NATURE | NEWS: EXPLAINER

Why great Olympic feats raise suspicions

'Performance profiling' could help to dispel doubts.

Ewen Callaway

01 August 2012

At the Olympics, how fast is too fast? That question has dogged Chinese swimmer Ye Shiwen after the 16-year-old shattered the world record in the women's 400-metre individual medley (400 IM) on Saturday. In the wake of that race, some swimming experts wondered whether Ye's win was aided by performance-enhancing drugs. She has never tested positive for a banned substance and the International Olympic Committee on Tuesday declared that her post-race test was clean. The resulting debate has been tinged with racial and political undertones, but little science. Nature examines whether and how an athlete's performance history and the limits of human physiology could be used to catch dopers.



Chinese swimmer Ye Shiwen broke the world record for the women's 400-metre individual medley event at the Olympic Games on 28 July.

L. NEAL /AFP / GETTY IMAGES

Was Ye's performance anomalous?

Yes. Her time in the 400 IM was more than 7 seconds faster than her time in the same event at a major meet in July. But what really raised eyebrows was her showing in the last 50 metres, which she swam faster than US swimmer Ryan Lochte did when he won gold in the men's 400 IM on Saturday, with the second-fastest time ever for that event.

Doesn't a clean drug test during competition rule out the possibility of doping?

No, says Ross Tucker, an exercise physiologist at the University of Cape Town in South Africa. Athletes are much more likely to dope while in training, when drug testing tends to be less rigorous. "Everyone will pass at the Olympic games. Hardly anyone fails in competition testing," Tucker says.

Out-of-competition tests are more likely to catch dopers, he says, but it is not feasible to test every elite athlete regularly year-round. Tracking an athlete over time and flagging anomalous performances would help

anti-doping authorities to make better use of resources, says Yorck Olaf Schumacher, an exercise physiologist at the Medical University of Freiburg in Germany, who co-authored a 2009 paper proposing that performance profiling be used as an anti-doping tool¹. "I think it's a good way and a cheap way to narrow down a large group of athletes to suspicious ones, because after all, the result of any doping is higher performance," Schumacher says.

The 'biological passport', which measures characteristics of an athlete's blood to look for physiological evidence of doping, works in a similar way to performance profiling (see 'Racing just to keep up'). After it was introduced in 2008, cycling authorities flagged irregularities in the blood characteristics of Antonio Colom, a Spanish cyclist, and targeted drug tests turned up evidence of the banned blood-boosting hormone erythropoietin (EPO) in 2009.

How would performance be used to nab dopers?

Anti-doping authorities need a better way of flagging anomalous performances or patterns of results, says Schumacher. To do this, sports scientists need to create databases that — sport by sport and event by event — record how athletes improve with age and experience. Longitudinal records of athletes' performances would then be fed into statistical models to determine the likelihood that they ran or swam too fast, given their past results and the limits of human physiology.

The Olympic biathlon, a winter sport that combines cross-country skiing and target shooting, has dabbled in performance profiling. In a pilot project, scientists at the International Biathlon Union in Salzburg, Austria, and the University of Ferrara in Italy, developed a software program that retroactively analysed blood and performance data from 180 biathletes over six years to identify those most likely to have doped². The biathlon federation now uses the software to target its athletes for drug testing.

Could an athlete then be disciplined simply for performing too well?

"That would be unfair," says Tucker. "The final verdict is only ever going to be reached by testing. It has to be." In recent years, cycling authorities have successfully prosecuted athletes for having anomalous blood profiles, even when banned substances such as EPO could not be found. But performance is too far removed from taking a banned substance and influenced by too many outside factors to convict someone of doping, Tucker says. "When we look at this young swimmer from China who breaks a world record, that's not proof of anything. It asks a question or two."

Nature doi:10.1038/nature.2012.11109

References

- 1. Shumacher, Y. O. & Pottgiesser, T. Int. J. Sport. Physiol. Perform. 4, 129-133 (2009).
- 2. Manfredini, A. F. et al. J. Sport. Med. Phys. Fit. 51, 153–159 (2011).

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Author information

Author details

Ewen Callaway

Ewen joined *Nature* in August 2010, after 2 years at *New Scientist* as Boston-based biomedical reporter. He attended the science-writing programme at the University of California, Santa Cruz, and earned a master's degree in microbiology at the University of Washington. He spends his free time learning...

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Comments

2012-08-01 12:58 PM

Report this comment | #47437

YJ Kung said: Did it not concur to anyone that the use of Polyurethane Suits employed by the swimmers could have contributed to the results? Since Y2010, the rules allow Polyurethane "jammers" from the kneecap to navel for men, and from the knee to shoulder for women. The Greater surface area of women's wear vs men's along with the "proper" techniques to optimise the suit's performance could have explained the "limits of human physiology" argument, as well as explain how she could have outperformed and broke the seemingly "gender bias" in performance.

2012-08-01 01:47 AM

Report this comment | #47438

YJ Kung said: _"The resulting debate has been tinged with racial and political undertones, but little science."

The little paragraph aptly sums up this article.

Reading between the lines, its not too difficult to see the thinly veiled but almost foredrawn conclusion:

_"Nature examines whether and how an athlete's **performance history** and **the limits of human physiology** could be used to **catch dopers**", _

_"Was Ye's performance anomalous? - Yes", _

"Doesn't a clean drug test during competition rule out the possibility of doping? - *No*"

Summing up "that's not proof of anything. It asks a question or two.â€

I too ask a question or two about this article -

- 1. how much science is there (or rather has this article been unbiased in its treatment)?
- 2. "has it been tinged (subconsciously) with racial and political undertones"?

2012-08-01 02:07 AM

Report this comment | #47439

Zhenxi Zhang said: I just want to add this: Phelps improved 4+ seconds in his 200 fly between 14-15 years old. Ian Thorpe also had a similar performance improvement. Ye is now 16. She was 160 cm in height and now 170 cm. Human biology also play a role – she gets stronger and bigger naturally. Yes she can make up 5 seconds (NOT 7 seconds in the article) in a 400 IM that has more room for improvement, with good training she got in Australia.

In both the 400 IM and 200 IM finals, Ye were behind until freestyle. Well I guess there is "drug" that just enhances freestyle, but not the backstroke, breast, and fly. Does that make sense? Also, it is not professional to only mention that 'her showing in the last 50 metres, which she swam faster than US swimmer Ryan Lochte did when he won gold in the men's 400 IM'. The whole fact is that Ye is more than 23 second slower than Lochte in 400 IM. Plus, Freestyle isn't Lochte's best leg, but it is Shiwen's best leg. Lochte had a huge lead on the field, and almost coasted to the finish. He wasn't pressured by the field to go all out that last few meters.

And before we get into the fact there's no way a woman should be able to come close to man's time for a final leg of 50m. May I present the following: Kate Ziegler set a WR in the 1500m freestyle. In the last 50m of her race she had a split of 29.27, which is ONLY 0.17s slower than Lochte final 50m. This was after she swam for 1100m longer than Lochte!

I feel the author would probably not write such a piece if Ye is an American or British. Neither country is clean from athletes caught by doping (See http://en.wikipedia.org/wiki/Use_of_performance-enhancing_drugs_in_the_Olympic_Games). Let's try not to use double standards on the great performance from countries other than US and European countries.

2012-08-01 08:10 AM

Report this comment | #47452

Cheun Jye Yow said: Zhenxi Zhang, thanks for the details. Good analysis.

2012-08-02 02:18 AM

Report this comment | #47487

Lai Jiang said: It is a shame to see Nature, which nearly all scientists, including myself, regard as the one of the most prestigious and influential physical science magazines to publish a thinly-veiled biased article like this. Granted, this is not a peer-reviewed scientific article and did not go through the scrutiny

of picking referees. But to serve as a channel for the general populous to be in touch with and appreciate sciences, the authors and editors should at least present the readers with facts within proper context, which they failed to do blatantly.

First, to compare a player's performance increase, the author used Ye's 400m IM time and her performance at the World championship 2011, which are 4:28.43 and 4:35.15 respectively, and reached the conclusion that she has got an "anomalous" increase by ~7 sec (6.72 sec). In fact she's previous personal best was 4:33.79 at Asian Games 2010¹. This leads to a 5.38 sec increase. In a sport event that 0.1 sec can be the difference between the gold and silver medal, I see no reason that 5.38 sec can be treated as 7 sec.

Second, as previously pointed out, Ye is only 16 years old and her body is still developing. Bettering oneself by 5 sec over two years may seem impossible for an adult swimmer, but certainly happens among youngsters. Ian Thorpe's interview revealed that his 400m freestyle time increased 5 sec between the age of 15 and 16². For regular people including the author it may be hard to imagine what an elite swimmer can achieve as he or she matures, combined with scientific and persistent training. But jumping to a conclusion that it is "anomalous" based on "Oh that's so tough I can not imagine it is real" is hardly sound.

Third, to compare Ryan Lochte's last 50m to Ye's is a textbook example of what we call to cherry pick your data. Yes, Lochte is slower than Ye in the last 50m, but (as pointed out by Zhenxi) Lochte has a huge lead in the first 300m so that he chose to not push himself too hard to conserve energy for latter events (whether this conforms to the Olympic spirit and the "use one's best efforts to win a match" requirement that the BWF has recently invoked to disqualify four badminton pairs is another topic worth discussing, probably not in Nature, though). On the contrary, Ye is trailing behind after the first 300m and relies on freestyle, which she has an edge, to win the game. Failing to mention this strategic difference, as well as the fact that Lochte is 23.25 sec faster (4:05.18) over all than Ye creates the illusion that a woman swam faster than the best man in the same sport, which sounds impossible. Put aside the gender argument, I believe this is still a leading question that implies the reader that something fishy is going on.

Fourth, another example of cherry picking. In the same event there are four male swimmers that swam faster than both Lochter (29.10 sec)³ and Ye (28.93 sec)⁴: Hagino (28.52 sec), Phelps (28.44 sec), Horihata (27.87 sec) and Fraser-Holmes (28.35 sec). As it turns out if we are just talking about the last 50m in a 400m IM, Lochter would not have been the example to use if I were the author. What kind of scientific rigorousness that author is trying to demonstrate here? Is it logical that if Lochter is the champion, we should assume he leads in every split? That would be a terrible way to teach the public how science works.

Fifth, which is the one I oppose the most. The author quotes Tucks and implies that a drug test can not rule out the possibility of doping. Is this kind of agnosticism what Nature really wants to educate its readers? By that standard I estimate that at least half of the peer-reviewed scientific papers in Nature should be retracted. How can one convince the editors and reviewers that their proposed theory works

for every possible case? One cannot. One chooses to apply the theory to typical examples and demonstrate that in (hopefully) all scenarios considered the theory works to a degree, and that should warrant a publication, until a counterexample is found. I could imagine that the author has a skeptical mind which is critical to scientific thinking, but that would be put into better use if he can write a real peer-reviewed paper that discusses the odds of Ye doping on a highly advanced non-detectable drug that the Chinese has come up within the last 4 years (they obviously did not have it in Beijing, otherwise why not to use it and woo the audience at home?), based on data and rational derivation. This paper, however, can be interpreted as saying that all athletes are doping, and the authorities are just not good enough to catch them. That may be true, logically, but definitely will not make the case if there is ever a hearing by FINA to determine if Ye has doped. To ask the question that if it is possible to false negative in a drug test looks like a rigged question to me. Of course it is, other than the drug that the test is not designed to detect, anyone who has taken Quantum 101 will tell you that everything is probabilistic in nature, and there is a probability for the drug in an athlete's system to tunnel out right at the moment of the test. A slight change as it may be, should we disregard all test results because of it? Letââ,¬â,¢s be practical and reasonable. And accept WADA is competent at its job. Her urine sample is stored for 8 years following the contest for future testing as technology advances. Innocent until proven guilty, shouldn't it be?

Sixth, and the last point I would like to make, is that the out-of-competition drug test is already in effect, which the author failed to mention. Per WADA president \tilde{A} \hat{a} , \hat{a} , \hat{a} press release \hat{a} , drug testing for olympians began at least 6 months prior to the opening of the London Olympic. Furthermore there are 107 athletes who are banned from this Olympic for doping. That maybe the reason that \tilde{A} \hat{a} , \hat{a} everyone will pass at the Olympic games. Hardly anyone fails in competition testing \tilde{A} \hat{a} , \hat{a} ? Because those who did dope are already sanctioned? The author is free to suggest that a player could have doped beforehand and fool the test at the game, but this possibility certainly is ruled out for Ye.

Over all, even though the author did not falsify any data, he did (intentionally or not) cherry pick data that is far too suggestive to be fair and unbiased, in my view. If you want to cover a story of a suspected doping from a scientific point of view, be impartial and provide all the facts for the reader to judge. You are entitled to your interpretation of the facts, and the expression thereof in your piece, explicitly or otherwise, but only showing evidences which favor your argument is hardly good science or journalism. Such an article in a journal like Nature is not an appropriate example of how scientific research or report should be done.

¹http://www.fina.org/H2O/index.php?option=com_wrapper&view=wrapper&Itemid=1241

²http://www.youtube.com/watch?v=8ETPUKlOwV4

³http://www.london2012.com/swimming/event/men-400m-individual-medley/phase=swm054100 /index.html

⁴http://www.london2012.com/swimming/event/women-400m-individual-medley/phase=sww054100/index.html

⁵http://playtrue.wada-ama.org/news/wada-presidents-addresses-london-2012-press-conference

/?utm_source=rss&utm_medium=rss&utm_campaign=wada-presidents-addresses-london-2012-press-conference

2012-08-02 04:01 AM

Report this comment | #47495

Alias Lin said: All of the editor joined in the research should get a score of F for their Statistics course

2012-08-02 04:09 AM

Report this comment | #47497

zhiping wang said: Wow, I can't believe Nature published something like this. So basically the point is that anybody whose performance improves too fast should be considered as cheaters. The above replies have pointed out Phelps and Thorpes, who are arguably two greatest talents in the past 20 years, had similar performance improvement when they were young. Did anybody question their performance and think they were doping? The greatest soccer player Leo Messi scored more than 80 goals this past season. Nobody could have ever done something like this before. According to the standard of this article, he should definitely be considered as a doper, right?

2012-08-02 04:13 AM

Report this comment | #47499

John Bigman said: What a shame to see Nature publishes this in which there are so many mistakes in citing and analyzing data by the author (intentionally or not as pointed out by Lai Jiang). It is just using science's name to express their prejudice and discrimination (this UK-based journal and the author, editors). What a bunch of losers! You lose my respect from today, Nature!

