INTRODUCTION

Sensory processing sensitivity (SPS) is an innate and evolutionarily conserved personality trait that was found in over 15-20% of the population and has a genetic basis (Aron & Aron, 1997).

Several theories propose that highly sensitive individuals experience stronger effects to both positive (enriching) and negative (hostile) environments:

- **Differential Susceptibility (DS)** (Belsky, 1997; Belsky & Pluess, 2009)
- **Biological Sensitivity to Context (BSC)** (Boyce & Ellis, 2005)
- **Sensory Processing Sensitivity Theory (SPS)** (Aron & Aron, 1997)

Aron and Aron (1997) devised a 27-item questionnaire, named **Highly Sensitive Person Scale** (HSPS), to measure this three dimensional construct.

- **Ease of excitation (EOE)**
- **Low sensory threshold (LST)**
- **Aesthetic sensitivity (AES)**

(Smolewska et al., 2006)

The **objective** of this review is to explore the relationship between SPS with the personality features of neuroticism, extraversion and openness, and with mental health (in particular, anxiety and depression).

METHOD

An online search was conducted in the following databases: PubMed, PubPsych and Scopus using the inclusion criteria (i), (ii) and (iii) (*17 articles*)

Further, the inclusion criteria were widened (iv), (v) and Google Scholar was used to increse the number of articles found (*41 articles*)

INCLUSION CRITERIA: (I) Empirical application of the HSPS method, (ii) Use of NEO- FFI, (iii) Studies on adult human subjects, (iv) Articles in English, (v) anxiety and depression related articles

58 articles- 15 Non empirical studies (i);12 articles not related to NEO-FFI Inventory (ii); 2 articles with application in Children (III); 9 articles not in English (iv), 13 articles not related to anxiety and depression (V) = *7 ARTICLES REVIEWED*

(Based on Prisma methodology in systematic reviews).

Key words: sensory processing sensitivity, highly sensitive person scale, personality dimensions, mental health, depression, anxiety

RESULTS

Author and year of publication	Publisher	Measurement of research results	Results obtained
Ahadi & Basharpoor (2010) Lionetti et al. (2018) Smolewska, McCabe, & Woody (2006)	Journal of Applied Sciences Translational Psychiatry Personality and Individual differences	Regression analysis and Pearson´s correlation coefficients	EOE and LST had a positive and significant relationship with N, anxiety, physical symptoms, social functioning disorder, depression and low mental health. EOE could directly predict mental health. EOE had a negative and significant correlation with extraversion. AES had a significant share in the prediction of openness and has a low but significant correlation with N and anxiety
Liss, Mailloux & Erchull (2008)	Personality and Individual differences	Pearson´s correlation coefficients	EOE and LST correlated positively with anxiety and depression and AES had a strong relation with anxiety but not with depression.
Grimen & Diseth (2016) Sobocko & Zelenski (2015)	Comprehensive Psychology Personality and Individual Differences	Pearson´s correlation coefficients and regression analysis	EOE and LST had a moderate to low correlation, respectively, with psychological health complaints. The subscales EOE and LST correlated positive and significantly with NE and NA.
Liss et al. (2005)	Personality and Individual Differences	Pearson´s correlation coefficients and regression analysis	SPS was positively correlated to both anxiety and depression (more strongly with anxiety). When controlling for depression, SPS predicted anxiety and, when controlling for anxiety, SPS predicted depression.

EOE=ease of excitation; LST= low sensory threshold; AES= aesthetic sensitivity; N=neuroticism; O=openness; E= extraversion; NE=negative emotionality; NA=negative affect

DSCUSSION AND CONCLUSIONS

AES was related to anxiety because these individuals have a richer inner life so they present an internally-oriented thinking which leads to spending a lot of time thinking in their mental and physical actions.

EOE and LST had a positive relationship with neuroticism and had significant share in the prediction of mental health, in particular anxiety and depression.

The importance of knowing individual differences regarding sensitivity and how these affect mental health provides the psychologist additional tools for understanding the way the patients feel, think and give meaning to life.

Further research needs to focus in the prevention of adverse effects related to SPS and enhance the positive potential of this trait to prevent mental health.

The main limitation of this review was the lack of investigation related to mental disorders and sensory processing sensitivity, therefore further studies are clearly needed to be carried out in this field.