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Wakefield *et al.* are correct to draw attention to the effect of parent-focused ads on youth smoking outcomes. Their conclusion, however, that “tobacco company parent-targeted advertising may have harmful effects on youth”¹ is not warranted.

First, the study design lacks validity. The authors combined aggregate level Nielsen data with individual level data from the Monitoring the Future (MTF) survey. Their unrealistic assumption is that all adolescents in a media market surveyed at the same time share the same ad exposure. This is obviously untrue with unpredictable consequences for subsequent modeling. Even if one accepted this unreasonable assumption, greater ad exposure should lead to greater ad recall, but their models inexplicably show a negative association between exposure to parent-targeted ads and recall of anti-smoking advertisements. In contrast, the authors got different results for the association between company-sponsored youth-targeted ads and recall and, in another study, still different results for state-sponsored ads.²

Second, the study did not include the necessary variables to properly evaluate the Philip Morris USA “Talk. They’ll Listen.” campaign. This campaign is based on the research-supported premise that parents can have a positive influence on their children, including helping them avoid smoking.³⁻⁵ Without regard for this basis, the authors drew conclusions without accounting for the influence of the ads on parents and their subsequent interactions with their children. A limitation in choosing the MTF survey is that these necessary parental variables are unavailable. On the other hand, available influential variables such as peer smoking behavior⁶⁻⁹ were not included by the authors. Curiously, they also excluded exposure to pharmaceutical company cessation ads which they considered important in similar previous work.²

Third, the results lack robustness. Logistic regression requires careful variable selection based on theoretical and statistical considerations to develop the most parsimonious and numerically stable model to explain the data with validity.¹⁰ This theoretical foundation, as suggested above, is absent in the current paper. Given the sensitivity of odds ratios to the selection of covariates, it is unreasonable to draw conclusions based on odds ratios so close to 1, especially with no adjustment for multiple correlated evaluations.

The design, variable selection and lack of robustness invalidate the conclusions of this study. Consultation and cooperation between the authors and the ad sponsors could have

improved this research. At the very least, the different mechanisms by which the campaigns were designed to work might have been considered.

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