2012-08-02 04:21 AM

Report this comment | #47501

Huaping Xu said: I read Nature very often since scientifically it is a very prestigious journal. I am extremely disappointed about Nature to let such a biased comment published. Basically a scientific journal will ask for conclusion to be well supported by data. I can not see this point in Ewen Callaway's article. I would like to ask for Ewen Callaway to address a point-to-point reply to Lai Jiang's reply.

2012-08-02 04:37 AM

Report this comment | #47502

Jason OBoyle said: It's ironic that the media are appalled that an 18-year old UK athlete is subjected to an offensive tweet but comfortable openly discussing whether a 16-year old Chinese athlete is a drug cheat or not – despite the absence of any evidence or even a direct allegation. Neither athlete has done anything wrong at all and yet both find themselves as front page headlines. For LOCOG and the British it is better to support her now (and risk looking naive later) than to host a games where allegation and insinuation along Nationalistic lines are allowed to go unchecked.

The USA need to accept that this young girl, Shiwen Ye from China is a World Record Breaking Olympian. That is what these games are about, the unexpected, the surprises, the new and the best talent, and the sad ending of many sporting careers for others.

The young lady deserves nothing but the utmost respect and all people involved in sabotaging her win should be ashamed and apologize. If Britain had won this medal in a World Record Breaking time, no questions would have been asked. The girl has been tested, and we all know how strict that testing is. Commend her, applaud her, and learn from her, she is a true Champion.

2012-08-02 04:40 AM

Report this comment | #47506

Jason OBoyle said: Whilst anyone qualified in sporting coaching,improvements of this nature are not uncommon and I can testify to that, YE's improvement, in percentage terms, was less than Ruta's, as of yet nobody has questioned this (but as she beat an american, perhaps by comment might be too early)

2012-08-02 04:45 AM

Report this comment | #47509

Jason OBoyle said: Ye is not guilty only if she is not Chinese: D but if she is Chinese then she would be blamed on by god knows who? The author selects to ignorant the fact that Ye is slower than US men in the same distance by a wide margin. Her final boost is a strategy used by many athletes who makes up their physical disadvantage by using strategy, take New Zealand rowing, they leave the race until the last 500 meters in which they jump in front and takes a win

2012-08-02 04:55 AM

Report this comment | #47510

Jason OBoyle said: London 2012 Olympic slogan "Inspire a generation", I'm pretty sure if the kinds of nonsense article inspires a generation of people then the world might as well stop the Olympics right now.

2012-08-02 04:56 AM

Report this comment | #47511

Jason OBoyle said: London 2012 Olympic slogan "Inspire a generation", I'm pretty sure if this kind of nonsense article inspires a generation of people then the world might as well stop the Olympics right now.

2012-08-02 05:30 AM

Report this comment | #47517

Charles Wang said: If you cannot do this, train yourself to beat her. Fair play.

2012-08-02 05:30 AM

Report this comment | #47519

Charles Wang said: If you cannot do this and still want to beat her, train yourself. Fair play.

2012-08-02 05:40 AM

Report this comment | #47523

ZHANG Guo-you said: What a shame thing to Natue. it is jealousy that China is challenging the UK or western contury dominance of sports like swimming in a major way.

2012-08-02 06:11 AM

Report this comment | #47525

John Millwood said: I do want to put the whole events--both the astonishing achievements (I'm not to telling whether it is a feat or a cheat) and the corresponding comments (not telling it is natural question or sour grapes)--onto the observations of modern historians. Surely it is an live episode showed in the great drama of a rising new power, especially when the leading actor is taken as underdog for a long time. It is a good subject of 'social psychology' research too, as more and more people in every corner of the globe come to feel the impact of this transformation. It is the responsibility of researchers to tell the public what is happening now and how to make sure the transformation do meet the wellbeing of human kind.

Finally, I want to say the Chinese people should have expected all such things (I mean 'biased' questioning indicted by many commenters) happens. It is the leading actors role to face any challenges and make the people and seated ones believe in him. The means he takes depends on the types of the movie. I prefer adventure and comedy.

2012-08-02 06:16 AM

Report this comment | #47526

Brian Owens said: We appreciate that the case of Ye Shiwen is a sensitive one for some readers. However, I would like to point out that this story was not intended to insinuate that Ye is guilty of anything. As we point out in the first paragraph, she has never failed a drug test and so is the rightful Olympic champion.

We wanted to use the controversy as a way to highlight what science can and can't tell us with respect to athletes' performance. We have done similar stories before, for example in the case of South African runner Caster Semenya

Congratulations to Ye Shiwen on her incredible win!

Brian Owens

Online news editor

Why great Olympic feats raise suspicions: Nature News & Comment

2012-08-02 06:19 AM

Report this comment | #47527

Wei Shao said: 'Performance profiling'?

Basically the point from the author is, anybody whose performance improves "too fast" should be considered as cheaters. What a shame, Nature!!! Is that a respected scientific journal??? OK, based on the same logic, you will be considered as potential cheaters if you just published your first paper on Nature. Since how could you have "1" Nature paper if you do not have any previous experience in publishing a Nature article? Ewen Callaway, it is the time for you to "retract" the report!

2012-08-02 06:21 AM

Report this comment | #47528

Wei Shao said: 'Performance profiling'? Basically the point from the author is, anybody whose performance improves "too fast" should be considered as cheaters. What a shame, Nature!!! Is that a respected scientific journal??? OK, based on the same logic, you will be considered as potential cheaters if you just published your first paper on Nature. Since how could you have "1" Nature paper if you do not have any previous experience in publishing a Nature article?

Ewen Callaway, it is the time for you to "retract" the report!

2012-08-02 06:24 AM

Report this comment | #47529

Wendell Parker said: Research of human is too much for a master degree in microbiology? There are many similar cases as to Ye's.

Elizabeth Beisel, (born August 18, 1992)

2006: 4:50.31

2007: 4:44.87 -5s!

2008: 4:32.87 -12s!

2012-08-02 06:25 AM

Report this comment | #47530

Wendell Parker said: Research of human is too much for a master degree in microbiology? There are many similar cases as to Ye's.

Elizabeth Beisel, (born August 18, 1992)

2006: 4:50.31

2007: 4:44.87 -5s!

2008: 4:32.87 -12s!

2012-08-02 06:29 AM

Report this comment | #47531

Jason OBoyle said: To Brian Owens:

10 of 64

All the British are murders even we cannot prove it now. You know, there are always ahead of the law.

We appreciate that accusing British people as murders is a sensitive one for some readers. However, I would like to point out that this story was not intended to insinuate that British are guilty of anything. As I point out in the first paragraph, many British has never failed a criminal charge and so is they are innocent.

I wanted to use the controversy as a way to highlight what science can and can't tell us with respect to a person's criminal record. We have done similar stories before, for example in the case of a non-British nation.

2012-08-02 06:38 AM

Report this comment | #47532

Wendell Parker said: To Jason OBoyle:

Please use "editor" instead of "British people". You can disagree the editors' comment, but you should not offend other people in the world.

2012-08-02 06:39 AM

Report this comment | #47533

Wendell Parker said: To Jason OBoyle:

Please use "editor" instead of "British people". You can disagree the editors' comment, but you should not offend other people in the world.

2012-08-02 06:40 AM

Report this comment | #47534

Sandy Fang said: Wow, I thought Nature was all about science and research. This article just proved how wrong I was! Since when did Nature join the business of rumor and second-guess? Maybe someday I will find Nature next to some celebrity gossip magzine when checkout at a grocery store:)

2012-08-02 06:40 AM

Report this comment | #47535

Jason OBoyle said: Lochte had the race won and didn't need a sensation freestyle leg.

Ye in both the 400 & 200 IM depended on her freestyle and that is obviously her strong suit. The circumstance of her 100 freestyle are totally different to Lochte and can only be compared if they were in the same race.

I am surprised that no reporter has mentioned that since Ye burst on to the scene in 2010 with incredible times at the Asian games she has grown in height from 160cm to 175cm. A teenager growing that fast in pretty common and that much extra leverage is going to help any swimmer loads.

2012-08-02 06:41 AM

Report this comment | #47536

Xiaosong Liu said: I personally appreciate the comments from Mr. Brian Owens. I hope, as a Nature Online News editor, you could consider to publish the comment from Lai Jiang as an article on Nature. Mr. Jiang's comments not only provide the public more information, more importantly, show the readers of Nature how REAL scientists analyze a problem in a more logical way.

2012-08-02 06:41 AM

Report this comment | #47537

Jason OBoyle said: To Wendell Parker,

Thank you. I agree that I should use "editor". Sorry.

2012-08-02 06:51 AM

Report this comment | #47538

Liang SUN said: The author is an Journalist only with a degree of writting;. He is far from a scientist. We all know what a journalist like to do. Take it as a joke. While, Nature, you succeed to convince me singing up an account, congratulation!

2012-08-02 06:52 AM

Report this comment | #47539

Jason OBoyle said: To Brian Owens:

If you are a responsible editor, you should consider to summarize the comments and publish them online along with this article. It is a good example showing how an article can mislead readers by only looking at selected data.

2012-08-02 07:10 AM

Report this comment | #47541

Zhao Zhang said: Performance profiling, as the base for accusation of an individual?! This is crazy!

2012-08-02 07:25 AM

Report this comment | #47542

Bond Shinra said: if China does has such drug that can not be found they will certainly use it for football athletes. They care this much more than caring swimming.

2012-08-02 07:48 AM

Report this comment | #47543

Yan Shen said: 为什ä¹^都æ¯ è‹±è¯ ï¼Œå†™Paperç'"英è¯ è¿ã¸å¤Ÿï¼Ÿè®©æ^'ç""汉è¯ è¯ ′:Nature,真渿ä½ å'Œä½ 所代表çš"英帽ç§'å-|精神æ,,Ÿå°°æ,²å"€ã€,è¿™ç¯ ‡æ–‡ç« 让ä½ ä»¬è′™ç¾žã€,没æœ

12 of 64

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2012-08-02 07:49 AM

Report this comment | #47544

Kc Xiao said: I cannot believe in this. Nature, such a top research journal publish speculations attacking a young girl without any evidence! The author express nothing but only narrow mind and barely racial discrimination. What a shame for nature. Such a biased article doesn't embarrass the young Chinese girl, but embarrass the author himself, and humiliate the honor of Nature.

2012-08-02 07:51 AM

Report this comment | #47545

Xinhua Lin said: Thank you, Mr. Callaway for a fine example of scientific reporting. I know I can always count on Nature for a fun article for our Friday journal club.

2012-08-02 08:06 AM

Report this comment | #47547

Guokr Ent said: Zhenxi Zhang and Lai Jiang made some great comments!

A few more points:

1 Ryan Lochte was very fast for the first 300m but really too slow for the last 50m. 300-350m took him 29.55s, and 350-400m 29.10s, while Phelps used 28.94s and 27.85s in Beijing 2008.

2 In swimming, the differences between female and male are not that big. Female athletes have more body fat, which is actually not that bad for a swimmer, since they could use the extra buoyancy.

3 Different swimming styles require very different technique. And different people are good at different styles.

2012-08-02 08:13 AM

Report this comment | #47548

C Jin said: To Wendell Parker

Elizabeth Beisel, born August 18, 1992

2006: 4:50.31

2007: 4:44.87 -5s!

2008: 4:32.87 -12s!"

18s! instead of 12s

2012-08-02 08:33 AM

Report this comment | #47550

CK Zhang said: To Nature Editors,

In light of the excellent analysis provided in the post by Lai Jiang (#47487) and others, it is evident that the author/reporter did not do his homework and cherry-picked data to support his false claim that Ye's performance was anomalous.

"Everyone charged with a criminal offense shall be presumed innocent until proved guilty according to law." It was a pity that the Press poured out doubts on the achievement of an excellent young athlete. What a shame that Nature published this piece of junk AFTER the IOC had proved that Ye was innocent.

Nature should seriously consider retracting this news from its website.

2012-08-02 08:38 AM

Report this comment | #47552

Tim Raynold said: SHAME ON Nature, it's barely a media tool for racial and political purpose rather than anything close to science.

2012-08-02 08:43 AM

Report this comment | #47553

Xuchen Liu said: I thought that nature is a serious scientific journal, Who can tell me if I am on a wrong site?

2012-08-02 08:51 AM

Report this comment | #47554

CK Zhang said: "Performance profiling". Are you CRAZY, Nature?

What about racial profiling?

What about intelligent profiling?

Einstein did not have a doctorate, it is so surreal that he could wrote The theory of Relativity.

2012-08-02 08:53 AM

Report this comment | #47555

Zhenbin Niu said: I don't know why the editors of Nature put such a ridiculous jerk on their website. Just "suspicion", "guess"... without evidence. Why do you guys don't suspect other great swimmer from other countries without evidence. Putting such a jerk on nature's website, I think, is a shame for Nature.

2012-08-02 08:54 AM

Report this comment | #47556

Tong Lu said: I know exactly what kind of "drug" Ye used in the match. It's called Chinese dream! It runs in almost every Chinese people's blood. Before the sour-grape theorists can come up with "test" to rule

14 of 64

that out, we will keeping kicking asses.

And I doubt whether it's worth even trying to create such a test. Because by the time the test is done, we will have dreamed more ambitious dreams!

2012-08-02 09:06 AM

Report this comment | #47557

Ye-Miao Chen said: Shame on you, Nature!

Are you really a journal on Biology?

2012-08-02 09:06 AM

Report this comment | #47558

Jeff Doug said: This is the most biased and discriminative article on a journal self inflated as leader in academic. I am shocked Nature editors would allow such article to be published. What a shame.

2012-08-02 09:14 AM

Report this comment | #47559

Zhichao Tan said: Does anyone can answer one question for me: if Ye is the British girl, what BBC and CNN will say now? Nature you should always keep in mind you are Nature, How you can allow this kinds of thing appear in your website? Disappointed!!!!!!

2012-08-02 09:15 AM

Report this comment | #47560

Zhichao Tan said: Does anyone can answer one question for me: if Ye is the British girl, what BBC and CNN will say now? Nature you should always keep in mind you are Nature, How you can allow this kinds of thing appear in your website? Disappointed!!!!!!

2012-08-02 09:26 AM

Report this comment | #47561

liange shi said: i have an idea, not a rumor, if someone writes a paper to appeal this one, he/she could become a lucky dog for publishing on Nature naturally.

2012-08-02 09:26 AM

Report this comment | #47562

Jason Light said: I just can not believe that Nature, the top scientific journal in the world, publish such an article online. I don't need to add any more arguement since other people have already listed robust ones.

