



A Public Health Approach to Negative News Media: The 3-to-1 Solution

Tyler J. VanderWeele, PhD¹ , and Arthur C. Brooks, PhD²

Abstract

There is clear evidence that the prevalence of negative media reporting has increased substantially over the past years. There is evidence that this negative reporting adversely affects social interactions, and thereby also health and well-being outcomes. Given the wide reach of negative media reporting and the contagion of such reporting and the resulting interactions, the effects on health are arguably substantial. Moreover, there is little incentive at present for media outlets to change practices. A commitment of news outlets to report one positive story for every 3 negative stories, and of news consumers to restrict attention to outlets that do, could dramatically alter practices and, consequently, population health.

Keywords

news, media, social networks, contagion, population health

The American Press Institute (www.americanpressinstitute.org) reports that 7 in 10 Americans consume news at least daily. The content of that news media has, however, become increasingly negative and polarizing over time.¹ This has led, and continues to lead, to discord, negative interactions, and consequently also poorer societal well-being and worse health. While effects sizes on health may be relatively modest, because of the vast scope of the exposure to negative news, and also the contagion of news itself and its effects on human behavior, the actual public health consequences, at the population level, may in fact be substantial. The increasingly polarizing and negative news media is thus not only a social and political concern but arguably a public health concern as well. There is, moreover, nothing to suggest that these trends in negative media reporting, and its adverse consequences, are reversing. What is to be done? We would argue, and will provide evidence for, the position that if news media were to commit to reporting 1 positive event for every 3 negative new stories, and news consumers were to restrict their attention to those outlets that did so, the consequences for society and even for population health and well-being could be very substantial indeed.

The Evidence

There is evidence that the content of media has become increasingly negative over time. A recent analysis using sentiment coding of news reporting from a summary of world broadcasts indicated a more than 2 standard deviation change in negative reporting from 1979 through 2010,¹ cf Figure 11. The negative content of news reporting is likely in part motivated by the fact that the human mind is more likely to be attracted to, carefully watch, and become fixated upon

something that is negative than something that is positive. This phenomenon, sometimes referred to as “negativity bias” may be an adaptive response, to ensure survival, since negative events of course have the greater likelihood of causing harm.^{2,3} However, the implications of this for news reporting are that news sources that provide negative reporting will generally thus end up with more viewers.⁴ There is thus strong incentive, for media success, to report negative news.

However, whether the implications of this for society are good is an entirely different matter. There is evidence that the witnessing of a positive event is more likely to result in someone subsequently acting altruistically toward another, and that the witnessing of a negative event or violence is more likely to result in more negative actions and behaviors toward others.⁵⁻⁸

Furthermore, evidence continues to accumulate that altruistic behaviors are themselves subject to considerable contagion.^{6,9,10} The recipient of an action of goodwill is more likely to go on to do the same. The contagion effects of altruistic action may extend so far that a positive interaction between 2 persons can travel through a social network and ultimately positively affect the interaction of 2 other persons neither of whom know either person in the original pair.⁶ One estimate, from a study using experimental data, suggested that each additional contribution a subject initially makes to the public good

¹ Harvard T.H. Chan School of Public Health, Boston, MA, USA

² Harvard Kennedy School of Government, Cambridge, MA, USA

Corresponding Author:

Tyler J. VanderWeele, Harvard T.H. Chan School of Public Health, 677 Huntington Avenue, Boston, MA 02115, USA.

