

Do you agree with bullshit? The relation of bullshit receptivity and agreeableness



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Abstract

A General Bullshit Receptivity Scale was developed with aim to explore the bullshit receptivity in more complex background compared to the original Bullshit Receptivity Scale. 459 participants, representative of the Slovak population, filled out two bullshit measures (the original BSR and the new GBSR), together with a measure of the Big5 (BFI-XS), cognitive reflection, and several questionnaires measuring epistemologically suspect beliefs and ontological confusion. Perceived profundness was related to perceived truthfulness and likeability. Of the Big5 variables, agreeableness correlated both with the original and the new measure of bullshit receptivity on all dimensions (except profundness of transcendental bullshit). Interestingly, conscientiousness correlated positively with judgment of profundness of general bullshit, while Openness correlated positively with judgment of profundness of transcendental bullshit. As expected, we found significant correlations between accepting bullshit (both transcendental and general) and adhering to all kinds of unsupported beliefs.

Introduction

One of the challenges of examining bullshit is that despite our common understanding of the term, it remains unclear what features of bullshit make it so appealing that many people accept it as profound and true thought. So far, a decent amount of work has been done in the area of so called pseudo-transcendental bullshit (Pennycook, Cheyne, Barr, Koehler, & Fugelsang, 2015) and research has shown that higher receptivity to bullshit is connected with other conceptually related concepts, such as endorsement of other epistemically suspect beliefs (paranormal phenomena, pseudoscientific claims, conspiracy theories), ontological confusion and lower intelligence and cognitive reflection. We do not know yet, however, whether receptivity to pseudo-transcendental bullshit is manifestation of more general bullshit receptivity or if there are individual differences in receptivity to specific kinds of bullshit. Therefore, it is important to identify and examine bullshit receptivity in other, more general domains, where its content extends far beyond the lines of spiritual or transcendental communication. Thus, the main focus of this paper is to examine how to measure bullshit in these non-transcendental domains, such as politics, health and relationships and what features of bullshit are prominent for its acceptance.



Figure 1. Deepak Chopra – inspiration for pseudo-profound bullshit items in BSR

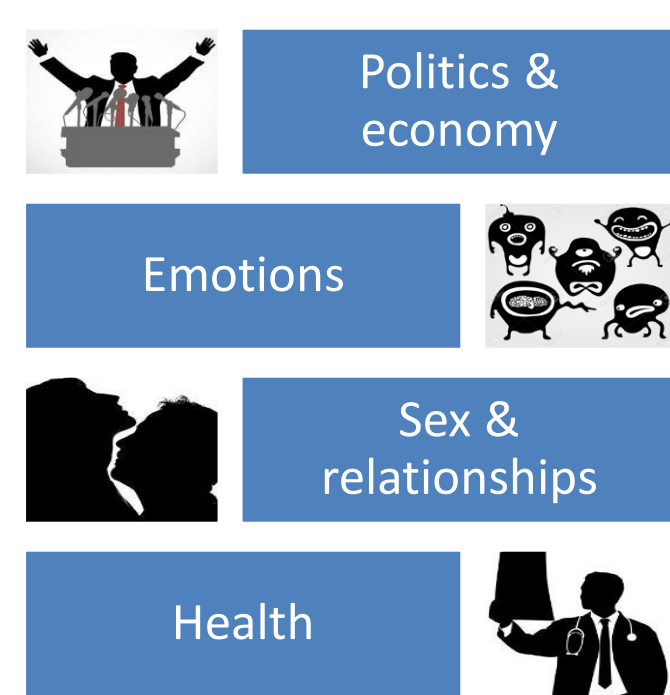


Figure 2. Content domains in GBSR.

Methods and Materials

458 participants (220 women) from Slovakia aged between 18 and 65 (M = 28.93, SD = 13.38) took part in the study.

General Bullshit receptivity Scale – 13 items rated on profundness, truthfulness and likeability
Bullshit receptivity Scale (Pennycook et al., 2015)
Epistemically suspect beliefs (Halama, 2018)
Conspiracy Mentality Questionnaire (Bruder, Haffke, Neave, Nouripanah, & Imhoff, 2013)
Pseudoscientific beliefs (Lundström & Jakobsson, 2009)
Ontological Confusion (Lindeman & Aarnio, 2007)
Paranormal Belief Scale (Randall, 1997)
Cognitive Reflection Test (Frederick, 2005)
Big Five Inventory – BFI-XS (Soto & John, 2017)
Daily Spiritual Experience Scale (Underwood, 2011)

Results

Results show high correlations between assessing BRS and GBR items in truthfulness, profundness and likeability, which suggests that also GBR is valid instrument for measurement of bullshit. At the same time, these correlations suggest that transcendental and more general bullshit probably differ in important aspects. Moreover, because mean ratings of truthfulness, profundness and likeability were higher for GBR than BRS we analysed these differences by pair-wise t-tests and found all of them to be significant: $t = 14.773, p < .001$ for truthfulness, $t = 7.552, p < .001$ for profundness, and $t = 7.280, p < .001$ for likeability. We also examined gender differences in bullshit receptivity and relationships with age and education. Results showed that while men and women did not differ in their ratings of likeability ($t = 0.539, p = .590$), women in general rated bullshit statements as more truthful ($t = 3.594, p < .001$) and profound ($t = 2.403, p = .017$). The higher participants rated bullshit as truthful, profound and likeable, the more likely it was for them to believe in other epistemically unwarranted suspect beliefs, the more ontologically confused and less cognitively reflective they were.