If this article showed up in other sources, such as "Scientific American", it would be sort of acceptable since those magazines are more for people's fun. However, this is "Nature", whose professional team

is supposed to be well-trained scientists themselves, and whose every single piece of article or even news has a DOI number for the whole scientific research community to follow. Arguments in this article are making "cherry picking" mistake, which is a typical strategy in politics to mislead audience without proper context.

Employees in Nature should be more professional.

2012-08-02 09:27 AM

Report this comment | #47563

Guo Yu said: Shame on you, Nature, for publishing such biased article. This article demonstrate nothing, but how an article on a scientific journal can cheat. And thank you Lai Jiang for the analysis.

2012-08-02 09:27 AM

Report this comment | #47564

Cheng Zhong said: We deem Nature as one of the top scientific journals in the world, but it is really a shame to see this biased report. Regrettably, this will hurt not only Chinese readers but also those who enjoy the 2012 Olympic in a fair way and mood.

Hope the editor(s) will take care of this issue. Thanks.

2012-08-02 09:38 AM

Report this comment | #47565

Nick Doolin said: Since when has Nature become a tabloid?

2012-08-02 09:40 AM

Report this comment | #47566

Qi Cheng said: I dropped my jaw when reading this "scientific" article! Shame on the author, who obviously lacks the essential merit of an honest person, not to mention the merit of a real scientist. Shame on Nature, a top scientific journal, who promotes rumors and bias against a 16-year-old girl simply because she is a Chinese athlete.

I suggest that the editor publish all the comments along with this article so readers know that most scientific people don't loose their judgement.

2012-08-02 09:40 AM

Report this comment | #47567

Jessie Chen said: Shame on YOU, Nature!!! As a researcher in the biomedical field, I can't not believe there is such an article published here. Now I have many reasons to doubt the reputation of this magazine. I will not buy any of this magazine any more. Going to cancel my order.

2012-08-02 09:40 AM

Report this comment | #47568

Nick Doolin said: Don't you think it is a disgrace for Nature to publish BS like this?

2012-08-02 09:41 AM

Report this comment | #47569

Da-Zhi Lai said: Nature put a Chinese girl's picture next to the title "Why great Olympic feats raise suspicions -

'Performance profiling' could help to catch cheaters in sport." What are you implying?

What would you think we publish an article titled "Why England nurtures football rogues? - 'Mind profiling' could help to catch who is behind the scene." and put the Queen's picture next to it?

2012-08-02 09:53 AM

Report this comment | #47570

Nick Doolin said: Since when has it become a tabloid???

2012-08-02 09:54 AM

Report this comment | #47571

dave xu said: It turned out that since Owens at the 1936 Berlin Olympics to create 10 seconds of one hundred meters short circuit record, the medical profession asserts, the the sprinter limits of not less than 10 seconds. But, Hines did not believe this conclusion, he ran 50 kilometers every day with the fastest speed, he is convinced can not train a hundred meters champion in the 100 meters on the track. To obtain a good score of 9.95 seconds at the Mexico Olympics, he felt that 10 seconds the door is not locked but ajar, Flanagan sideways like the end of the rope.

The above example tells us that the view of medicine has limitations. Therefore, the nature of the problem is whether Ye Shiwen taken the drugs or not, but discrimination. The so-called drugs, the so-called violation of physiological knowledge, is the only excuse for discrimination. So, ask yourself, what is impossible. The heart of discrimination can not be eliminated, or physiological limit can not be achieved! support the Ye Shiwen!

2012-08-02 10:02 AM

Report this comment | #47572

Le Zhang said: Although most of the comments were made by Chinese to show their anger over the misleading report and their disappointment towards Nature, I am glad to see that many comments were filled with facts, data and analysis rather than pale complains. It means that we still respect and fully understand that Nature is a magazine with the basic justice, objective, independent and reliable just as it said in its guideline for authors as "Nature does not employ an editorial board of senior scientists, nor is it affiliated to a scientific society or institution, thus its decisions are independent, unbiased by scientific or national prejudices of particular individuals." We still want to tell the truth in a reasonable way and ask Nature to recognize its serious mistakes.

We hope that Nature would act as it said, cherish its reputation and make an apology to Ye and the readers. We scientists say everything on the basis of facts not irresponsible speculations. To respect others itself is the best way to respect yourself. We have been trying hard without little rest to come to what we are today.

2012-08-02 10:02 AM

Report this comment | #47573

Venti Awake said: Oh Boy! Just when you think the whole thing has quiet down, it all started again. And this time, it has to be nature---the most prestigious journal in the scientific world! Nature, and the editors, if you cannot stand the idea that the Americans can be mediocre sometimes, dress up like Captain America may help you feel better. Well done, you have shown the world that Nature can be a prestigious comedy magazine. You do not need to toot your own horn anymore.

2012-08-02 10:06 AM

Report this comment | #47574

Yi Wang said: Dear Mr. Callaway, I don't blame you for your shallow knowledge of statistics, since you are just holding a master degree, and westerners are usually not good in math anyway. But I do want to blame for your narrow mind and arrogant racial discrimination. I would also remind you that you and Nature will bear all possible legal consequences for coming up with such a disgusting article.

2012-08-02 10:06 AM

Report this comment | #47575

Lin Zhou said: I will not be surprised to see such an article on CNN, BBC, NBC ... But it is a BIG surprise to see it in Nature, a top-notch scientific journal for scientists like me. I almost never post any comments online, but the publication of this one on Nature is so disturbing and disgusting. SHAME ON YOU, NATURE!

2012-08-02 10:06 AM

Report this comment | #47576

Joe Bao said: I did not know why a famous scientific journal, Nature, degenerated into Suns with tons of hearsay. I suspect that current editors contributed a lot. Could I?

2012-08-02 10:07 AM

Report this comment | #47577

davine Liu said: This is the most biased and discriminative article on a journal self inflated as leader in academic. I am shocked Nature editors would allow such article to be published. What a shame. Shame on you fucking Ewen Callaway

2012-08-02 10:08 AM

Report this comment | #47578

JIAN WU said: Come on Nature! Are you a gossip magazine like "xxx super star" or "XX entertainment"? What a shame! You disgracefully ruined yourself.

2012-08-02 10:11 AM

Report this comment | #47579

Yanan Chen said: How come a top journal become so biased? You sound like a gossip magazine now! SHAME ON YOU, NATURE!

2012-08-02 10:14 AM

Report this comment | #47580

peng zhang said: What a shame for the "editor" to even consider putting something like this on the Nature website manipulating the data with the conclusion (discrimination) already in his mind. what a model to publish scientific papers??? I am just wondering what would be the authors response to all the comments?

2012-08-02 10:16 AM

Report this comment | #47581

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2012-08-02 10:17 AM

Report this comment | #47582

HUA XIA said: What a shame! Nature! I really feel you are insulting nature and science. And I have to change my mind to submit my original paper to other journals, you really make me down.

2012-08-02 10:17 AM

Report this comment | #47583

Xuchen Liu said: A side note of this – no doubt The 2012 British Olympics is the most successful one ever in the history from the perspective of revealing arrogance, ignorance and prejudice accumulated over a hundred years in the mind some people, in just a few nights

2012-08-02 10:19 AM

Report this comment | #47584

Laura Kleiman said: I am sending emails to the Editor-in-Chief and Executive Editor and all other editors I can find. Very soon Nature will be changed into a gossip tabloid. At the same time, I would seriously suggest that Mr. Callaway and Mr. Owens changing their career paths. Trust me, science is not

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for you guys. You should send our your resumes right now before bringing more humiliation to the scientific community. Rupert Murdoch may give you higher salaries.

Laura, Ph.D, even though I have no publication on Nature, I am a real scientist and I am proud of both facts.

2012-08-02 10:19 AM

Report this comment | #47585

xigui Huang said: I have thought Nature is one of the best scientific journal in the world. Now seems I have to change my idea. This article is just a plain comment full of hatred, made up by imagination and vicious logic. I am so surprised Nature has released it. What does Nature intend to tell the world? Chinese does not deserve champion or what? Shame on you Nature.

2012-08-02 10:21 AM

Report this comment | #47586

Qi Cheng said: Thank Lai Jiang for the analysis and many others for their fair comments. I watched Olympic games many times. This one in British opened my eyes – so many dramas! Even Nature is eager to jump into the mess, so funny!

Brian Owens said:

We appreciate that the case of Ye Shiwen is a sensitive one for some readers. However, I would like to point out that this story was not intended to insinuate that Ye is guilty of anything (of course you cannot without any evidence, otherwise you will bring lawsuit for your magazine). As we (you and the author? All stuffs of Nature?) point out in the first paragraph, she has never failed a drug test and so is the rightful Olympic champion (just like many other athletes, then why you pick her up?). We wanted to use the controversy (which controversy? She won but she's a Chinese female? You are sure she doped but she passed the test?) as a way to highlight what science can and can't tell us with respect to athletes' performance (is there any science in this jerk?). We have done similar stories before, for example in the case of South African runner Caster Semenya Congratulations to Ye Shiwen on her incredible (incredible means not credible, hard to believe. The fact IS hard to you, Mr. Owens and Mr. Callaway, I understand) win! Brian Owens Online news editor

2012-08-02 10:22 AM

Report this comment | #47587

Laura Kleiman said: We see intentionally fabrication (7 sec) and cherry picking right here. What a shame.

2012-08-02 10:24 AM

Report this comment | #47588

Qi Cheng said: Thank Lai Jiang for the analysis and many others for their fair comments. I watched Olympic games many times. This one in British opened my eyes – so many dramas! Even Nature is

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2012-08-02 10:27 AM

Report this comment | #47589

rong gao said: I'm very disappointed to see Nature, the world-leading scientific journal, to publish such a biased article lacking basic scientific rigor. As the editor mentioned in his comment that this is to highlight the role of science in judging athletes' performance, but it is appalling to see the author hastening the conclusion without rigorous scientific reasoning. Apparently there is no systematic statistic analysis of swimming athletes' performances, otherwise the article would not promote the performance profiling method. Yet the author reached a quick assessment that Ye's performance is anomalous. As the comments from Lai Jiang, Jason OBoyle and many more pointed out, the author's claim is based on a few examples of cherry-picked data. With the limited data, we are not at a position to reach such conclusions.

In my mind, this would be an ideal chance to educate the general public of scientific methods yet the article failed to deliver due to the bias and pre-formed opinions influenced by the mass media. It sets a very bad example of scientific publishing.

2012-08-02 10:28 AM

Report this comment | #47590

Ryan J said: Is this article professional?

No, actually a big NOOO! for Nature, which always boasts itself as a well respected sciences-authority. The first paragraph failed to introduce certain important facts (such as Ye's height difference, etc. as covered in other comments).

Was Brian Owens on drugs when he chose to publish this article, or is he a science-amateur to begin with?

We appreciate that Mr. Owens claims this story was not intended to insinuate that Ye is guilty of

anything. However, knowing his intentions we can only conclude either he lacks the professional qualities required to work in Nature as an editor, or he was on dopes. Or both. The only other option, that he tried to imply and hint, was ruled out by himself. Oh wait, maybe he is liar... Whatever, in either case he should not work here anymore.

2012-08-02 10:28 AM

Report this comment | #47591

Adam Wang said: Sometimes people always question magazines, websites or newspaper, because they may use false reports. Now we know where those false reports came from:) Gr8

2012-08-02 10:31 AM

Report this comment | #47592

Richard Sun said: Dear Mr. Callaway:

Your standards of scientific rigor and journalism can at best satisfy The National Enquirer. It is a shame that you even have any authority to address the masses.

2012-08-02 10:33 AM

Report this comment | #47593

Piggy Brain Human Head said: You guys are so fun. Well said. Now Nature owns SiWen an apology

2012-08-02 10:35 AM

Report this comment | #47594

am tf said: We didn't question about Phelps's 8 gold medals in one olympics game, we didn't question any incredible world recorder made by western young players, why do we have this kind of stupid question to these Chinese girl?

Just like Ian Thorpe said, if Ye is a UK girl she wouldn't receive any kind of question like that.

Shame on UK guys!

Shame on this so terrible olympics game, horrible organization, lots of mistakes, too many scandals.

2012-08-02 10:35 AM

Report this comment | #47595

James Bolts said: Holly molly, how nature allows such crap full of bias get published? Trashing others would not improve your status.

Why great Olympic feats raise suspicions: Nature News & Comment

2012-08-02 10:38 AM

Report this comment | #47597

Human Genetics said: Actually I am glad to see such biased and fabricated article published by the best scientific journal of Britain.

It gives me another proof that this country is indeed going down.

2012-08-02 10:38 AM

Report this comment | #47598

Ying Liu said: Nature owes Ye an official apology. This is no kind of news ANY SCIENTIFIC journal should post out or even quote. Shame on Nature, with such bias and ugly racism, you would not even qualify for a science fiction journal

2012-08-02 10:42 AM

Report this comment | #47599

Yuxuan Huang said: This article explains nothing with little and unconvencing data. It is makes Nature more like a gossip magazine with no difference with Play Boy. What a shame!

2012-08-02 10:43 AM

Report this comment | #47600

Harry Du said: From an objective perspective, whether Ye in fact doped is actually secondary. Aside from the mounting evidence that she did not, it is just bias, borderline bigotry, to suggest someone is doping purely based on a fantastic performance and her ethnicity. By asking the question alone, the doubter exposes his own bias and discrimination. When Phelps got eight gold, why there was no suspicion? Nature successfully drags down its own stature by publishing this article. Huge shame on Nature!

2012-08-02 10:43 AM

Report this comment | #47601

Yuxuan Huang said: This article explains nothing with little and unconvencing data. It is makes Nature more like a gossip magazine with no difference with Play Boy. What a shame!

2012-08-02 10:46 AM

Report this comment | #47602

Opium Dealer said: This article is crap. The author is crap also. Add upp, nature becoming crap. Digusting western meida relects what inside you dealer!!!

2012-08-02 10:47 AM

Report this comment | #47603

Ning MA said: Shame on you, Ewen Callaway. And also shame on Nature magazine. The westerns still

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has two rules to evaluate the world as always. All your westerns with this feature should self-examination.

2012-08-02 10:48 AM

Report this comment | #47604

Opium Dealer said: The great ugly kingkong!!!

2012-08-02 10:48 AM

Report this comment | #47605

Yanni Ding said: I could not believe Nature, one of the world top science journal, would allow such a biased paper published. Are you sure you guys know anything about statistics? And do you know Nature was the dream journal for all the scientists in the world? You're ruining your reputation now! And you should apologize to Ms. Ye! The sooner, the better.

2012-08-02 10:50 AM

Report this comment | #47606

Zhenmin Hong said: Shame on you! Nature! You just published something without any evidence!