Email: tvanderw@hsph.harvard.edu

is eventually tripled by other subjects who are directly or indirectly influenced to contribute more as a consequence.⁶

A single positive, or negative, interaction is thus important. These positive or negative interactions of course shape social relations, politics, and the effectiveness of democracy, and thus also the public health system and, through it, the health of populations. But there is also evidence that positive versus negative interactions also shape health directly. Evidence from meta-analyses of experimental and observational studies indicates a moderately sizeable effect of prosocial behavior on psychological well-being, and on physical and mental health.¹¹⁻¹⁴

The Implications

These phenomena of negativity bias, of increasingly negative news reporting, of the effects of this on human interaction, and the contagion effects of positive and negative interactions all have implications for public health. The consequences of this chain of causation from the witnessing of negative or positive events through negative or positive personal interactions, and their spreading by contagion through a social network, to health and well-being may be very powerful indeed. While the effect size of negative, divisive, or polarizing media reporting on health, may, at the individual level, be very tiny, the capacity to both reach large numbers (eg, through numerous viewers) and to spread massively through a social network (eg, by sharing the negative news, and the spread of negative interactions) may result in social and public health consequences that, at the population level, bring about considerable harm in human interaction, and subsequently also health and well-being.¹⁵

If the current trends are left unaddressed, there will continue to be incentive for news reporting to become more and more negative. Negative interactions and political polarization will continue to increase, resulting in negative effects on democracy, increasingly negative interactions between individuals, and declines in health and well-being. What should be done? Given the available empirical evidence, it seems that small changes in reporting practices could have substantial beneficial impact.

A Solution: The 3-to-1 Commitment

Our proposal is that media outlets commit to reporting at least 1 positive event for every 3 negative new stories. Media reporting of negative events is of course often important, and can indeed sometimes play a critical role in bringing awareness of society's problems and ills, and focusing attention on how such problems can be solved. We would not argue that such negative reporting should be abandoned. However, in light of the evidence, including strong spillover and contagion, greater effort should also be given to balance these negative reports with stories that comment upon what is good in the community, or what individuals or groups are doing to bring about a better world. Based on prior evidence, media outlets that committed to doing so could make substantial contributions to health and

well-being.⁵⁻¹³ We will refer to the implementation of such an approach as the "3-to-1 commitment *for media*": for every 3 negative stories, at least 1 positive report.

But can this realistically come about? Will it not be the case that those media outlets that commit to this strategy inevitably suffer declines in viewership? That is certainly what the available evidence suggests; and that this is so is at least in part because of the demand, from viewers, for negative news (notwithstanding the common finding that a majority of Americans say they dislike these trends).^{5,16} Here is where cooperation is needed, cooperation at the societal level. Some of that cooperation may arise from mutual commitment among competing news outlets themselves. However, this will likely, in our view, be insufficient; the incentives for nearly exclusive negative reporting are too great. Cooperation thus also must also come from consumers of media. If consumers themselves were to commit to not viewing news from any media outlet that had not made such a 3-to-1 commitment, then the incentives for the media outlets themselves would vastly change. We will refer to this as the "3-to-1 commitment *for viewers*." If a large portion of viewers made such a commitment, incentives for media would change, and thus reporting practices would as well. Social interaction, well-being, and health would be improved. We certainly do not view this 3-to-1 commitment for media, or for consumers of media, as in any way definitively optimal. Indeed, existing research indicates a higher ratio of positive interactions over negative interaction is needed for good relationships.^{17,18} However, the 3-to-1 ratio seems at least potentially attainable, and a considerable improvement over the present circumstances.

So What?

What is already known on this topic?

The prevalence of negative media reporting has increased substantially over the past years. Such negative reporting adversely affects social interactions, as well as health and well-being outcomes.

What does this article add?

Given the wide reach of negative media reporting and the contagion of such reporting and the resulting interactions, the effects on health are arguably substantial, but could be prevented by a change in media reporting and consumption practices.

What are the implications for health promotion practice or research?

A commitment of news outlets to report 1 positive story for every 3 negative stories, and of news consumers to restrict attention to outlets that do, could substantially improve population health and well-being.

We have, in present news reporting and consumption, come to a very bad equilibrium. Media outlets are incentivized by the number of viewers; the number of viewers depends on the amount of negative media; consumers are attracted by this negative media, resulting in a downward spiral of increasingly negative reporting and consequently increasingly negative interactions. A commitment by viewers to only engage with media outlets that had themselves made the 3-to-1 commitment could break this bad equilibrium, restoring some level, at least, of positive reporting on what is good, on noble actions and undertakings, thereby promoting this also for others and, by contagion, yet further for society at large. The implications of such a 3-to-1 commitment from viewers, and from media outlets, could be immense, for society, and for public health.

