May 21, 2018

We are writing for *Modern Psychological Studies* to consider, “Love, Language, and Linear Algebra: Linguistic Modeling of Personality and Mate Preference” for publication as a research article. This manuscript has not been previously published, and it is not under review at any other journal. The research in this study was approved by the IRB at Missouri State University. This project was carried out as part of the requirements for an undergraduate Honors Thesis by Caleb Marshall.

Abstract: This study utilized Latent Semantic Analysis to determine whether similarities in personality predicted similarities in responses to a romantic writing prompt. (Landauer & Dumais, 1997). From participants’ writing samples, we calculated thematic cosines (a measure of relatedness) between each male and female participant. Participants also completed the Big Five Personality Questionnaire Short Form (Morizet, 2014). Extraversion, agreeableness and conscientiousness were related to cosines, which suggested medium-small relationships from personality traits to written responses. This relationship is consistent with previous studies on mate preference, which suggests that Latent Semantic Analysis may be useful in quantifying mate preference, especially when alongside traditional survey methods. We conclude with a discussion of the compatibility of ordinal measures (survey data) and continuous measures in examining complex phenomena in the Behavioral Sciences, such as mate preference.

Thank you for your consideration of our work. Do not hesitate to contact us with any questions or concerns you may have.

Sincerely,

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