"Was Yeâ€~s performance anomalous?â€

As Wendell Parker pointed out, there are quite a few cases that are similar to Ye's, some of them are even more surprising, for example, the US Elizabeth Beisel case that Wendell Parker gave. Ye is 5 seconds faster than her best in 2011. However, she is a young athlete and still growing. Her body NATURALLY becomes stronger as other young athlete. This was NOT anomalous at all.

"Doesn't a clean drug test during competition rule out the possibility of doping?†Scientifically, one could always answer no. However, one could always question this to everything except a few cases. Like, one could always question theory of relativity, question quantum mechanism. However, there is no any evidence showing that they are false. However, it is extremely unfair and of prejudice to question a single athlete, but no others. It would be fair to question ALL athletes. Unfortunately, this is not the case that this report trying to do.

"How would performance be used to nab dopers?"

Ye is not the only case showing such a big improvement in such a period. Either Ye or other athletes who had the some performance profile has been convicted to be doping. There is no any evidence or hint I, as many other people can see that the performance profile can be used to nab dopers. So the answer is NO.

"Could an athlete then be disciplined simply for performing too well?"

NO! We should celebrate that the record has been broken, with regardless who he/she is, where he/she comes from, etc. It is really a shame to question an athlete who broke the record with any evidence showing he/she did that in an banned manner! There is no question at all.

Nature, please stop publishing craps like this!

2012-08-02 10:50 AM

Report this comment | #47607

Opium Dealer said: Anyone want some doping, contact me.

2012-08-02 10:55 AM

Report this comment | #47609

Opium Dealer said: Congratulation, Ewen Callaway, you published at great Nature, the most prestigious journal of science.

2012-08-02 10:57 AM

Report this comment | #47610

Xuefeng Shang said: SHAME ON YOU, NATURE!

2012-08-02 10:57 AM

Report this comment | #47611

Cheng Du said: Why great scientific journals are sustained by great scientists, and dragged down by poor editors.

One commentary article may reveal the truth.

Nature has been one of the most prestigious scientific journal in the world since the stone age. Many wondered why. Some arrogant scientists are starting to suspect that the greatness is rooted in the great science done by the scientists, and some times some poor editors get in the way. Hence the new journals such as Elife.

It has however been hard to prove this is the case, as hard as to prove the innocence of the elite athletics in doping cases. After all, the journal run by the editors keeps publishing great scientific papers even our grandma cheers for.

Now a recent commentary on the alleged doping of Ye Shiwen provided the evidence those arrogant scientists have been search for. Since its appearance one day ago, this article has garnered ? (still counting) number of comments with worlds like "shame on you, Nature", "I can't believe Nature published \hat{A} \hat{A} . This may have set a new world record of negative comments for an article in the short period of time (One has the very right to suspect that the author of the commentary has doped to make such an achievement, but this is another matter that warrants a separate discussion).

Based on this shaky evidence, those arrogant scientists will argue that they did all the scientific research, wrote up the papers, performed the peer review process. All of these led to great scientific articles that set the high prestige of Nature. Now they let the editors alone for one second, you came up with this piece of crap to tarnish the name of Nature?

Why great Olympic feats raise suspicions: Nature News & Comment

2012-08-02 10:57 AM

Report this comment | #47612

Shuai Yuan said: There is little science in this article, too. There are solid data against the author's point that Ye's performance is anomalous, but he just cherry-pick one to make his point. This is exactly how those scientific scandals happen. Shame on Nature publishing such an article on-line.

Lai Jiang wrote a great comment and showed how a serious scientist should collect and examine data to draw a scientific conclusion. I agree with his comment and would add some more.

Apparently the author has no idea about the limits of human physiology since he didn't bother to collect more data beyond what flood on TV and newspaper − Ryan Lochte's last 50m record in the male 400IM event. Although Ryan Lochte won the gold, his last 50m record is the fifth in the event. So far, not many reporters (if any) have mentioned that. The possible reason: (1) they are not scientists; (2) with "racial and political undertones"...

The performance profiling might not be a solid method when we talk about world record breakers. Their world-record performances are all anomalous in a way since they break the world records! If the author did want to pick a suspicious athlete doper using his so-called performance profiling, he should choose Michael Phelps, who broke world records 39 times. His 200m butterfly stoke record improved more than 7s in less than a year when he was 15. That is extremely anomalous. About Shiwen Ye, she only broke 2 records and her last 50m record in the 400IM event is slower than the last 50m record in the 50IM, 100IM and 200IM world record and just a little faster than that in the 800IM world record. This seems normal among those "anomalous" athletes. Her performance improvement over a year is much less than Michael Phelps, Elizabeth Beisel, etc when comparing them at the same age. I don't know why the author choose Ye instead of Phelps or Beisel to present his point although Phelps and Beisel are much more suspicious under his so-called performance profiling. I just hope it was not actually based on racial and political profiling ... BTW: I am not saying Mr. Phelps or Ms. Beisel are dopers, I just want to show the weakness of the so-called performance profiling and one should be very careful when applying it.

2012-08-02 10:58 AM

Report this comment | #47614

Tian Xue said: What a shame. I may think twice whether Science or Nature when I have good paper to submit next time.

2012-08-02 10:58 AM

Report this comment | #47615

Opium Dealer said: Does Chinese swimmer Ye Shiwen deserve an apology?

Yes!!!!

http://www.guardian.co.uk/commentisfree/poll/2012/jul/31/does-ye-shiwen-deserve-apology

Nature, you owe one apology. Shame on all of you.

2012-08-02 10:59 AM

Report this comment | #47616

Jo Wang said: I can not believe that Nature, which was a top Journal based on facts, evidence and objectivenesslturned out to be a biased and gossip journal like this. It is a huge shame and disappointment.

2012-08-02 11:01 AM

Report this comment | #47617

Xiaoping Liu said: SHAME ON NATURE to publish such a biased article with its conclusion supported by nothing except the author's bullshit. There is no doubt in my mind the author is doped. He is probably fucking high when writing this piece of crap.

2012-08-02 11:04 AM

Report this comment | #47618

Kuang Yu said: I can not help to register to share my opinion:

As a prestigious high-profile scientific journal, Nature should be more responsible for its publications. Any scientific conclusion should be supported by concrete evidence and careful analysis. Nature claims that it "examines whether and how an athlete's performance history and the limits of human physiology could be used to catch dopers". However, as pointed out by many previous comments, the Ye's example, which is the only example in this paper, is strongly biased in terms of data processing. A well known data point is missing from Ye's performance curve, and a comparison is conducted between two sets of data obtained in completely different conditions. Comments from other reliable sources, such as Thorpe, provide contradictory perspectives, and this problem is not properly addressed, or even mentioned by the author. Furthermore, other athletes' data, which are certainly available, are not presented for comparison purposes, and no rigorous statistical analysis is performed. Hence, this article has no solid proofs and should be rejected by any serious scientific journal. Publishing this article here is an insult to all the hard working scientists around the world, and also an insult to the hard working athlete.

2012-08-02 11:07 AM

Report this comment | #47619

Sarah wang said: Even one glimpse after reading the author's first argument, one can easily tell this is

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a very biased and hostile attack on a great young athlete without any trace of scientific support. Under usual circumstances, I don't even bother to make a comment towards such a JOKE. However, I sincerely hope that Nature publishing group can cherish the reputation that is with the journal for so long and DO NOT LET THIS TYPE OF CRAP RUIN THE RESPECT earned not so easily throughout the years!

2012-08-02 11:10 AM

Report this comment | #47620

Wang Zaige said: You're soooo stupid!

Shame on you,nature

2012-08-02 11:11 AM

Report this comment | #47621

toby lancert said: it's lucky that the author does not write any peer-reviewed paper, otherwise, this piece of crap would made you shameful in the science field

2012-08-02 11:14 AM

Report this comment | #47622

jingye zhou said: As a top tier scientific journal with highest standard of excellent contents and objectiveness, NATURE disappointed and insulted all readers who truly believe in drawing scientific conclusions based on unbiased analysis of facts and data.

Unlike scientific publications which publicize best experimental results, athletes' performance in major events may or may not reflect their best performance in daily training. A few seconds difference in events that occurred years apart with no supporting data on how Ye's improvement was incidental or gradual can't lead to the conclusion that

2012-08-02 11:15 AM

Report this comment | #47623

Ying Yang said: Dear Editor:

I don't think people react to this merely because of the sensitive nature of this article, as you pointed out in your reply of this whole issue.

It's in fact largely due to many fatal flaws of this article, which potentially could ruin the reputation of Nature, as a prestigious scientific publishing enterprising.

Yes, as you pointed out, the first paragraph did lay out the fact that Ye was tested clean. However, to be honest, I'm afraid that's the only portion of the entire article that was based on facts.

From the second paragraph, all the science and logic have started to fall apart.

First, the term that Ye's record was "anomalous" was simply wrong. Numerous historical records have

indicated, that similar amount of advances had been achieved by other swimmers, both by men and women, as several of my fellow commenters pointed out.

Putting forward a imprudent judgment with such a firm tone without simple literature review, is extremely unprofessional for anyone in the science community, in publishing industry, and not to say, in scientific publishing.

Researching an area before commenting, is a basic training in Scientific Writing 101. How regrettable it is, that a contributor of Nature showed a lack of such an essential education.

Second, the author twisted Dr. Tucker's comments, and put his more important general comment, which is "performance couldn't be the verdict of doping" at the very end and treated it like it was unimportanted.

This caused huge bias, to the extent that facts have been manipulated.

I don't think Dr. Tucker himself would like to be quoted this way. Twisting the interviewee's comments and spliced them in an artful way to mislead the audience, is not uncommon in paparazzi coverage and entertainment magazine.

However, this style is not so appropriate for Nature. It will discourage other scientists to be interviewed.

Scientists certainly don't desire their intention and results, being attacked for reasons outside science.

Thirdly, the entire article doesn't have any statistics to back itself up: how strongly correlate excellent performance correlate with doping? That was very surprising, given the reader's education level.

By the way, I 'd like to point out that, the links of the references at the bottom don't work. Please check and make sure. Some readers will check the original reference, since this is a prerequisite for most of us.

Finally, I'd like to point out my personal understanding of nature, if I may: survival of the fittest, and not the strongest. That's in Biology 101 class.

An female beats a male under certain circumstances, especially for stamina, is not a huge fault but an wonder, in nature's own eye. Like all the great things women can do nowadays.

Thank you very much and I hope the editors could seriously consider remove the article and post a formal apology.

2012-08-02 11:16 AM

Report this comment | #47624

Shame Nature said: It's really a shame to see this paper on Nature with a ridiculous biased attitude, whereas providing little scientific data to support it

2012-08-02 11:18 AM

Report this comment | #47625

Tom Hu said: thank you Nature, now i'm not worried about my science reports which are required every term, since writing a science report is so easy.

2012-08-02 11:19 AM

Report this comment | #47626

Tisbon Oscan said: Shame on you, Nature!

2012-08-02 11:19 AM

Report this comment | #47627

toby lancert said: this article is truly a humiliation to the nature journal and to the science field

2012-08-02 11:20 AM

Report this comment | #47628

jingye zhou said: As a top tier scientific journal with highest standard of excellent contents and objectiveness, NATURE disappointed and insulted all readers who truly believe in drawing scientific conclusions based on unbiased analysis of facts and data by publishing this article.

Unlike scientific publications which publicize best experimental results, athletes' performance in major events may or may not reflect their best performance in daily training. A few seconds difference in events that occurred years apart with no supporting data to reveal whether Ye's improvement was incidental or gradual can't lead to the conclusion that Ye's performance was anomalous.

I strongly recommend Nature to retract this article and give a sincere apology to Ye and all the readers who were offended by the lack of basic scientific discipline in Nature's publications.

2012-08-02 11:21 AM

Report this comment | #47629

Qinglu Zeng said: I totally agree with Zhenxi Zhang. Nature is playing a racial discrimination game here, which should not be a role for a good scientific magazine. Shame on Nature. We should write a letter to the editor.

Qinglu Zeng from MIT

Why great Olympic feats raise suspicions: Nature News & Comment

2012-08-02 11:22 AM

Report this comment | #47630

Zhu Huang said: This article is really embarrassing. Is Nature News a tabloid site now? There's no evidence at all that Ye Shiwen has done anything but something great, but there's her picture, with the headline just above it: "help to catch CHEATERs".

Shameful, Nature, Shameful. I'm disgusted.

2012-08-02 11:29 AM

Report this comment | #47631

Ya Fu said: Such a shame to Nature!!! Never imagine such a biased article which indicates nothing but racial discrimination will get published in NATURE!!! SO DISGUSTING!!!

2012-08-02 11:29 AM

Report this comment | #47632

Qi Cheng said: I totally agree with Laura – these two guys should not work for Nature anymore. Their behavior severely disgraced this top science magazine and humiliated the science community. They will have a much better future in the entertaining industry.

2012-08-02 11:33 AM

Report this comment | #47633

Wei Zheng said: Dear editor,

I always regard Nature as world's leading scientific journal/media.

You don't need to attract attention by publishing such a poor article. Did you really take a deep look at it before you accepted it?

I believe your sponsor or director won't feel good after they read all the replies that point out how shame this article is.

2012-08-02 11:34 AM

Report this comment | #47634

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2012-08-02 11:36 AM

Report this comment | #47635

Beida 101 said: Was Ye's performance anomalous?

Logical fallacy: begging the question. The performances of all Olympic champions have been, are, and will be anomalous. Therefore, Ye's incredible feat was anomalous in the eyes of a spectator. But it was *normal* to a true champion! Kudos to her and her coaches!

Doesn't a clean drug test during competition rule out the possibility of doping?

Never say never. However, the same conclusion could be reached for every athletes competing in the London Olympics. Hypothetically it is possible that within four years Phelps' samples from 2008 *might* show up some interesting chemicals since the current instruments or methods are not *advanced* enough to catch those entities. Nevertheless, possibility does not give you the right to accuse an athlete, such as Ye or Phelps, of doping! In God we trust. Everyone else? Bring **valid** data or arguments!

Furthermore, according to the Chinese officials, they have conducted drug tests on the elite athletes regularly to catch cheaters. In fact, China detected and reported a doping incident by one of their top swimmers, who was swiftly kicked out of the team. Do your homework first before proposing a fix to the problem.

Finally, as a fan of sports, I admire Ye as a top athlete who proves once again: hard work and superior science (in training, not doping) can bring out anomalous results! As a former scientist, I wish I had her strengths, perseverance and talents.

2012-08-02 11:37 AM

Report this comment | #47636

VERONIA Huang said: How come Nature allowed this kind of article published?! Can't you guys read? IOC already announced Ye is clean. You have other opinion you have to show your evidence, or this is libel.

