SUPPLEMENTARY FILE FOR:

Linguistic Markers of Grandiose Narcissism:

An Exploratory LIWC Analysis of 15 Samples

Are there Gender Differences in the LIWC Correlates of Narcissism?

The second research question we intend to answer is whether there are consistencies across men and women in the profiles of correlations. Prior research in this area has shown that there are gender differences in the language correlates of narcissism (Fast & Funder, 2010); in particular, it has been demonstrated that for men, some facets of narcissism are positively correlated with first-person singular pronoun use, whereas for women this is not the case. Although follow-up research generally did not support this pattern with regard to first-person singular pronouns (Carey et al., 2015), it is important to consider the possibility that it could be relevant to a broader study of LIWC correlates of narcissism. Thus, we explore gender differences in the LIWC correlates of narcissism in our study.

Correlations by Gender and a Test for Between-Correlation Gender Differences

Among females, narcissism was most positively correlated with the "humans" category ($r = .046$, $p = .01$, 95% CI [.011; .080]), and it was most negatively correlated with "anxiety or fear" words ($r = -.061, p < .001$, 95% CI [-.097; -.026]). Among males, narcissism was most positively correlated with certainty ($r = .050, p = .048$, 95% CI [.0004; .0992]), and it was most negatively correlated with tentative words ($r = -.051, p = .04$, 95% CI [-.100; -.002]).

Next, we examined gender differences for each specific LIWC category; the full results

are available in the Supplemental Material – Gender Differences (AKA Supple~1.XLS at https://osf.io/caf8n/files/). Using the equation 2.8.5 from Cohen and Cohen (1983), which compares the magnitudes of correlations from independent samples, we found two gender differences that were significant (ps < .05). The two were as follows: The correlation between narcissism and word count was greater for women than men ($Z = 2.204$, $p = .028$); and the correlation between narcissism and percent of words captured as LIWC dictionary words was greater for men than women ($Z = 2.030$, $p = .042$). Overall, the number of gender differences we found is fewer than what can be expected by chance alone, given that we ran 72 statistical tests (at chance, 3.6 out of 72 would be significant at $p < .05$ [under the null hypothesis]), and thus these two highlighted differences probably do not reflect real differences.

To determine whether the profile for females was similar to the profile for males, we ran a column-vector correlation (Funder & Sneed, 1993). This approach takes the column of correlations for females, the column of correlations for males, and then correlates them (after using the appropriate r-to-z transformation); it indexes the degree of similarity between the profiles. In this case, the correlation was small for a profile correlation ($r = .321$), indicating only modest similarity between the females and the males with regard to LIWC correlates of narcissism. It is worth mentioning that because the 72 correlations hovered around zero, this pattern may have stifled our ability to detect a large profile correlation, and thus it is possible that the profile correlation reported here is underestimated.

References

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