Testosterone overload

A surplus of men leads to violence, right? It depends on how you look at it, say anthropologists Ryan Schacht, Kristin Rauch and Monique Borgerhoff Mulder

IN ASIA there are 100 million more men than women and this excess of men, particularly in China, has led to fears of “macho militarism and imperialism”. These concerns portray a violent, socially unstable world, caused by a glut of testosterone-driven, unmarried men. But although it is generally true that men are more violence-prone than women, does it follow that an abundance of men will cause an abundance of violence?

Claims of “more men, more violence” come primarily from two scholarly traditions. From a biological perspective, male violence results from antagonistic competition over mates, which intensifies when partners are rare. Sociologists typically argue that violence increases when the sex ratio is male-biased because of the large pool of unmarried men (the group most prone to violence). But what does the evidence say?

In a 2014 review of the research on violence in different societies, we found that violence was equally likely to be associated with extra women as with extra men (Trends in Ecology & Evolution, vol 29, p 214). Out of 20 studies, nine showed violence increasing with more men, but nine showed the opposite. Two were inconclusive.

Why the conflicting evidence? Clearly, the expectation of a straightforward relationship between violence and the sex ratio is overly simplistic. It stems from beliefs about innate sex differences in predilections for violence and responses to sexual frustration. Breaking free of such restrictive thinking allows us to see the possible reasons for the inconsistent relationship between sex ratios and violence in the scientific literature.

What alternatives do men have when there aren’t enough women? Some insight can be gleaned from “mating market models”. In these models, based on the principle of supply and demand, the rarer sex has more bargaining power in the marketplace. If not pleased with the terms of the relationship, they have little trouble going elsewhere. But the more abundant gender has few options, and therefore must cater to the preferences of the rarer gender. Mating market logic predicts that when there are extra women, men have the upper hand – behaving promiscuously, offering little parental investment, and yet still being able to obtain partners. On the other hand, when women are in short supply, men will find that marriage and a commitment to family are necessary to attain mating opportunities. In this situation, the best strategy for the average man is to secure and maintain a single partner.

There is substantial support for these expectations. In general, in many different societies around the world, male-biased sex ratios are associated with a greater proportion of men being married, less promiscuity in both sexes, greater marital stability, higher rates of paternal involvement, and lower rates of female-headed households and out-of-wedlock births. These findings directly contradict many alarmist predictions about the hazards of too many men. Rather than becoming ever more violent when faced with a deficit of women, men can engage in much more positive social behaviour to attract and keep a partner. This alternative strategy could
As commonly happens in the US, might actually be contributing to higher rates of violence in society. The resulting shortages of men in the communities they come from reduces rates of monogamy, marriage, family stability and paternal involvement in parenting. Rash reactions to the recent shocking rape cases in India blame “too many men”, but evidence for this relationship is lacking—and jumping to such conclusions could obscure other, more influential, causes.

Finally, we turn to China, the country of key concern when it comes to rising sex ratios and social unrest. A common narrative is that the growing number of bachelors might form gangs of violent, unattached men who will threaten China’s stability. This does indeed sound frightening. Fortunately these claims are based largely on historical accounts about marauding groups of males and intuitive arguments, rather than on data. There is evidence that rates of some types of crime are higher in the more male-biased provinces. However, in an evaluation of the current state of “maleness” and violence in China, Susan Greenhalgh, a Harvard University anthropologist specialising in Chinese society, argues that the very government programmes seeking to limit violence there may only be intensifying it. Bachelors from poor, rural communities are socially marginalised and the state limits their marriage options. In this way, government policies may be producing the very group of unmarried, violent men that they are trying to eliminate.

The belief that violence and crime increase in human populations with an excess of men is overly simplistic. Cross-national evidence consistently shows that rates of rape, sexual assault and male-on-male homicide are greatest when men are rare, not abundant. Of course, that doesn’t necessarily mean “more women, more violence” either. Many factors complicate the relationship between sex ratios and violence, including unique cultural and historical influences. To better understand the causes of violence, it is important to be specific about different forms of it, and to be sensitive to the different ways in which people can respond to partner availability, otherwise we will miss the patterns that can allow us to create appropriate intervention programmes.

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Another reason for inconsistent findings could be vague concepts of “violence”. If we are interested in the role that imbalanced sex ratios play in this, then we need to look at specific forms of violence. When we move away from vague notions, we find evidence that specific acts are associated with an overabundance of one gender or the other.

**Courting and catering**

In general, there are higher rates of men killing men and sexual assault in female-biased sex ratios. Perhaps this is because when women are abundant, men compete directly with one another in an aggressive pursuit of multiple sexual partners. Rates of intimate-partner violence by men (both assault and homicide) are higher in male-biased sex ratios. This might reflect attempts to control and guard a mate from potential competitors.

These findings show how men might adopt different behavioural strategies in response to a shortage of women, from antagonistic competition with other men to courting and catering to the desires of scarce women.

This is important, because a better understanding of these dynamics can help shape policies and interventions. For example, researchers have suggested that female-biased sex ratios in classrooms could reduce bullying. The cartoon version of the argument is that boys bully other boys, and so fewer boys means less bullying. But this policy recommendation is based on intuitive arguments, not data. Although well-intentioned, this suggestion could exacerbate the problem if, for example, it means there is a larger audience of girls for boys to perform in front of.

Another example is “tough on crime” policies. Incarcerating large numbers of men for non-violent offences such as drug crimes, as commonly happens in the US, might actually be contributing to higher rates of violence in society. The resulting shortages of men in the communities they come from reduces rates of monogamy, marriage, family stability and paternal involvement in parenting. Rash reactions to the recent shocking rape cases in India blame “too many men”, but evidence for this relationship is lacking—and jumping to such conclusions could obscure other, more influential, causes.

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