I can't imagine how many articles you published are fraud, guess work, or inspired by the political necessity. You betray science, no matter how many Nobel Prize winners have kissed your ass.

Shame on Nature!

2012-08-02 11:41 AM

Report this comment | #47637

Beida 101 said: Was Ye's performance anomalous?

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2012-08-02 11:47 AM

Report this comment | #47638

Qin Xu said: What a shame for Nature to let a article like this to be published. The article is a purely unnecessary, disrespectful, biased and racist statement.

Shame on the editors in Nature!

2012-08-02 11:52 AM

Report this comment | #47639

Wenbin Li said: SHAME ON YOU, Nature! I can't believe you, as world's best science journal, published such an article. Where is the Nature's standard going?

2012-08-02 11:56 AM

Report this comment | #47640

Yiran Guo said: Hey Science, time to publish sth.

2012-08-02 11:56 AM

Report this comment | #47641

huan w74 said: I am shocked by this article published by Nature. For years, Nature has stood firmly against Creationism. Now I wonder where Nature is because the suggestive way the author used in the article is exactly how Creationist attacks Evolution. While all hard evidence supported Evolution, Creationists always argue the probability that every creature is created by God cannot be ruled out and there are many "obvious†discrepancies in Evolution theory. The author apparently learned the trick from the Creationists, implying doping with cherry-picked data that shows discrepancy. When confronted with negative test result, the author just suggested the probability of doping still exists. Why this type of poor-quality assay mimicking Creationist showed up in Nature? Does Nature buy the same kind of argument from Creationists?

2012-08-02 12:00 PM

Report this comment | #47642

Xiaodong Sun said: When was The Sun bought by Nature Publishing Group?

2012-08-02 12:01 PM

Report this comment | #47643

XX Li said: What a shame of the author and the Nature! Even though it's an article full of ignorance and bias, I fully understand how and why they wrote this article — they just can't get over the failure of their own athletes and countries, be jealous of the achievement of hardworking athletes from other countries, and try to smear the competitors as they always did.

The fact is this kind of articles doesn't hurt anything but just reduce the credibility of the author and Nature, and let the readers know how bias and shallow he is. To the athlete, it's just some uncomfortable noise, which illustrates to her some white trash are just so jealous.

2012-08-02 12:02 PM

Report this comment | #47644

Si Xu said: I was told the Olympic spirit was: higher, faster, and stronger.

Now I think it really is: higher, faster, and stronger in a way that smells acceptable to the journal named Nature.

Thanks, you journal. You have reinforced my opinion that I was right to quit Phd and academia is 99.9% just business.

2012-08-02 12:04 PM

Report this comment | #47645

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Thanks, you journal. You have reinforced my opinion that I was right to quit Phd and academia is 99.9% just business.

2012-08-02 12:04 PM

Report this comment | #47646

Yang Haoyi said: It's a shame for Nature to publish such news.

You do not have the spirit of science 1/4

2012-08-02 12:06 PM

Report this comment | #47647

Ye Yang said: This is hilariously, and such a pity that some of these "scientists" and "elites" can't

34 of 64

accept by fact that a Chinese beat their "heroes". Since they lost at the arena, they have been doing their best to win by mouth. What a typical childish play! Yet I must say this article somehow fits perfectly into the journal "nature". Yeah it is the human nature, or at least someone's.

2012-08-02 12:09 PM

Report this comment | #47648

elaine ren said: Another sore loser and racist. I thought there are some guidelines and rules during Nature peer review process and racism is just not one of them.

2012-08-02 12:12 PM

Report this comment | #47649

Gevin Hoo said: Shame on the author of this assay and on the journal Nature! How could this kind of trash which was absed on nothing can be published?

2012-08-02 12:12 PM

Report this comment | #47650

Vian Lee said: For a non-science-major Ph.D student, like me, I finally know what is the Nature magazine all about. I really want to thank the author of this article. Thank him for the clarifications. It looks like that you can compare the Nature with U.S. Weekly, Perezhilton.com, People magazine. Name more gossip magazines, please!!!!!! The nature will surely be better than them in the near future! Thanks again for letting me know the Nature. I'm glad that friends around me will know another place where they can get more gossips and entertaining news.

2012-08-02 12:17 PM

Report this comment | #47652

Frank L. Liu said: To the author: Below are your arguments (in quotation marks):

(1) "Her time in the 400 IM was more than 7 seconds faster than her time in the same event at a major meet in July."

In your logic, if a swimmer's best match is a few seconds faster than his/her another match, then it's abnormal. Isn't it ridiculous?

(2) "But what really raised eyebrows was her showing in the last 50 metres, which she swam faster than US swimmer Ryan Lochte did when he won gold in the men's 400 IM on Saturday, with the second-fastest time ever for that event."

Ok, if you want to compare last 50 meter, let's compare it in a fair way. Mr. Lochte ranked 5th or 6th out of all 8 swimmers that attended his event if we compare the last split only, and nobody in that even did not even break the Olympic record; Ms Ye ranked 1st out of 8 swimmers in her event, broke the world record, but still was slower than 3 or 4 men swimmers in Mr. Lochte's match in last 50 meters. Do you mean any women's phenomenal performance should not be comparable to some men's so-so

performance since you said it's "anomalous" (in your words)?

I earned my PhD degree in statistics from a top-tier university and used to teach statistics. I hate to say but I would certainly fail you if your were my student. Based on her performance, Ms Ye was asked directly if she took drugs. Well, let me ask you an outright but legit question as well based on your performance, Mr. Ewen Callaway. Did you ever CHEAT to pass your Statistics 101 exam?

2012-08-02 12:18 PM

Report this comment | #47653

Shiwen Ye said: Ewen Callaway has brought shame to Nature and the entire scientific community. His employment with Nature Publishing Group should be terminated immediately.

2012-08-02 12:19 PM

Report this comment | #47654

Michael Chu said: No wonder more and more papers were retracted from Nature because of faked data. They made conclusions from biased hypothesis, but not from the real experimental data. Does the whole scientific world start to get rotten? How can I tell my son that the science is the pursuit of truth?

2012-08-02 12:22 PM

Report this comment | #47655

shuangzhuang guo said: what a stupid author! you guys must learn how to use to China and Chinese people becoming stronger and stronger! Any way, you are a big loser.

2012-08-02 12:22 PM

Report this comment | #47656

Shiwen Ye said: Ewen Callaway has brought shame to Nature and the entire scientific community. His employment with Nature Publishing Group should be terminated immediately.

2012-08-02 12:25 PM

Report this comment | #47657

Shufang Geng said: Why people keep questioning Miss Ye Shiwen's performance during the competition? Because she is an Asian? Anyone could tell me the answer? Please!

2012-08-02 12:31 PM

Report this comment | #47658

Shu Xiang said: Wow, since when did Nature begin to publish speculations and biased reports? A great example of how authors can mislead their readers with the disguise of faked scientific rigor. Nice try.

2012-08-02 12:33 PM

Report this comment | #47660

euler Lo said: This author is very welcome to suspect Ye Shiwen with such aggressive title, "if this author has found certain evidence!" I always believe Nature is a authoritative journal. Before any article was accepted on Nature it should be based on a rigorous review. It is very shame on publishing such aggressive article without "any" evidences! Ye Shiwen is just a young athlete (16 years old). She still own much powerful potential which we can look forward to see in her future. She deserves to be encouraged instead such unfair accusation! If this author think his argument is fair (not a special for Ye Shiwen), why we did not see his same arguement to Michael Fred Phelps II four years ago? This author's argument is a very bad example and lose the spirit of Olympic.....

2012-08-02 12:33 PM

Report this comment | #47661

Helen Zhang said: It is eye-opening to see such an unscientific article being published at Nature.com. Nature Editors, How about live up to your own standards, retract the article, and stop hiring incompetent people.

2012-08-02 12:33 PM

Report this comment | #47662

Wen-Feng Chen said: I guess being a Nature Editor warrants an advantage in publishing on Nature. It is a shame that so many comments are so much better than the original article. Epic fail on this one, Nature.

2012-08-02 12:36 PM

Report this comment | #47663

GUO qinghao said: This is NATURE?As a Chinese I don't belive it that such a absurd can be published! The experience can not prove you views.It's illogical.You must be responsible for what you said!Chinese are very angry.

2012-08-02 12:39 PM

Report this comment | #47664

Y. Chen said: It is shame on Nature, a top Science Journal published this anti-Science paper. Editor should stop it if he/she know a little more Science.

2012-08-02 12:39 PM

Report this comment | #47665

Chuntao Liang said: As a Chinese myself, I respect the author's right of doubt.

However, the title of a Nature reporter does NOT warranty a right of worthless nonsense talking like this. To stand behind its reputation in academia, Nature should have trained its employee (including online reporter) to do some basic Googling before publishing something like this. If Googling is too much to ask, check out the Wikipedia page of Ye Shiwen AT LEAST! That's too hard to hard, here it is:

http://en.wikipedia.org/wiki/Ye_Shiwen

2012-08-02 12:41 PM

Report this comment | #47666

Alex Cutting said: Chinese wrote big checks to Aussie's world class swimming couches to train their talent swimmers. Ken Wood couched Shiwen Ye (2 gold in 2012 London) and Zige liu (200m fly gold in 2008 beijing). Denis Cotterell coaches Yang sun (400m free gold, 200 free silver in 2012 so far, 1500m free world record holder). You know why Australia gets less gold medal now. If Shiwen Ye is an Aussie, would people question her on doping?

It is a shame to see an article like this in Nature.

2012-08-02 12:41 PM

Report this comment | #47667

Alex Cutting said: Chinese wrote big checks to Aussie's world class swimming couches to train their talent swimmers. Ken Wood couched Shiwen Ye (2 gold in 2012 London) and Zige liu (200m fly gold in 2008 beijing). Denis Cotterell coaches Yang sun (400m free gold, 200 free silver in 2012 so far, 1500m free world record holder). You know why Australia gets less gold medal now. If Shiwen Ye is an Aussie, would people question her on doping?

It is a shame to see an article like this in Nature.

2012-08-02 12:42 PM

Report this comment | #47668

Sweet Tree said: I can't believe Nature would publish such an article without solid data and analysis! The entire article is simply based on prejudice and discrimination! How could you expect us to respect you as an authority in science publications? It's everyone's dream to have their work published by Nature, but not anymore! Shame on you, Nature!

2012-08-02 12:57 PM

Report this comment | #47669

Yu Chen said: Hello Mr. Owens,

In reply your comment of "We wanted to use the controversy as a way to highlight what science can and can't tell us with respect to athletes' performance. We have done similar stories before, for example in the case of South African runner Caster Semenya", I would like first using some sentences shown in this article to summary what this article really want to say:

- 1) Subtitle: "'Performance profiling' could help to catch cheaters in sport." Yeah? So you guys here are trying to catch cheaters. Who is the one you guys think he/she is a cheater?
- 2) "Was Ye's performance anomalous? Yes. "What does "anomalous" mean here? Why Ye's good performance is "anomalous" but not a normal result of the hard training of a talent athlete? Why don't

you raise the same question on other western athletes but Ye only?!

- 3) "Doesn't a clean drug test during competition rule out the possibility of doping? No,..." So what's really in your mind is that even Ye's drug test is clean, she is still having the possibility of doping, isn't it?! Based on your logic, may I question that you are drugging doesn't matter if your test gave the positive result or not?!
- 4) "Her time in the 400 IM was more than 7 seconds faster than her time in the same event at a major meet in July.†Hello!!! Wake up! Ye's previous personal best was 4:33.79 at Asian Games 2010. This leads to a 5.38 sec increase, not "more than 7 secondsâ€. Remember, Nature is an academic journal, not a tabloid that full of gossips. PLEASE RESPECT THE FACT AND DOUBLE CHECK YOUR DATA BEFORE PUBLISHING IT.

According to all facts shown above, your excuse is not established. What you published here is full of bias and discrimination and YOU PUT YE IN THE SAME POSITION TO the South African runner who was really doping! What are you trying to say here?!

And finally I do have two questions for you here:

- 1) What's your logic in using a case of a clean athlete to proof the concept of "science can't tell us with respect to athletes' performance"?!
- 2) Why don't you use an example from a western player in this article, for example, Michael Phelps won 8 gold medals in Olympic 2008?

This is the most misleading, biased, and discriminative article on a journal self inflated as leader in academic. I am shocked that Nature editors would allow such article to be published! What a shame!

2012-08-02 12:58 PM

Report this comment | #47670

Songhu Wang said: When does "nature" become a gossip magazine? Dear Editors, please do your jobs.

2012-08-02 12:58 PM

Report this comment | #47671

Jason Wen said: Shame on you, nature. I have being thinking you are one of the best scientific journal in the wold.

But no more. You're just ruining your own reputation.

How could you allow to publish such a thing full of manipulated data and prejudice?

All that wrong with Ye is she is a Chinese with yellow skin?

Do you really think it's acceptable to compare the score from Ye Shiwen and Lochet in totally different conditions? Have you ever learned how to set a control in an experiment?

I don't think I can do much with you, but I definitely would not cite any nature any more.

2012-08-02 01:08 AM

Report this comment | #47672

Bo Huang said: 1, Was Ye's performance anomalous?

Yes, usually we do not say "amazing" or "Superstar" for Chinese or Asian athletes.

2, Doesn't a clean drug test during competition rule out the possibility of doping?

No, although the drug signal is far below 0.1 sigma, but there is still a chance that we cannot rule out completely. Especially, we guess China has High-Tech new drugs that can fool the test by taking effect two weeks after using it, or can just change the Gene and muscle structure of athletes.

3, How would performance be used to nab dopers?

We suspect the athlete who plays much better than others or progresses too much in a big match, or his/her performance fluctuates a lot. If the athlete is Austrian, we take 6 years to have a statistic result; if he/she is Chinese, we will double check him/her immediately and repeatly.

4, Could an athlete then be disciplined simply for performing too well?

No, That would be unfair. We should only defame and libel him/her in a moral way.

2012-08-02 01:10 AM

Report this comment | #47673

Shame On NATURE said: My ID is the most appropriate comment to this shitty article.

2012-08-02 01:13 AM

Report this comment | #47674

damao zhang said: Shame on nature for publishing such a trash article – no convincing evidence but just prejudices!

2012-08-02 01:14 AM

Report this comment | #47675

Junwen Wang said: Whining is part of human nature. This magazine provided an example of this subject.