Authors' Note

Tyler J. VanderWeele conceived of the paper and drafted the article. Arthur C. Brooks contributed to the interpretation of the results and provided critical revision of the manuscript. Both authors approve the version to be published and have participated sufficiently to take responsibility for the appropriate portions of the content.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was supported by grant 61075 from the John Templeton Foundation.

ORCID iD

Tyler J. VanderWeele, PhD  <https://orcid.org/0000-0002-6112-0239>

References

1. Leetaru KH. Culturomics 2.0: forecasting large-scale human behavior using global news media tone in time and space. Volume 16, Number 9. September 5, 2011. <http://firstmonday.org/ojs/index.php/fm/article/view/3663/3040>. Accessed March 17, 2020.
2. Rozin P, Royzman EB. Negativity bias, negativity dominance, and contagion. *Pers Soc Psychol Rev*. 2001;5(4):296-320.
3. Baumeister RF, Bratslavsky E, Finkenauer C, Vohs KD. Bad is stronger than good. *Rev Gen Psychol*. 2001;5(4):323-370.
4. Trussler M, Soroka S. Consumer demand for cynical and negative news frames. *Int J Press/Polit*. 2014;19(3):360-379.
5. Greitemeyer T. Effects of prosocial media on social behavior: when and why does media exposure affect helping and aggression? *Curr Dir Psychol Sci*. 2011;20(4):251-255.
6. Fowler JH, Christakis NA. Cooperative behavior cascades in human social network. *Proc Natl Acad Sci*. 2010;107(12):5334-5338.
7. Brooks AC. *Love Your Enemies*. New York, NY: Harper Collins; 2019.
8. Mathur MB, VanderWeele TJ. Finding common ground in meta-analysis "wars" on violent video games. *Perspect Psychol Sci*. 2019;14(4):705-708.
9. Jordan JJ, Rand DG, Arbesman S, Fowler JH, Christakis NA. Contagion of cooperation in static and fluid social networks. *PLoS One*. 2013;8(6):e66199.
10. Chancellor J, Margolis S, Lyubomirsky S. The propagation of everyday prosociality in the workplace. *J Posit Psychol*. 2018;13(3):271-283.
11. Curry OS, Rowland LA, Van Lissa CJ, Zlotowitz S, McAlaney J, Whitehouse H. Happy to help? A systematic review and meta-analysis of the effects of performing acts of kindness on the well-being of the actor. *J Exp Soc Psychol*. 2018;76:320-329.
12. Martín-María N, Miret M, Caballero FF, et al. The impact of subjective well-being on mortality: a meta-analysis of longitudinal studies in the general population. *Psychosom Med*. 2017;79(5):565-575.
13. Post SG. Rx It's good to be good (G2BG) 2017 commentary: prescribing volunteerism for health, happiness, resilience, and longevity. *Am J Health Promot*. 2017;31(2):164-172.
14. Kim ES, Whillans AV, Lee MT, Chen Y, VanderWeele TJ. Volunteering and subsequent health and well-being in older adults: an outcome-wide longitudinal approach. *American Journal of Preventive Medicine* 2020, in press.
15. VanderWeele TJ, Christakis NA. Network multipliers and public health. *Int J Epidemiol*. 2019;48(4):1032-1037. doi:10.1093/ije/dyz010.
16. Brooks AC. Our culture of contempt. *The New York Times*. Mar 3, 2019; SR9. <https://www.nytimes.com/2018/08/01/opinion/contributors/politics-cleanse.html>. Accessed March 17, 2020.
17. Tierney J, Baumeister RF. *The Power of Bad*. London, United Kingdom: Penguin Press; 2020.
18. Losada M, Heaphy E. The role of positivity and connectivity in the performance of business teams. *Am Behav Sci*. 2004;47(6):740-765.