Table 1. Correlations between the two bullshit receptivity measures and Big5.

	Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness
BRS - truthfulness	0.06	.106*	-.011	-.01	0.06
BRS - profundness	0.064	0.082	-.001	-.005	.114*
BRS - likeability	.098*	.153**	.026	-.074	.028
GBRS - truthfulness	.055	.160**	.027	.028	.025
GBRS - profundness	.086	.165**	.109*	-.019	-.022
GBRS - likeability	.054	.151**	.055	-.006	-.005

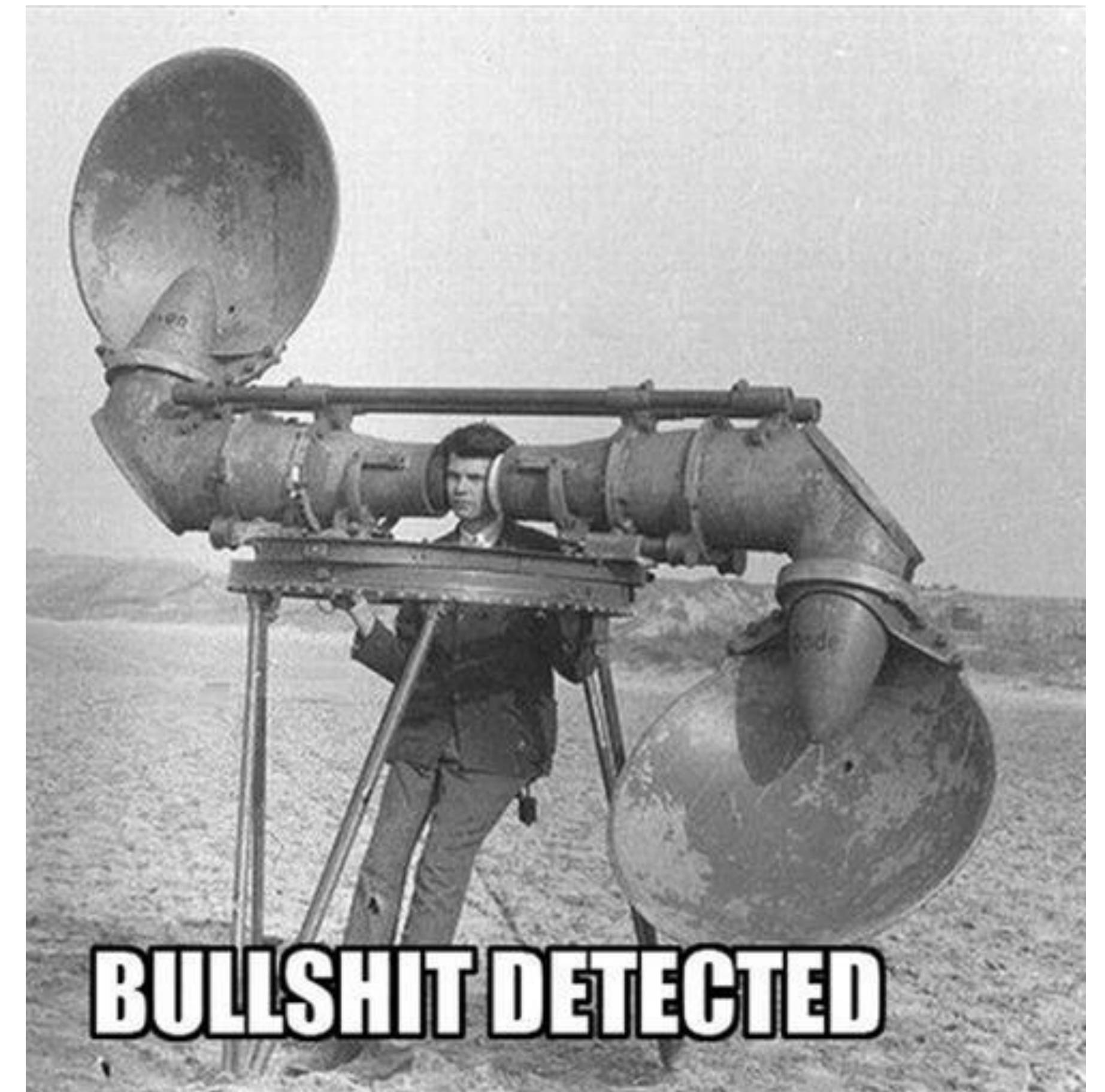


Figure 3. Bullshit detector.