2012-08-02 01:21 AM

Report this comment | #47676

Hao Sun said: I feel ASTONISHED when I saw this article on the website of Nature. Most people in the scientific community, if not all, agree that Nature is the top publishing group. Nature should take true responsibility when educating the readers. The editor, Brian Owens pointed out, the purpose of this article is " to use the controversy as a way to highlight what science can and can't tell us with respect to athletes' performance". Come on baby! Don't fool us! As Lai Jiang pointed out, the data and logical are not scientific! Then, how can you tell the reader anything about "science"? Mr. Brian Owens, are you sure this is the way Nature want to educate the readers? Please, do something to save Nature's hard-earned reputation!

2012-08-02 01:22 AM

Report this comment | #47678

f j said: I guess doubting is a human right. For example, some may be suspicious that Queen E. was a child of a hooker. Well, without DNA or strong historical proof, it remains a suspicion.

2012-08-02 01:23 AM

Report this comment | #47679

Logic Logic said: To Editor in Chief of Nature

I am deeply disturbed, disappointed, and quite frankly, outraged by Mr. Ewen Callaway's article on nature.com (http://www.nature.com/news/why-great-olympic-feats-raise-suspicions-1.11109# /comments) claiming "performance profiling could help to catch cheaters in sportsâ€, which used Ms. Ye Shiwen's Olympic performance as an example with her image prominent shown aside.

I am outraged that Mr. Callaway conveys a racial discriminative message under the name of science, "The resulting debate has been tinged with racial and political undertones, but little science,†he wrote, yet auite ironically, as many commentators have already pointed out, it is Mr. Callaway who lacks the capability and training of rigorous scientific reasoning and analysis, or he simply chose to manipulate and fabricate data to serve his malicious purpose. "Was Ye's performance anomalous?†Mr. Callaway asked, and "Yes,†he asserted. In supporting his claim, he fabricated "7 seconds†improvement of Ye's performance, while in reality it is 5 second. He cited "a major meet in July†without giving its year, leaving a false impression that Ye improved in just one month, while in reality it is one year. He ignored the fact that such improvement is nothing anomalous among young elite swimmers, Thorpe, Phelps, and Beisel have all done that at comparable age, to name a few, and the only thing "anomalous†here is that Ye is a Chinese. He also chose to single out the last 50 meters to compare Ye's time with Lochte's, ignoring the fact that Lochte's overall time was almost 24 seconds faster than Ye's, his last 50 meter is nothing but elite, and quite a few female swimmers were faster. Any one of these fabrications and manipulations may suggest Mr. Callaway's ignorance, and putting everything together, you can draw your own conclusion.

I am equally disturbed and disappointed that Nature and its editors can allow such a racial discriminative and deep biased article published under the name of science. As a premier science journal, you have a responsibility to scientific community and general public of conveying science objectively without bias. By publishing this article, you have successfully degraded yourself to the level of CNN, BBC and alike, misled numerous readers using false science, and lost your credibility as a serious scientific forum.

I respectfully urge you to do the honorable thing, fire Mr. Ewen Callaway and the responsible editor, formally apologize to Ms. Ye Shiwen and Chinese people, and restore the integrity and credibility of Nature.

2012-08-02 01:26 AM

Report this comment | #47680

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2012-08-02 01:31 AM

Report this comment | #47681

f j said: I rather to be a envied winner than a sympathized loser.

If you keep being a winner and excelling in many areas, the shits will automatically disappear. You gotta give the loser some time to swallow their defeats.

2012-08-02 01:34 AM

Report this comment | #47682

Publishing in Science said: Why you guys are so surprised to see such an article in Nature?

Compared to Cell and Science, it is obvious that the Nature Editors are easily fooled and manipulated. Now we could tease those published in Nature with one more joke: Are your results based on scientific evidence or "Performance profiling"?

2012-08-02 01:34 AM

Report this comment | #47683

Xiaodong Sun said: "Her time in the 400 IM was more than 7 seconds faster than her time in the same event at a major meet in July. But what really raised eyebrows was her showing in the last 50 metres, which she swam faster than US swimmer Ryan Lochte did when he won gold in the men's 400 IM on Saturday, with the second-fastest time ever for that event."

The editor was either misinterpreting the data or purposely misleading the audience. Many women swimmers have beaten Lochte in terms of his last 50 meters performance. Ye's 400IM record is 23 sec slower than Lochte's "second-fastest time ever for that event"

"We wanted to use the controversy as a way to highlight what science can and can't tell us with respect to athletes' performance." quoted Brian Owens. However, ridiculously it is the author of this article that lacks basic scientific training in critical thinking and data analysis. Or even worse, Nature loses its objective stance as a scientific journal and is stirring the water.

If the Nature's goal is to draw more attention by publishing nonsense articles, you should change your name to SuperNature, which sounds stronger, more appealing to broader audience and more convenient to publish articles like this one.

2012-08-02 01:36 AM

Report this comment | #47684

Jing Li said: Let's enjoy the show done by Phelps in 2008.

2012-08-02 01:36 AM

Report this comment | #47685

Cindy Su said: Yet another example of racial/sexual profiling in the disguise of performance profiling. Biased assumption/motive and questionable logic. The author(s) has failed in both scientific method and journalism ethics.

2012-08-02 01:42 AM

Report this comment | #47686

Zi Ye said: This article is mostly ridiculous in that it lies in a different way of typical scientific critics or even theoretical rumors, in which a researcher observes others' results and provides controversial comments based on his knowledge and experimental results.

I don't know the Tucker who's being quoted, and I think most of us don't either. This is like some paparazzi magazine scouts who would travel all around the world finding the only one who simply thinks that Mother Teresa is a whore, and then brag about it in a full page.

This is simply annoying and although we of course are not 100% sure Ye is innocent in a pure "scientific skeptical" way. This is definitely cruel to just stand out and say something about her performance being "anomalous".

I think Mr. Tucker, if you've ever received a PhD, you should return it back.

2012-08-02 01:46 AM

Report this comment | #47687

Wake UP said: This is THE most provoking and disturbing accusation, yet got published in a top research magazine and even defended by the editor.

The author and editor acted out of their own prejudice, manipulated data, and distorted facts. Should this behavior tolerated by the magazine's editorial board, the hard-earned reputation will vanish without remorse.

Researchers and scientists around the globe, please stand up against such "anomalous" behavior. Nature magazine editors, please conduct your due ethnic investigation and restore your reputation.

2012-08-02 01:48 AM

Report this comment | #47688

Yanling Zhang said: About the subtitle: "'Performance profiling' could help to dispel doubts." It looks like performance profiling only RAISES doubts, while testing is the real gold standard to address them, which Ye has passed. Ye is already a high profile case. Performance profiling does not apply here at all.

2012-08-02 01:50 AM

Report this comment | #47689

Yong Zeng said: Based on your logic, now I suspect Michael Phelps, Jonathan Edwards and who else made remarkable breakthrough in sports were on doping simple because they performed too well. Another provoking question is why these genius did not get questioned like Miss Ye has suffered even after multiple tests had proved her clean? Did the author imply that Chinese cannot have genius? I hesitated to link this article with racial discrimination but I feel disappointed that in fact it is.

It is disgusting to see such a racially biased and non-scientific nonsense published on Nature. I have no problem with raising question on doping. But this article is obviously biased and intentionally misleading. It is full of "suspicions" without neither solid evidences nor reasonable logic. I am now concerned with Nature failing to insist on its scientific standards and turning into a street magazine.

2012-08-02 01:55 AM

Report this comment | #47690

Ang Zhu said: Lochte, you really have no idea how much damage you caused to Ye by not putting 100% energy to your final 50m. Four of your competitors swam faster than Ye in the final 50m while you got the gold medal and the author selectively neglect this fact to prove Ye has been doping. I remember

in 2008 when Bolt broke the 100m WR, he deliberately slowed down in the final 5m and started celerbarating. Believe me or not, I bet the other 7 runners are faster than Bolt at that particular point so they might all be taking drugs.

Another thing to remind you Lochte, do not do this anymore because Olympic committee might kick you out of the game if you don't put 100% heart to your race to win. They already did that to 8 badminton girls so god knows when they will do this to you while this topic gets hotter and hotter. So be careful.

2012-08-02 01:58 AM

Report this comment | #47691

Chloe Chang said: Hey, Mr. Ewen Callaway. I suppose to find some Nature articles here but happened to read this. And I was so curious about ur background so I just googled u and I found many results. Ohhh! I have to admit that u really did a GREAT job to write this with a microbiology master background! Did u just use some magic microbes from Ye and came to this conclusion? But, oops, wait a minute, I didnt see any words related to ur area.

Well, I guess u must have used ur intuition and imagination! But is this website Nature? Since when does Nature have this kind of stories?

Dear Ewen Callaway, I am now writing this not because that I am a Chinese but it is common sense that you should have fact and should be honest to yourself, huh? By the way, I just read some of your other articles and I do appreciate your styles and words you used. I don't really understand your aim in writing this, but if I were you, I'd rather choose to say something like, "her swimming genes have been changed to win the Games" or "they might clone the genes from the sailfish and insert into Ye's gene and it apparently worked!" than simply write this, suspecting the drug test without strong evidence.

Really look forward to seeing you write something to clarify yourself.

2012-08-02 02:00 AM

Report this comment | #47692

Si Xu said: Mr. Ewen Callaway, in Queen's honor and for God's sake, are you actually employed by Science?

2012-08-02 02:02 AM

Report this comment | #47693

Chengyuan Li said: too simple sometimes naive

2012-08-02 02:04 AM

Report this comment | #47694

Good Job said: For publishing such an article, you lost my respect. Nature, shame on you!

2012-08-02 02:08 AM

Report this comment | #47695

Helen Zhang said: Dear editor, I wonder why you changed the subtitle from "'Performance profiling' could help to catch cheaters in sports" to "'Performance profiling' could help to dispel doubts' "if, as you have said, "this story was not intended to insinuate that Ye is guilty of anything".

2012-08-02 02:08 AM

Report this comment | #47696

Yi Shi said: This article is a good example to show how we can "prove†a preset and biased opinion. To do that, you only need to collect or create something that seems to be supportive and ignore anything that tells you truth. For example, the author wants to claim that Ye's performance was anomalous. To "prove†this opinion, it looks like "Ye's time in the 400 IM was more than 7 seconds faster than her time†is supportive. But first of all, this fact is incorrect. It should be 5 seconds faster. The author may increase the number to make it more anomalous. Second, Ye is only 16. Such an improvement is not anomalous at all for a young athlete and was achieved by other young athletes. However, since similar improvement by other athletes is not supportive, the author just ignores. There are more errors in this article. It is very interesting that an article with many typical errors can be accepted by editors. I have handled and reviewed hundreds of papers for different journals. I do not think any journal in my area will incidentally publish such a low quality article.

2012-08-02 02:09 AM

Report this comment | #47697

Si Xu said: "See other News & Comment articles from Nature" - "NASA: let academia lead space science"

Alert, NASA!

2012-08-02 02:11 AM

Report this comment | #47699

Qi Zhao said: To Editor Brian Owens, please publish Lai Jiang's articel as well for people all round hte world to hear the other side of the story which has described the facts. Nature should not become a gossip magzine.

2012-08-02 02:11 AM

Report this comment | #47700

Audrey Feng said: Nature should apologize for publishing such irresponsible paper!

2012-08-02 02:12 AM

Report this comment | #47701

Yi Shi said: This article is a good example to show how we can "prove" a preset and biased opinion. To

do that, you only need to collect or create something that seems to be supportive and ignore anything that tells you truth. For example, the author wants to claim that Ye's performance was anomalous. To "prove" this opinion, it looks like "Ye's time in the 400 IM was more than 7 seconds faster than her time" is a supportive fact. But first of all, this fact is incorrect. It should be 5 seconds faster. The author may increase the number to make it more anomalous. Second, Ye is only 16. Such an improvement is not anomalous at all for a young athlete and was achieved by other young athletes. However, since similar improvement by other athletes is not supportive, the author just ignores.

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2012-08-02 02:15 AM

Report this comment | #47702

Child Curious said: This article is not only a deeply biased and absurd article on the subject of Ye, Shiwen, but also a shameful blasphemy to scientific spirit. As a world famous scientific magazine, how could the editors allow such an ugly article to be published? I have to doubt the value of the other articles on Nature, and consider not to publish my papers on Nature.

2012-08-02 02:19 AM

Report this comment | #47703

Si Xu said: I couldn't help but jokingly categorize you as a 2B Wenyi young man, in reasons that:

You are so 2B to come up with such an article; and

You are so Wenyi to have managed to publish it on Nature online.

2012-08-02 02:20 AM

Report this comment | #47704

Xin Chen said: When somebody tells me he/she published a paper on Nature next time, it will remind me a journal of racism other than a great scientific journal.

2012-08-02 02:20 AM

Report this comment | #47705

Dian Li said: OK one deduction of this Nature article is that all the athletes are or were potential dopers, which may probably annoy many public readers but not the scientific researcher like us. But please just show a little bit of RELIABLE statistical analysis to support the hypothesis that Ye's performance was anomalous. And even it was truly †significantly' anomalous, the hypothesis that athlete showing anomalous performance is a doper still needs to be verified. If I see this kind of article in Nature, does that mean that I can write any nonsense as long as it is UK or US biased?

2012-08-02 02:27 AM

Report this comment | #47708

Si Xu said: May I waste the precious Nature online publishing room one last time to express my humble yet totally good-faith question: how exactly will this London Olympic Game inspire a generation?

2012-08-02 02:29 AM

Report this comment | #47709

lyc lyc said: This article is biased and absurd, to some extenet. How can the author make such conclusion only by some suspicious date and no evidence deduction. Is it the article really an "scienctifc paper"? Perhaps the authour is now hired by Science? It is shame to see this kind of article in Nature

2012-08-02 02:31 AM

Report this comment | #47710

chen zhangmou said: æ^'认为作è€...å°±æ~ 一个SB,é‰'定完æ-•

2012-08-02 02:35 AM

Report this comment | #47711

Feynman Lochte said: "Was Yeââ,¬â,,¢s performance anomalous? Yes."

•

"But what really raised eyebrows was her showing in the last 50 metres, which she swam faster than US swimmer Ryan Lochte did when he won gold in the menââ,¬â,,¢s 400 IM on Saturday, with the second-fastest time ever for that event."

2012-08-02 02:37 AM

Report this comment | #47712

Kris J said: Oh, Mr. Owen, I guess you were using facts to demonstrate your points...excepts your fact is wrong and you forgot to check them. Making a mistake in the key fact that how much Ye has improved from her personal best alone is enough to tell the readers how much you don't care about your "facts" and how you wouldn't hesitate to cherry pick your data simply to make a biased case against Ye.

2012-08-02 02:37 AM

Report this comment | #47713

Yazhu Li said: Cannot be more angry! And so much shame on Nature!!! Few evidence, worst reasoning, biased comment, etc. You really call yourself a scientific journal! Do more work!!! And you owe Ye a sincere official apology!!!!!!

