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“Letter: Psychological targeting”

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Letter: Psychological Targeting

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Psychological targeting of advertising using Facebook profiles has been a contentious issue of late. Researchers from Cambridge, but separate from Cambridge Analytica, have reported results suggesting that psychological targeting using Facebook is so effective that its use should be regulated¹. Here we show that their findings actually refute the proposition that psychological targeting is more effective than normal advertising. Psychological targeting involves tailoring advertising messages to an individual's personality traits (e.g., dominant or submissive²). Matz and colleagues used the *myPersonality.org* database, which matches millions of people's Facebook likes with their responses to a "big five" personality questionnaire, to identify the likes that best classified people as either extraverts versus introverts, or high versus low openness to experience. Professional graphic designers then designed ads that worked better for these personality types. Instead of testing whether ads performed better when targeted than when untargeted, to the general population, Matz et al. used a weaker test in two of their three studies. They compared targeted ads with deliberately mis-targeted ads (e.g., showing an ad designed for extraverts to introverts). Across three studies, Matz et al. carried out four tests of psychological targeting versus mis-targeting, and one test of targeting versus a standard message. If psychological targeting worked reliably, it should have been 100% effective in all five experiments. By random chance, it would have been effective in 50% of them, in two or three of the five experiments. In fact, the results showed that psychological targeting was effective in only two of the experiments. We use click-through as the critical dependent variable, as conversions (sales or app installs) and conversion rates (conversions/reach *sic.*), the measures highlighted in the article, occurred after click-through, and so are explained by self-selection effects out of the control of the experimenters³. The two cases where the psychologically targeted ad worked better suggest instead that it was the creative quality of these ads that was superior, not their targeting. It is well known that creativity explains most of the difference between ads in their performance⁴. The main problem with the Matz et al. study is the failure to rule out differences in creative quality as an alternative explanation for their results. Some pretesting was done with small groups of students, but not using the same target audience and dependent variable as the main experiments, to ensure that all five ads were equally effective in creative terms before testing whether they performed better when targeted. Until that study is carried out, the results of Matz et al. study suggest that psychological targeting is difficult to attempt, and, so far, not shown to work. This should allay fears about the power and potential misuse of psychological targeting.

Word count (body of letter): 446

- 1 Matz SC, et al. (2017) Psychological targeting as an effective approach to digital mass persuasion. *Proc Natl Acad Sci USA* 114:12714–12719.
- 2 Moon MS (2002) Personalization and personality: Some effects of customizing message style based on consumer personality. *J Consum Psychol* 12:313–326.
- 3 Heckman JJ (1979) Sample selection bias as a specification error. *Econometrica* 47:153–161.
- 4 Wood L (2009) Short-term effects of advertising: Some well-established empirical law-like patterns. *J Advertis Res* 49, 2:186-192.

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