Discussion & Conclusion

The major difference between BRS and GBR can be seen in their relationship with personality dimensions. Similarly as Bainbridge et al. (2018) we found correlation between profundness rating in BRS and Openness, but there was no correlation between profundness rating in GBR and Openness. Bainbridge et al. used only profundness ratings and concentrated on examining Openness/Intelect simplex, while we used extra short version of Big Five which does not allow us to analyse individual facets, however, we find these results distinctive of GBR from BRS. According to Bainbridge et al. (2018) apophenia, which is defined as “the perception of patterns or causal connections where none exist” (DeYoung et al., 2012, p. 63), lies at the extreme of Openness. Bainbridge et al. (2018) used ontological confusion as a measure of apophenia and in our research it was again shown that also general bullshit is related to ontological confusion (Bainbridge et al., 2018; Čavojová et al., 2018; Mækelæ et al., 2018). Moreover, in our study we examined also other personality dimensions and found that profundness rating in GBR was associated with higher trait of Conscientiousness and Agreeableness (again in contrast with profundness ratings in BRS). It highlights possible differences between the two kinds of bullshit each measure captures – while pseudo-profound bullshit may be more connected with general openness, accepting more mundane bullshit may be connected more with not wanting to appear rude by challenging and doubting other people’s statements.

Acknowledgment

This work was supported by Slovak Research and Development Agency, Grant/Award Number: APVV-16-0153 and VEGA 2/0085/17 and Grant Agency of Ministry of Education of Slovak Republic VEGA 2/0085/17.

References

- Bainbridge, T. F., Quinlan, J. A., Mar, R. A., & Smillie, L. D. (2018). Openness/Intelect and Susceptibility to Pseudo-Profound Bullshit: A Replication and Extension. *European Journal of Personality*, (January). <https://doi.org/10.1002/per.2176>
- Bruder, M., Haffke, P., Neave, N., Nouripanah, N., & Imhoff, R. (2013). Measuring individual differences in generic beliefs in conspiracy theories across cultures: conspiracy mentality questionnaire. *Frontiers in Psychology*, 4(April), 225. <https://doi.org/10.3389/fpsyg.2013.00225>
- Čavojová, V., Secarā, E. C., Jurkovič, M., & Šrol, J. (2018). Reception and willingness to share pseudo-profound bullshit and their relation to other epistemically suspect beliefs and cognitive ability in Slovakia and Romania. *Applied Cognitive Psychology*, 1–13. <https://doi.org/10.1002/acp.3486>
- DeYoung, C. G., Grazioplene, R. G., & Peterson, J. B. (2012). From madness to genius: The Openness/Intelect trait domain as a paradoxical simplex. *Journal of Research in Personality*, 46(1), 63–78. <https://doi.org/10.1016/j.jrp.2011.12.003>
- Frederick, S. (2005). Cognitive reflection and decision making. *Journal of Economic Perspectives*, 19(4), 25–42. <https://doi.org/10.1257/089533005775196732>
- Halama, P. (2018). Konštrukcia a psychometrické vlastnosti škály epistemologicky nepodložených presvedčení. In *Sociálne procesy a osobnosť 2018*. Stará Lesná: Spoločenskovedný ústav CSDP SAV.
- Lindeman, M., & Aarnio, K. (2007). Superstitious, magical, and paranormal beliefs: An integrative model. *Journal of Research in Personality*, 41(4), 731–744. <https://doi.org/10.1016/j.jrp.2006.06.009>
- Lundström, M., & Jakobsson, A. (2009). Students’ ideas regarding science and pseudo-science in relation to the human body and health. *Nor Dina*, 5(1), 3–17. <https://doi.org/10.5617/nordina.279>
- Mækelæ, M. J., Moritz, S., & Pfuhl, G. (2018). Are Psychotic Experiences Related to Poorer Reflective Reasoning? 9(February), 1–10. <https://doi.org/10.3389/fpsyg.2018.00122>
- Pennycook, G., Cheyne, J. A., Barr, N., Koehler, D. J., & Fugelsang, J. A. (2015). On the reception and detection of pseudo-profound bullshit. *Judgment and Decision Making*, 10(6), 549–563. <https://doi.org/10.3389/fpsyg.2015.00279>
- Randall, T. M. (1997). Paranormal Short Inventory. *Perceptual and Motor Skills*, 84(3c), 1265–1266. <https://doi.org/10.2466/pms.1997.84.3c.1265>
- Soto, C. J., & John, O. P. (2017). Short and extra-short forms of the Big Five Inventory–2: The BFI-2-S and BFI-2-XS. *Journal of Research in Personality*, 68, 69–81. <https://doi.org/10.1016/j.jrp.2017.02.004>
- Underwood, L. G. (2011). The Daily Spiritual Experience Scale: Overview and Results. *Religions*, 2(1), 29–50. <https://doi.org/10.3390/rel2010029>

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