

Reply to Millet: Digit ratios and high frequency trading

Kobe Millet, in a letter (1) commenting on the correlations we found between digit ratios and success in high-frequency trading (2), suggests that digit ratios gauge the psychological need to excel rather than a physiological characteristic. However, if this were true, then we would find low 2D:4D among successful people of most occupations, but I do not believe we do. One study, for example, found that faculty in the math and science departments of universities had higher more-feminine digit ratios (3). Furthermore, several digit-ratio studies have controlled for effort and found that relative performance in many sports is predicted by 2D:4D independently of training intensity (4, 5). Lastly, our own findings show that a lower 2D:4D predicts greater trading profit and loss when the volatility of the market increases, higher volatility demanding faster reaction times. This result, together with the sporting studies mentioned above, suggests that a physiological trait rather than a psychological one is at least partly responsible for success in these fields.

We should, however, point out that our study could not fully test for the mechanism underlying the correlations between trading success and digit ratio. Only laboratory work can establish this mechanism. Our study rather was a piece of field work, a type of study we feel is sadly lacking in the new subject of neuroscience and economics. In field work, you forgo the ability to establish mechanism, but what you lose in rigor you pick up in relevance.

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The author declares no conflict of interest.

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