Sensory-processing sensitivity and its relation to introversion and emotionality, *Journal of Personality and Social Psychology*, 73, 345-368.
- p. AN 5 *Max Wolf and his colleagues:* Wolf, M., Van Doorn, S., & Weissing, F. J. (2008). Evolutionary emergence of responsive and unresponsive personalities. *PNAS*, 105(41), 15825-15830.
- p. AN 6 *Chen and his associates:* Chen, C., Chen, C., Moyzis, R., Stern, H., He, Q., Li, H., . . . & Dong, Q. (2011). Contributions of dopamine-related genes and environmental factors to Highly Sensitive Personality: A multi-step neuronal system-level approach. *PLoS ONE*. 6:e21636.
- p. AN 7 *Franziska Borries did a particular statistical analysis:* Borries, F. (2012). DO 'THE HIGHLY SENSITIVE' EXIST? - A TAXOMETRIC INVESTIGATION OF THE PERSONALITY CONSTRUCT SENSORY-PROCESSING SENSITIVITY. University of Bielefeld, Germany.
- p. AN 7 *Psychotherapy and the Highly Sensitive Person in 2011:* Aron, E. (2010) *Psychotherapy and highly sensitive person: Improving outcomes for that minority of people who are the majority of clients*. NY: Routledge.
- p. AN 8 *Research by Jadzia Jagiellowicz:* Jagiellowicz, J., Xu, X., Aron, A., Aron, E., Cao, G., Feng, T., & Weng, X. (2011). Sensory processing sensitivity and neural responses to changes in visual scenes. *Social Cognitive and Affective Neuroscience*, 6, 38-47.

- p. AN 8 *In another study, by ourselves and others:* Aron, A., Ketay, S., Hedden, T., Aron, E., Markus, H. R., & Gabrieli, J. D. E. (2010). Temperament trait of sensory processing sensitivity moderates cultural differences in neural response, Special Issue on Cultural Neuroscience. *Social Cognitive and Affective Neuroscience*, 5, 219-226.
- p. AN 8 *research by Bianca Acevedo:* Acevedo, B., Aron, A., Aron, E. (2010). *Association of sensory processing sensitivity when perceiving positive and negative emotional states.* Presented at APA, San Diego.
- p. AN 8 *Some have called it the seat of consciousness:* Craig, A. D. (2009). How do you feel—now? The anterior insula and human awareness. *Nature Reviews Neuroscience*, 10, 59-70.
- p. AN 9 *A recent study by Friederike Gerstenberg in Germany:* F. Gerstenberg, “Sensory-processing sensitivity predicts performance on a visual search task followed by an increase in perceived stress,” *Personality and Individual Differences*, 53 (2012) 496-500.
- p. AN 9 *Data from surveys and experiments:* Already cited: Aron and Aron (1997) and Aron et al 2005
- p. AN 9 *a series of studies done by Jadzia Jagiellowicz:* J. Jagiellowicz, *The Relationship between the Temperament Trait of Sensory Processing Sensitivity and Emotional Reactivity.* a dissertation at SUNY-Stony Brook completed August 2012.
- p. AN 9 *M. Pluess and J. Belsky,* “Vantage Sensitivity: Individual Differences in Response to Positive Experiences,” *Psychological Bulletin*, in press.

- p. AN 10 *In another study, by Bianca Acevedo:* Acevedo, B., Aron, A., Aron, E. (2010). *Association of sensory processing sensitivity when perceiving positive and negative emotional states.* Presented at APA, San Diego.
- p. AN 10 *The brain's mirror neurons* For a more complete understanding of mirror neurons, see M. Iacoboni, *Mirroring People: The New Science of how we Connect with Others* (New York: Farrar, Straus, and Giroux, 2008).
- p. AN 10 *Roy Baumeister and his colleagues:* Baumeister, F. R., Vohs, D. K., DeWall, N. C., & Zhang, L. (2007). How emotion shapes behavior: Feedback, anticipation, and reflection, rather than direct causation. *Personality and Social Psychology Review, 11*(2), 167-203.
- p. AN 11 *People have other traits:* For a fuller discussion of these traits, especially high sensation seeking and HSPs, see E. Aron, *The Highly Sensitive Person in Love* (New York: Broadway Books, 2000).
- p. AN 12 *A study done by Bhavini Shrivastava:* Shrivastava B. (2011). Predictors of work performance for employees with sensory processing sensitivity (MSC Organisational Psychology. City University, London).