



Fake news of baby booms 9 months after major sporting events distorts the public's understanding of early human development science



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ABSTRACT

Introduction: In France on 27/6/16, Iceland's men's national football team won 2-1, knocking England out of the UEFA European Championship.

Result: Nine months after this momentous Icelandic victory, Ásgeir Pétur Þorvaldsson a medical doctor in Iceland, posted a tweet in jest suggesting that a baby boom had occurred as a result of increased celebratory coital activity following the win. The media covered this widely but statistical analysis shows otherwise and this was confirmed by the original tweet source.

Discussion: Given the increase in fake scientific news, it is especially important for scientists to correct misinformation lest the public loses trust in science or gains a distorted understanding of known facts.

In France on 27/6/16, Iceland's men's national football team won 2-1, knocking England out of the UEFA European Championship. This victory was widely regarded as the greatest in Iceland's footballing history.

On 27 March 2017, nine months after this momentous Icelandic victory, Ásgeir Pétur Þorvaldsson a medical doctor in Iceland, posted a tweet in jest suggesting that a baby boom had occurred as a result of increased celebratory coital activity following the win [1]. The media covered this widely, including a BBC Facebook video which has garnered over 1.8 million views (as of May 2017) [2]. Dr. Þorvaldsson subsequently confirmed that he was not contacted by the media to verify the scientific basis of his tweet and corroborated this report as untrue [3]. Live birth data by sex was obtained from Statistics Iceland for January 1990 to June 2017 is shown in the top of Fig. 1 (total births 122,290, male / total births) (MT) = 0.5111 (95% CI 0.5083–0.5139). Data for Jan 1990 to June 2017 is shown in the bottom of Fig. 1 and there is clearly no abnormal or outstanding peak in March–April 2016, nine months after the event.

A baby boom was recently reported in South Africa approximately 9 months after the 2010 FIFA World Cup. This was attributed to increased coital frequency at population level, albeit with small effect size [4,5]. However, an absence of an equivalent boom was reported in France following the 1998 FIFA World Cup [6]. Similarly, no booms followed the Fifty Shades of Gray release in the United States [7]. Given the increase in fake scientific news, it is especially important for

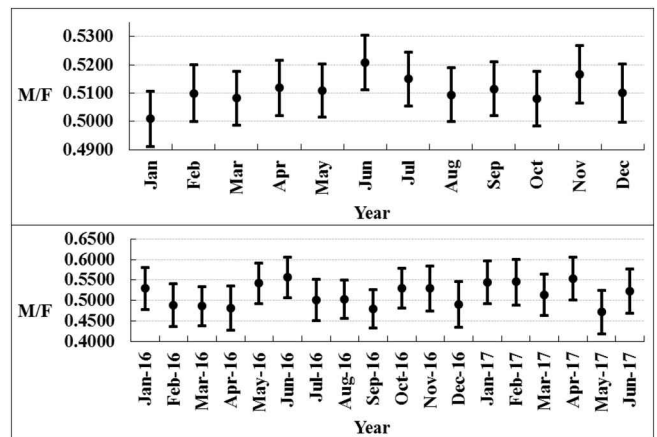


Fig. 1. Top: Summated monthly live birth data for January 1990 to June 2017. Bottom: Monthly live birth data for Jan 2016 to June 2017.

Footnote to table: Data is displayed male/total births (MT) along with upper 95% intervals for these proportions.

scientists to correct misinformation lest the public loses trust in science or gains a distorted understanding of known facts [8] [9].

Competing interests

None.

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