RELATIONSHIP BETWEEN SENSORY PROCESSING SENSITIVITY AND MENTAL HEALTH

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INTRODUCTION

Sensory Processing Sensitivity (SPS) is defined as a personality feature which describes the differences among individuals that is related to the perception of environmental stimuli. Previous researchers have associated this personality trait with some mental health negative consequences however, the studies are scarce and an integration of the obtained findings needs to be addressed (Greven et al., 2019).

OBJETIVE

To analyze the association between sensory processing sensitivity and mental health implications

METHODS

Data sources

Publimed Scopus[®] ScienceDirect

Search strategy

"sensory processing sensitivity" AND

"mental health"

Time filter: 2015 - 2021

Exclusion criteria

- I. Not in English or Spanish
- 2. Not related to sensory processing sensitivity
- 3. No mental health implications included
- 4. Conference abstracts

RESULTS

Selection of the studies (Petticrew & Roberts, 2006)	Authors	Sample	Relationship between SPS and mental health
References identified through the databases $(n = 767)$	1. Stern Strober & Goverover (2020)	N=94; Multiple sclerosis participants	Moderate correlations between trait anxiety and SPS (r=.57)
	2. Kibe, Suzuki, Hirano & Boniwell (2020)	N=395; Students (15-16 years)	Positive association between SPS and depression (r=.22)
	3. Khodabakhsh, Loh & Rosli (2020)	N=354; Adults (20-45 years)	Positive association among SPS subscales and depression (r=.295) and anxiety (r=.381)
Records after duplicates removed	4. Yano, Kase & Oishi (2020)	N=430; Students (20.5 years)	Moderate correlations between depression and SPS (r=.45)
(n = 755) Duplicates (n=12)	5. Andersson, Sutton, Bejerholm & Argentzell (2020)	N=14; People with psychiatric disorders	Experienced sensory inputs as stressful
SCREEN SCREEN	6. Carr, Matthews, Williams & Blagrove (2020)	N=137; Adults (33.66 years)	High SPS is positively correlated with trait nightmare distress (r=.32)
Records screened	7. Harrison, Kats, Williams & Aziz- Zadeh (2019)	N=51; People with obsessive- compulsive disorder (OCD)	People with OCD indicate higher scores in SPS (p<.001; δ=1.16)
(n = 755)	8. Hjordt & Stenbæk (2019)	N=31; People with Seasonal Affective Disorder (SAD) N=30; healthy controls	Individuals with SAD and high levels of SPS reported higher scores in depressive symptoms in winter than in summer phase (p=.024)
Excluded articles $(n = 742)$ Studies included in the final review $(n = 13)$	9. Khrosravani, Ganji, Bastan, Samimi & Amirinezhad (2019)	N=51; People with obsessive- compulsive disorder (OCD)	Positive associations among SPS subscales and OCD (r=.3540)
	10. Meyerson, Gelkopf, Eli & Uziel (2019)	N=243; Dentists	Moderate correlations between burnout and SPS (r=.40)
	11. Panagiotidi, Overton & Stafford (2019)	N=274; University of Sheffield community (33.16)	Positive association between SPS and both Inattention (r=.40) and Hiperactivity (r=.30)
	12. Wu, Zhang, Li, Feng & Yan (2021)	N=244; Students (20 years)	Positive association between SPS and perceived stress (r=.24)
	13. Takahashi, Kawashima, Nitta & Kumano (2019)	N=635; Adults (21.1 years)	Positive associations among SPS subscales and anxiety (r=.5162)

CONCLUSIONS

Despite the health implications of sensory processing sensitivity observed, more research studies are needed to understand it and to create clinical tools of assessment and intervention, in order to improve the health and quality of life of people who present this trait

REFERENCES

Greven, C.U., Lionetti, F., Booth, C., Aron, E.N., Fox, E., Schendan, H.E., Pluess, M., Bruining, H., Acevedo, B., Bijttebier, P. and Homberg, J. (2019). Sensory Processing Sensitivity in the context of environmental sensitivity: a critical review and development of research agenda. *Neuroscience and Biobehvioral Reviews*, 98, 287-305 Petticrew, M. & Roberts, H. (2006). *Systematic Reviews in the Social Sciences: A Practical Guide*. NJ, USA.