2012-08-02 02:38 AM

Report this comment | #47714

Lingmei Ma said: What a shame to see such an article here. Maybe in the future every athlete should control their improvement in performance to be not too much, otherwise he/she will be accused by taking drugs, even if he/she passes the test.

2012-08-02 02:45 AM

Report this comment | #47715

New Voice said: The author has definitely achieved his goal – to reenforce the doubt over Ye. After all, how many people are going to read through those comments? Majority of the readers will only read the article and naturally get the conclusion of the article. This has been proven to be very effective and extremely successful to spread a biased opinion by the media:

PUT BIASED REPORT IN HEADLINE AND APOLOGY IN CORNER/COMMENT.

Congratulations to Nature for evolving from a scientific publisher to a biased media!

2012-08-02 02:49 AM

Report this comment | #47717

Ray Yan said: Nature should apologize in public and lay off this Ewen Callaway. Immediately!!!

2012-08-02 02:52 AM

Report this comment | #47718

Jun Wang said: I thought Nature is scientific journal, isn't it?

This article is again using the incomplete and selective data floating around the mainstream media that disgustingly imply that her performance is not something human being can do. Unfortunately, not many stupid media doing their homework before they open their mouth. I thought Nature would do more literature review before writing this article. Isn't a literature review a natural thing for this journal? Whether the author is intentionally or not, all the speculations around have really hurt the 16 years old chinese girl. Yes, doping cannot be 100% tested. I guess the readers from the scientific field understand that easily. But for the people who may have less background, the information conveyed in this article is almost like saying:"She can never prove her innocence". Given the situation, do you think this article is only dealing with scientific question?

Imagine your little daughter made great achievement with 10 years of hard working but the whole world is constantly talking about she is cheating, will you feel that this is fair? Even worse, the world renown academic journal "NATURE" jumps out and educate everyone that you can never prove the innocence of yourself. Then why the heck are we having Olympic games?

Sometimes it's just hard to keep my self calm in such sick and cynical world.

2012-08-02 02:52 AM

Report this comment | #47719

Al Woods said: It is totally bias. If Ye is from America or Europe, she will become a super star, a

49 of 64

absolutely talented swimmer, and no ones dare to doubt her medals.

2012-08-02 02:53 AM

Report this comment | #47720

Jun Wang said: I thought Nature is scientific journal, isn't it?

This article is again using the incomplete and selective data floating around the mainstream media that disgustingly imply that her performance is not something human being can do. Unfortunately, not many stupid media doing their homework before they open their mouth. I thought Nature would do more literature review before writing this article. Isn't a literature review a natural thing for this journal? Whether the author is intentionally or not, all the speculations around have really hurt the 16 years old chinese girl. Yes, doping cannot be 100% tested. I guess the readers from the scientific field understand that easily. But for the people who may have less background, the information conveyed in this article is almost like saying:"She can never prove her innocence". Given the situation, do you think this article is only dealing with scientific question?

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Sometimes it's just hard to keep my self calm in such sick and cynical world.

2012-08-02 02:54 AM

Report this comment | #47721

Zhe Zhang said: I am so disappointed to see Nature- one of the most prestigious journals in the world-published such an unprofessional, non-scientific article. Did the author compare the control experiment? Did the author recognize and consider other young non-Chinese swimmers' achievements? Even though there are people who wrote such a biased article, the editors totally failed to serve as his/her responsibility to review the article. It is really a shame that Nature treats itself more as a public media instead of an authorized, professional scientific journal!

Strongly require Nature apologize for this indecent behavior.

2012-08-02 02:55 AM

Report this comment | #47722

Zhe Zhang said: I am so disappointed to see Nature- one of the most prestigious journals in the world-published such an unprofessional, non-scientific article. Did the author compare the "control experiment"? Did the author recognize and consider other young non-Chinese swimmers' achievements? Even though there are people who wrote such a biased article, the editors totally failed to serve as his/her responsibility to review the article. It is really a shame that Nature treats itself more as a public media instead of an authorized, professional scientific journal!

Strongly require Nature apologize for this indecent behavior.

2012-08-02 02:57 AM

Report this comment | #47723

YING SHEN said: The author who suspects on Ye's doping in Nature proves nothing, bu he is doping, and Nature is suspicious now.

2012-08-02 02:57 AM

Report this comment | #47724

Dongmei Xiang said: Other authors will feel insulted to be on the same magazine with this biased, misleading and ridiculous articleï¹/₄

You completely set the new standard of NATURE! What a shame.

The only thing you can do to fix it is to retract this article and make a apology to Ye Shiwen! She deserves more respect!

2012-08-02 02:58 AM

Report this comment | #47725

Timeriver Timeriver said: To editors

Please read the paper again and ask yourself if those values you cherish and those principles you guard for years still remain. Are U acting responsibly to the power you hold and influence you result in? How do you answer when your kids ask you "oh daddy/mommy, are you the one that distinguish and bring about the truth to the world?" Nature used to be a articles i respected for its objectivity, creativity and most importantly honesty. Now, things changed. Shame on Nature!

2012-08-02 02:59 AM

Report this comment | #47726

Timeriver Timeriver said: To editors

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most importantly honesty. Now, things changed. Shame on Nature!

2012-08-02 02:59 AM

Report this comment | #47727

Joanna Wu said: "The resulting debate has been tinged with racial and political undertones, but little science."

This article is a perfect example of the "little science" debate literature. Bravo, you characterized your own article so well.

It is extremely disturbing to see that Nature, a supposedly preeminent science magazine, chose to publish this article that violates, on multiple accounts, one fundamental principle of scientific publications – evidence. Instead, it relies on speculation, bias, stereotype and piecemeal "evidence" that did not present the readers with a complete picture.

For example, this article, like many others, commented on Ye's last 50 m in the 400m IM event and how she was faster that the male counterpart, the great American swimmer Ryan Lochte. However, it fails to mention that Ye's overall result was much slower than Lochte, so Lochte's final 50m was not representative at all of his full capability. Here is a quote from

http://www.nature.com/news/why-great-olympic-feats-raise-suspicions-1.11109

"There was no three-peat to be had in this men's 400 IM, the first of multiple attempts from across the field in this meet, as Ryan Lochte put this race in his pocket by about 250 meters. When he turned onto the back-half of the breaststroke leg, he was a full-body ahead of the World Record line, and cruised to a personal (and textile) best of 4:05.18. That is better than the 4:06.22 that Michael Phelps swam at the World Championships in 2007. It's also the second-fastest swim in history, though Lochte ended well back of the World Record.

He dominated this race by so much that he was able to coast into his last 5 strokes. This swim looked very similar to what he did at the Olympic Trials, only against a much more elite level of competition."

Now, do you still think it is valid comparison between Ye's last 50 m versus Ryan Lochte's?

Another example of the article's failure to present a complete picture has already been pointed out by many commentators above: Ye has been through rigorous out-of-competition tests. PERIOD.

Apologize, Nature! Not only to Ye, but also to your loyal readers, who truly value real science, instead of speculation and bias in the name of science.

2012-08-02 03:01 AM

Report this comment | #47728

Yi Zhang said: What a success! Obviously Nature has once again received broad criticisms for a biased article. Now we see how high impact factors are cooked by bad British chefs.

2012-08-02 03:02 AM

Report this comment | #47729

edith white said: What a shame! As a scientist, I regret to see such an article on Nature. It is definitely a dereliction of duty for the editor. Nature publishing should investigate whose responsibilities this is and gives us readers and contributors a satisfying answer.

2012-08-02 03:02 AM

Report this comment | #47730

cat doudou said: wow, I though Nature was all about science, which means truth and facts. Now I totally changed my mind. The article above is a truly disappointment.

2012-08-02 03:04 AM

Report this comment | #47731

James Gurski said: Wow. Nature is becoming a joke too! How shameful you are? Those scientists are really stinking big shit!

2012-08-02 03:04 AM

Report this comment | #47732

Celine O said: I'm fiercely disappointed. Where's the integrity of this world famous publication?

All I see from this article are wrong facts, unrepresentative sampling, poor reasoning, biased and ignorant conclusion, and zero scientific profoundness.

For sure authors can have their political views and choose sides, but Olympics, and NATURE too? Seriously?

You really need to try harder to make a sound case. <-- Sarcasm in case you didn't notice.

2012-08-02 03:05 AM

Report this comment | #47733

Celine O said: I'm fiercely disappointed. Where's the integrity of this world famous publication?

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For sure authors can have their political views and choose sides, but Olympics, and NATURE too? Seriously?

You really need to try harder to make a sound case. <-- Sarcasm in case you didn't notice.

2012-08-02 03:07 AM

Report this comment | #47734

Opium Dealer said: whining UK losers

2012-08-02 03:09 AM

Report this comment | #47735

Yue Chen said: Why this article raises my eyebrow?

'Race profiling' could help to dispel doubts.

As a scientist who has published in Nature before, I am shocked to see how such a piece a rubbish can find its way through and show up here. Dear editor, your days working at Nature is numbered. Nature, you own readers an apology.

2012-08-02 03:13 AM

Report this comment | #47736

charlie charlie said: it does not matter who won the match, but the smear is shameful, pity on you lousy losers.

2012-08-02 03:14 AM

Report this comment | #47737

H. Huang said: How convenient it is to accuse Miss Ye in the name of science, while all the rigorous tests have proven her clean. It is simply "unbelievable" and "incredible" to see an article like this appearing on Nature's website, whose reputation I have been holding in the highest regard until today. It may be very disappointing to learn. But this author and the editor is to be informed that such a "profiling" technique has been very successfully employed by the "free press". So this article can hardly be claimed as original.

http://thenewvoice.wordpress.com/2012/08/02/now-nature-is-playing-the-same-game/

An official apology to Miss Ye is in order.

2012-08-02 03:15 AM

Report this comment | #47738

Bo Cao said: The comments are very good, nature should apology to Ye shiwen and all athletes.

2012-08-02 03:16 AM

Report this comment | #47739

Shi Chen said: Now that the subtitle of this article has changed from "'Performance profiling' could help to catch cheaters in sport." to "'Performance profiling' could help to dispel doubts." by the author or the editors. I don't think that is enough, not even close. The 16-year-old Shiwen Ye deserves an apology and the biased and "racial profiling" article should be withdrawn immediately. The rebuttal comments by a few people here should be published to clear this thing up. I really don't think the author Ewen Callaway is capable of doing his job as a reporter in Nature, which is one of the best scientific journals. Probably the author himself is a suspect of a cheater to enter the Nature publishing group with falsified resume.

Again, Ye Shiwen deserves more respect.

2012-08-02 03:16 AM

Report this comment | #47740

Chongzhi Zu said: The whole debate about Ye is not about science but about prejudice and a bunch of adults attempting to ruin a little girl's best moment in her life. Every time when a "geniusâ€ athlete, e.g., Michael Phelps and Ye, emerged, they had done something "anomalous†that really awed people. While these "anomalous†performances could be rather unbelievable at the moment, people, particularly scientists, should be open-minded rather than jumping into a quick conclusion that these phenomena shouldn't and couldn't happen. Giving the benefit of the doubt to these unbelievable phenomena is exactly what jumpstarts new exploration efforts and drives science moving forward. It's very sad seeing so many Westerners rejecting giving the benefit of the doubt to this little Chinese girl. It's also concerning to see how double standards have been applied. Last time when Michael Phelps won sooooooo many medals in Beijing fighting through countless qualification, semifinal and final matches during an extremely tight week, did anyone cast the same kinda doping doubt on him? Well†I do not remember. At least, this great Nature journal did not publish anything suggesting Phelps might have done something fancy. These days, people seem to have forgotten how to act graciously. When that 16-year-old reached a high point in her life and no evidence what so ever proves she had done anything wrong, why couldn't we adults just congratulate her and let her enjoy the moment? To me, the doubt toward Ye's performance is not from the brain but from the heart. That's sad! Very sad!

2012-08-02 03:16 AM

Report this comment | #47741

Liming Wang said: Philip Campbell, Ph.D. and Editor-in-Chief of Nature,

I am a neurobiologist in University of California, Berkeley, USA. I (as well as many of my colleagues) found an article that appeared in Nature yesterday, titled "Why great Olympic feats raise suspicions" Ã,Â, completely groundless and extremely disturbing.

In that article, Mr. Callaway questioned China's 16-year-old swimmer Ye Shiwen, who won two gold

medals in womenââ,¬Ëœs 200-meter and 400-meter individual medley (400 IM); in London Olympics, and said her record-breaking performance "anomalous"Ã,Â. However, the evidence he used to support his reckless statement is simply groundless.

As many have pointed out in the major media, it is not uncommon for an elite and young swimmer to increase his/her performance in a relatively short time window. An Australian swimmer and Olympics gold medalist, Ian Thorpe, said that he improved his 400-meter performance by 5 seconds around the same age as Ye. UK's Adrian Moorhouse, a Seoul Olympics gold medalist, also testified openly that he "improved four seconds" \(\tilde{A}, \tilde{A} \) at the age of 17. He also called the suspicions around Ye's performance "sour grape" \(\tilde{A}, \tilde{A}. \)

The other point that Ewen Callaway used to support his accusation, that Ye swam faster than US swimmer Ryan Lochte in the last 50 meters when he won gold in the men's 400 IM, is unfortunately also unprovoked. First of all, Ryan Lochte did not perform the best in the final 50 meters. He only ranked 5th in the last 50 meters, at 29ââ,¬Â10, which was significantly slower than Japan's Yuya Horihata (27ââ,¬Å"87ïÂ1¼â€°; and three other swimmers competing in the same event. (Ye's performance was 28″Ã,Â93). It could be that Lochte was away ahead of his competitors in the first three splits so he did not have to strike too hard in the final 50 meters, or that he had used up all his energy. So one cannot only look at the final 50 meters of Ye and Lochte and conclude that Ye swam faster than a men's champion. In fact, Ye's record-breaking performance in women's 400 IM (4'28"43) was significantly slower than Lochte's 4'5"18;. Secondly, even if one only looks at the performance of the final 50 meters, women can certainly surpass men and Ye's performance shouldn't be accused as "anomalous"Ã,Â. For example, in last year's World Championships in Shanghai, UK's swimmer Rebecca Adlington won a gold medal in women's 800-meter freestyle. In that event her performance in her final 50 meters (28"90) was faster than both Ye and Lochte in London.

It is worth pointing out that all the facts I listed above can be easily tracked in major media and from the Internet. With just a little effort Ewen Callaway could have avoided raising groundless and disturbing charges against China's young athlete in a professional scientific journal.

