

## *As Predicted PreRegistration*

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### **Submission**

#### **1) Have any data been collected for this study already?**

- ☐ Yes, we already collected the data.
- ☒ No, no data have been collected for this study yet.
- ☐ It's complicated. We have already collected some data but explain in Question 8 why readers may consider this a valid pre-registration nevertheless.  
(Note: "Yes" is not an acceptable answer.)

#### **2) Hypothesis. What's the main question being asked or hypothesis being tested in this study?**

The main research question is whether Narcissism (found to be reliably related to conspiracy, Cichocka, Marchlewska, Golec de Zavala, 2016) contributes to the explanation of the beliefs in conspiracy theories above the HEXACO personality traits (complemented with disintegration trait, Knežević, Savić, Kutlešić, & Opačić, 2017). This question will be addressed by using two different cultural groups: UK and Germans.

H1. Disintegration explains variance in the beliefs in conspiracy theories incrementally to the HEXACO traits.

H2. Narcissism does not explain variance in the beliefs in conspiracy theories incrementally to the HEXACO traits complemented with Disintegration.

H3. The structural model of narcissism, HEXACO and disintegration in conspiracy beliefs is expected to reveal crucial role of disintegration, honesty (or agreeableness) and conscientiousness in conspiracy, while narcissism is expected to have at best partial mediatory role between these personality traits and conspiracy beliefs. The model is expected to be invariant across the two samples.

#### **3) Dependent variable. Describe the key dependent variable(s) specifying how they will be measured.**

It is not an experimental, but correlational design. Logic of dependend/independent variables is not quite applicable. All variables are listed here.

HEXACO 100-item inventory (Lee, & Ashton, 2016), with 5 alternatives from 1 – strongly disagree to 5 – strongly agree, measuring 24 facets within 6 basic personality domains and interstitial Altruism scale (total 25 facets):

Honesty-Humility (Sincerity, Fairness, Greed Avoidance, Modesty – 16 items altogether)

Emotionality (Fearfulness, Anxiety, Dependence, Sentimentality - 16 items altogether)

Extraversion (Social Self-Esteem, Social Boldness, Sociability, Liveliness - 16 items altogether)  
Agreeableness (Forgiveness, Gentleness, Flexibility, Patience - 16 items altogether)  
Conscientiousness (Organization, Diligence, Perfectionism, Prudence - 16 items altogether)  
Openness to Experience (Aesthetic Appreciation, Inquisitiveness, Creativity, Unconventionality - 16 items altogether), and Altruism (4 items)

DELTA 20-item Likert-type scale (Knezevic, Savic, Kutlesic & Opacic, 2017), with 5 alternatives from 1 – strongly disagree to 5 – strongly agree, measuring 9 Disintegration facets within the domain of Disintegration:

Perceptual Distortion (3 items)  
General cognitive/executive impairments (3 items)  
Paranoia (2 items)  
Mania (2 items)  
Apathy/Depression (2 items)  
Flattened Affect (2 items)  
Somatoform Dysregulation (2 items)  
Enhanced Awareness (2 items)  
Magical Thinking (2 items)

Conspiracy beliefs measured by the Conspiracy scale Generic Conspiracist Beliefs Scale (Brotherton, French, & Pickering, 2013) – 15 items, Likert-type scale with 5 alternatives from 1 - definitely not true to 5 -definitely true.

Narcissism measured by Individual narcissism scale, a simplified version of 40 item narcissistic personality inventory (Raskin & Hall), containing 18 items (Ang & Yusof, 2006), Likert-type scale with 5 alternatives from 1 – not at all like me to 5 – very much like me.

Socio-demographic data

1. Gender (3 categories: female, male, other)
2. Age in years
3. Educational level
  1. 1 - 8 years (elementary school and lower)
  2. 9 – 12 (secondary school, vocational)
  3. More than 12 years of education (college, university, PhD)

#### **4) Conditions. How many and which conditions will participants be assigned to?**

The study uses a correlational design. Participants complete four measures (HEXACO inventory, 100-item version; DELTA scale, 20-item version, Narcissism scale (Ang & Yusof, 2006), and Conspiracy scale Generic Conspiracist Beliefs Scale (Brotherton, French, & Pickering, 2013).

There will be two different cultural groups: subjects from UK, and Germany.

#### **5) Analyses. Specify exactly which analyses you will conduct to examine the main question/hypothesis.**

Hierarchical regression analysis will be employed to test incremental validity of disintegration over HEXACO (H1), and Narcissism over HEXACO + disintegration (H2) in explaining beliefs in conspiracy theories.

Multi-group Structure Equation Modeling (SEM) will be employed to test proposed model of personality influence on conspiracy, as well as expectation that narcissism have only partial mediatory role between the basic traits and conspiracy. Invariance of the model across the two samples is expected.

**6) Outliers and Exclusions. Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.**

We exclude participants indicating more than 50% of missing answers.

**7) Sample size. How many observations will be collected or what will determine sample size?**

**No need to justify the decision, but be precise about exactly how the number will be determined.**

In each of the samples (countries), we will have 360 respondents. This study is part of the larger project aimed at finding out the relations between HEXACO, disintegration and beliefs in conspiracy theories. This study will be conducted on the same participants on which the study titled «Seven-factor model of personality space – evidence from a cross-cultural study» will be conducted. While the other study is focused on the factorial separation of Disintegration from HEXACO traits, this one is focused on the role of HEXACO, Disintegration and Narcissism in the beliefs in conspiracy theories. The reasons for this number of subjects are determined by the logic of the aforementioned, connected study. As we have 34 facets in the factor analysis (25 HEXACO+9 Disintegration) the optimal 1:10 variable:subject ratio will be achieved by having 340 respondents. Because we would like to do factor analysis at the item level within each of the samples, by having 360 respondents the variable:subject ratio will be 1:3 (given that the number of items is 120), the minimal variable:subject ratio for a proper factor analysis.

**8) Other. Anything else you would like to pre-register?**

**(e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)**

No

**9) Name. Give a title for this AsPredicted pre-registration**

**The role of narcissism, HEXACO and disintegration in conspiracy beliefs**

**Finally. For record keeping purposes, please tell us the type of study you are pre-registering.**

- ☐ Class project or assignment
- ☐ Experiment
- ☒ Survey
- ☐ Observational/archival study
- ☐ Other:

References

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- Cichocka A., Marchlewska M., Golec de Zavala A. (2016). Does self-love or self-hate predict conspiracy beliefs? Narcissism, self-esteem, and the endorsement of conspiracy theories. *Social Psychological & Personality Science*, 7, 157–166. doi:10.1177/1948550615616170
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- Lee, K., & Ashton, M. C. (2016). Psychometric properties of the HEXACO-100. *Assessment*, 25(5), 543-556. <https://doi.org/10.1177/1073191116659134>