Even worse, Ewen Callaway further argued that Ye's clean drug test in Olympics \tilde{A} ¢â,¬Å"doesn't rule out the possibility of doping \tilde{A} ¢â,¬Â \tilde{A} Â, implying that Ye might have doped \tilde{A} ¢â,¬Å"during training \tilde{A} ¢â,¬Â and escape the more rigorous tests during Olympics. Such a statement is disrespectful to Ye and all professional athletes. Following this logic, Mr. Callaway can easily accuse any athlete \tilde{A} ¢â,¬Å"doping \tilde{A} ¢â,¬Â \tilde{A} Â, without any evidence; and ironically, according to him, those being accused have no way to prove themselves innocent: even if they pass all rigorous drug test, they could still have doped at a different time, or even doped some unidentified drugs! I cannot help wondering if presumption of innocence (innocent until proven guilty) still has people's belief nowadays, or it is considered outdated in Nature, or in UK?

Last but not least, although Mr. Callaway claimed that he was attempting to discuss science, instead of "racial and political undertones"Ã,Â. Readers can easily smell the hidden (yet clearly implied) racism and discrimination. Yes, we may all agree that better methodology for drug test (such as "biological")

passport") is needed for the anti-doping effort. But why the stunning performance from this 16-year-old gifted swimmer can lead to such a proposal? Was Mr. Callaway suggesting that Ye was found drug-clean simply because the drug detection method was not advanced enough? At the end of the article, Mr. Callaway even quoted "When we look at this young swimmer from China who breaks a world record, that's not proof of anything. It asks a question or two." So athletes from China, despite their talent and training, are supposed to perform bad and never break world records, otherwise they deserve to be questioned, suspected, and accused? Backed up by technological progress and better training/supporting systems, athletes worldwide are maximizing their potentials. World records are being refreshed every year. USA's Michael Phelps just won a record 19th medals in Olympics and he has broken numerous swimming world records. Shall we also "ask a question or two"Ã, about his "anomalous"Ã, performance?

Nature is considered one of the most prestigious scientific journals in the world; many scientists, including myself, chose Nature to publish their best work (I myself have co-authored three papers published in Nature and Nature sister journals). However, Mr. Callaway's article, which is not only misleading, but also full of racial and political bias, has tainted Nature's reputation in the scientific community, and among the general audience. Unless Nature takes further actions (e.g. publicly retract this article and apologize to Ye and all athletes), I hereby decide not to send my work to Nature any more-and believe me I will not be the last one to protest.

Liming Wang, PhD Bowes Research Fellow Department of Molecular and Cell Biology University of California, Berkeley CA 94720 USA

2012-08-02 03:17 AM

Report this comment | #47742

Shi Chen said: Now that the subtitle of this article has changed from "'Performance profiling' could help to catch cheaters in sport." to "'Performance profiling' could help to dispel doubts." by the author or the editors. I don't think that is enough, not even close. The 16-year-old Shiwen Ye deserves an apology and the biased and "racial profiling" article should be withdrawn immediately. The rebuttal comments by a few people here should be published to clear this thing up. I really don't think the author Ewen Callaway is capable of doing his job as a reporter in Nature, which is one of the best scientific journals. Probably the author himself is a suspect of a cheater to enter the Nature publishing group with falsified resume.

Again, Ye Shiwen deserves more respect.

2012-08-02 03:20 AM

Report this comment | #47743

Liang Qi said: Why Nature published this article? The editors must know how lack of logic and

evidences this article is. If they just try to get more public attentions, they definitely choose the wrong way!

2012-08-02 03:20 AM

Report this comment | #47744

cat doudou said: Mr. Ewen Callaway, you should read through the comments, and learn a little (since you have none) scientific thinking/writing techniques from other people, especially from Dr, Jiang Lai. As pointed out by Celline O, this article is full of "wrong facts, unrepresentative sampling, poor reasoning, biased and ignorant conclusion, and zero scientific profoundness", I'm wondering why Nature, one of the most prestigious scientific journals published such a cramp online. This article is just an obvious proof of how narrow-minded, biased and jealous some "Great British" are. Please keep whining, then all the world would be laughing at you. What a joke!

2012-08-02 03:21 AM

Report this comment | #47745

JH Hu said: Dear Editors in Nature,

As for what Ewen Callaway wrote on the most famous and prestigious scientific journal Nature

"Was Ye's performance anomalous?

Yes. Her time in the 400 IM was more than 7 seconds faster than her time in the same event at a major meet in July."

Mr. Callaway intended to twist the readers to think Ye is a doper. A swimmer improved 7 secs from July to August is indeed anomalous.

However, let's see the truth, the fact Mr. Callaway used in his paper should be

"Ye's time in the 400 IM was more than 5 seconds faster than her time in the same event at a major meet in July 2011".

See the difference? Mr. Callaway carefully manipulated his data from the real 5 sec to anomalous-looking 7 secs, and, most importantly, he "forgot" to add 2011 after July (Whoops, Mr. Callaway, where did you receive the training on scientific writing?).

Ye grows from 160 cm to 170 cm from 2011 to 2012 and she achieved the similar improvement in her IM as other American or Europeans, for example, the famous Phelps, did at similar age. Is there any evidence that supports Mr. Callaway's assumption that non-Caucasians could not achieve similar improvement comparable to Caucasians?

Should this paper be rejected during the reviewing stage, and Mr. Callaway be called away from his job due to incompetence?

Sincerely,

JH

P.S. As expected, I submitted this commendation to Nature and got rejected, next, I should consider a Journal with IF around 0.00023.

2012-08-02 03:22 AM

Report this comment | #47746

Liming Wang said: Philip Campbell, Ph.D. and Editor-in-Chief of Nature,

I am a neurobiologist in University of California, Berkeley, USA. I (as well as many of my colleagues) found an article that appeared in Nature yesterday, titled "Why great Olympic feats raise suspicionsâ€, completely groundless and extremely disturbing.

In that article, Mr. Callaway questioned China's 16-year-old swimmer Ye Shiwen, who won two gold medals in women's 200-meter and 400-meter individual medley (400 IM) in London Olympics, and said her record-breaking performance "anomalousâ€. However, the evidence he used to support his reckless statement is simply groundless.

As many have pointed out in the major media, it is not uncommon for an elite and young swimmer to increase his/her performance in a relatively short time window. An Australian swimmer and Olympics gold medalist, Ian Thorpe, said that he improved his 400-meter performance by 5 seconds around the same age as Ye. UK's Adrian Moorhouse, a Seoul Olympics gold medalist, also testified openly that he "improved four seconds†at the age of 17. He also called the suspicions around Ye's performance "sour grapeâ€.

The other point that Ewen Callaway used to support his accusation, that Ye swam faster than US swimmer Ryan Lochte in the last 50 meters when he won gold in the men's 400 IM, is unfortunately also unprovoked. First of all, Ryan Lochte did not perform the best in the final 50 meters. He only ranked 5th in the last 50 meters, at 29''10, which was significantly slower than Japan's Yuya Horihata (27â€87) and three other swimmers competing in the same event. (Ye's performance was 28â€93). It could be that Lochte was away ahead of his competitors in the first three splits so he did not have to strike too hard in the final 50 meters, or that he had used up all his energy. So one cannot only look at the final 50 meters of Ye and Lochte and conclude that Ye swam faster than a men's champion. In fact, Ye's record-breaking performance in women's 400 IM (4'28â€43) was significantly slower than Lochte's (4'5â€18). Secondly, even if one only looks at the performance of the final 50 meters, women can certainly surpass men and Ye's performance shouldn't be accused as "anomalousâ€. For example, in last year's World Championships in Shanghai, UK's swimmer Rebecca Adlington won a gold medal in women's 800-meter freestyle. In that event her performance in her final 50 meters (28â€91) was faster than both Ye and Lochte in London.

It is worth pointing out that all the facts I listed above can be easily tracked in major media and from the Internet. With just a little effort Ewen Callaway could have avoided raising groundless and disturbing

charges against China's young athlete in a professional scientific journal.

Even worse, Ewen Callaway further argued that Ye's clean drug test in Olympics â€doesn't rule out the possibility of dopingâ€, implying that Ye might have doped "during training†and escape the more rigorous tests during Olympics. Such a statement is disrespectful to Ye and all professional athletes. Following this logic, Mr. Callaway can easily accuse any athlete "doping†without any evidence; and ironically, according to him, those being accused have no way to prove themselves innocent: even if they pass all rigorous drug test, they could still have doped at a different time, or even doped some unidentified drugs! I cannot help wondering if presumption of innocence (innocent until proven guilty) still has people's belief nowadays, or it is considered outdated in Nature, or in UK?

Last but not least, although Mr. Callaway claimed that he was attempting to discuss science, instead of "racial and political undertonesâ€. Readers can easily smell the hidden (yet clearly implied) racism and discrimination. Yes, we may all agree that better methodology for drug test (such as "biological passportâ€) is needed for the anti-doping effort. But why the stunning performance from this 16-year-old gifted swimmer can lead to such a proposal? Was Mr. Callaway suggesting that Ye was found drug-clean simply because the drug detection method was not advanced enough? At the end of the article, Mr. Callaway even quoted "When we look at this young swimmer from China who breaks a world record, that's not proof of anything. It asks a question or two.†So athletes from China, despite their talent and training, are supposed to perform bad and never break world records, otherwise they deserve to be questioned, suspected, and accused? Backed up by technological progress and better training/supporting systems, athletes worldwide are maximizing their potentials. World records are being refreshed every year. USA's Michael Phelps just won a record 19th medals in Olympics and he has broken numerous swimming world records. Shall we also "ask a question or two†about his "anomalous†performance?

Nature is considered one of the most prestigious scientific journals in the world; many scientists, including myself, chose Nature to publish their best work (I myself have co-authored three papers published in Nature and Nature sister journals). However, Mr. Callaway's article, which is not only misleading, but also full of racial and political bias, has tainted Nature's reputation in the scientific community, and among the general audience. Unless Nature takes further actions (e.g. publicly retract this article and apologize to Ye and all athletes), I hereby decide not to send my work to Nature any more-and believe me I will not be the last one to protest.

Liming Wang, PhD
Bowes Research Fellow
Department of Molecular and Cell Biology
University of California, Berkeley
CA 94720 USA

2012-08-02 03:25 AM

Report this comment | #47747

Shelly Shi said: So surprised to see such an article with full prejudice in Nature. It is really embarrassing. Shame on you, nature!

2012-08-02 03:27 AM

Report this comment | #47748

Lin Zhou said: I strongly urge the Nature editors take this matter seriously. This article should be retracted immediately and Nature should apologize for the damages it has caused (this article has already been quoted by other western media to mislead the public), both to Ye Shiwen and to the loyal readers who want to find science, not bias, prejudice, and ignorance on your website. The author and handling editor of this article should be held responsible; they either lack the required scientific training to work for Nature, or more seriously, are racist in the name of science. We will contact (and have contacted) the editor-in-chief, and bring this to the attention to the Chinese media and community. This article has severely damaged the reputation of Nature, not only insulted the 16 year old girl herself, but also humiliated the entire scientific community.

2012-08-02 03:34 AM

Report this comment | #47749

Elaine Zhong said: Zhenxi Zhang: your proved details are perfect!

but those ppl won't admit, when they are scared of the opponent and felt other's power, the only thing they can do is to defame the opponent but not work harder to build themselves. when they lost, the reason they found is from others but not themselves. That was the dirty culture. As Chinese saying goes on, "winner rule, while loser is ruled". so if you r the loser, just shut up! To be ruler, perform better next time, but not envy others and make a slander, which just makes yourself much cheaper!!!

2012-08-02 03:35 AM

Report this comment | #47750

Zhuo Wang said: Once again, Nature got late to the party, got beaten by CNN and Yahoo.com this time.

For those who had their eye brows risen by Ye Shiwen's breathtaking final 50m swim, and who appear to stay that way, contact your doctor.

And back to the 'scientific' part of the report. Aren't all champions convicted outliers?

2012-08-02 03:36 AM

Report this comment | #47751

Fan Yang said: you'd better use "why the western cast discrimination on the Asian". I think it would summarize better what you're really thinking.

2012-08-02 03:36 AM

Report this comment | #47752

JH Hu said: Damage has been made! Mr. Callaway should take his responsibility and be fired. Nature you own a formal apology to your loyal readers and subscribers. I am not paying \$\$\$ to see this bullshit paper on Nature.

2012-08-02 03:40 AM

Report this comment | #47753

Tao Shi said: To editor Brian Owens:

I wonder the so called 'performance profiling', as mentioned in the title of this article, could be used to judge if the editor was drunk on duty or is lack of basic knowledge of Statistics.

If this is article used to highlight what so called science with crappy data analysis cannot tell us, congratulations! You passed with A+.

2012-08-02 03:40 AM

Report this comment | #47754

Wenting Luo said: As a scientist, and a regular reader of Nature, I feel sorry that such a low-quality and un-solid article can be approved to publish here. Dear Editors, please consider the reputation of Nature magazine in our scientific community and wisely withdraw this article. We do not want to see Nature going down to a gossip tabloid level.

2012-08-02 03:41 AM

Report this comment | #47755

jingfeng kang said: I can't believe I am reading this garbage on Nature. This is nuts. Where is science in this article?

2012-08-02 03:41 AM

Report this comment | #47756

Ran Xin said: What has been most disgusting to me in this whole 'doubting Ye episode' are the following:

- 1. The "performers" cherry picked data to mislead the audience into believing that Ye's performance was "impossible". I'm not gonna be subtle here, they are purposely spinning the fact.
- 2. The "performers" assumed the worst of this 16-years old girl, even when she has passed or the tests against drug use, and felt perfectly comfortable expressing their biased judgement.

I can't help but feel that the doubts and attacks against Ye was actually based solely upon her nationality. I will fight against the acceptance of this kind of attitude.

I would like to remind everyone, that the victim here is a 16 years old girl.

2012-08-02 03:50 AM

Report this comment | #47757

jingfeng kang said: I can't believe I am reading such a garbage article on Nature.

2012-08-02 03:50 AM

Report this comment | #47758

YU ZHANG said: This article just breaks all my vision on 《Natureã€. I am so disappointed, Ye is only 16 years old girl, don't you feel ashamed? Aaah?

2012-08-02 03:53 AM

Report this comment | #47759

G L said: Well, so much for "the world's most prestigious science magazine". I guess the ground reality is that the world is still built around the idea of "us vs them". Thank you Nature for reminding us that.

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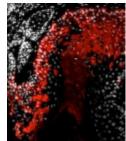




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7 minutes of terror

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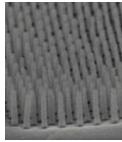
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