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**Publication Pressure, Fraud, and Cheating in Sports**

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It is simply no longer possible to believe much of the clinical research that is published….

-- Marcia Angell

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| **There is increasing concern that most current published research findings are false.****-- John P. A. Ioannidis** |

**esearch** **fraud** is a terrible waste of time.  Yet, it should not surprise the reader that it exists. Human beings today are no different from countless other decades and centuries ago. There have always been people in great positions before we were born, when we were growing up, and where we are working who are willing to do anything to get ahead or put extra cash in their pockets.

Today, it is common to read about the topic of fraudulent research. It is far more common than you ever imagined. Makia Freeman (1), the editor of The Freedom Articles said in 2015 that "...fraudulent scientific research is now so widespread and pervasive it has become an open secret." The bottom line is that money buys the research findings to move a product.

Universities professors and administrators understand this point all too well. The only people who don't get it are the students, their parents, and the rest of the non-academic community. Society as such is not aware that the students' teachers are likely to be compromised as well as their relationships with colleagues. The collateral costs are large, and it includes the students’ education (or the lack of it).

Imagine yourself sitting Monday morning in a sports nutrition class. Unless you are one of a 1000 students who get the big picture, you have no idea that the exercise physiologist (your teacher) is talking about (and promoting) a sports supplement that he just received a big grant from a major sports supplement company. He (and, yes, she as well) is not necessarily interested in telling you the side effects of the supplements or if it is wrong to take it.

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| **The abuse of scientific misconduct and fraud deserves more attention from college professors and academic administrators.** |

Strange enough, the university administrators understand what is going on, but they are inclined to turn a blind eye, especially since institutions are helped by the big grant money. The fact that the supplement may set the stage for an unfair sports competition isn't of interest to many professor and/or their administrators. In particular, what the college professors are interested in is the recognition, academic promotion, and seeing their name in print on another research paper.

This problem is so big that it is the norm, and the college professors seldom talk about it among themselves. Yet, it is as serious a major problem as is the reporting of scientific findings that are made up to publish a paper or to do what is necessary to keep the grants coming in. In fact, this is essentially the reason Dr. Richard Horton (2) said, "...much of the scientific literature, perhaps half, may simply be untrue."

R. Grant Steen (3) concluded that "...retractions for fraud increased between 2000 and 2010..." and that "...most fraud took the form of outright data fabrication." It is no wonder that Dr. John P.A. Ioannidis (4) said, "...that most current published research findings are false."  Obviously, this is so scary that we cannot turn a deaf ear to it. Yes, competition is essential but it must have limits. Unless I am wrong the professors’ primary job is to teach and to prepare students for a market-driven career.

However, it is unclear whether recent hires in the academy get this point. Job security is so important that it seems the only track to take is to emulate the habits of the tenured faculty. Surely, they aren’t doing anything wrong! Openness and connecting with fellow colleagues is actually something that happens on the surface only. What is interesting and disappointing about this topic is these are individuals with the doctorate degree. Are they the problem? Or, is it their education that is problematic? Is it the academic administrative infrastructure that needs updating?

There is an interesting comparison between scientific fraud and cheating in sports. Both are driven by competition. It seems that either you are a professor who will make up data to be the first to publish on a certain topic in the best journal with the highest impact factor or an athlete who is on steroids to help ensure his or her win with all the financial and otherwise benefits. The history of cheating and sports underscores the fundamental drive to be recognized as the best (5), regardless of the rules. Perhaps, that same emotion is the stress experienced by the researcher.

Of course, the key wording is "help ensure " because so many athletes are cheating by taking this or that supplement or drug just as the researchers are doing what they can to take-all as well. In a way, society itself is the problem due to the need for power, prestige, and position. Hardly anyone is willing to do anything without considerable secrecy. Researchers do not want to be beat out by their rivals and athletes do not want to share the winning spot.

While the number of retractions for misconduct is small, a 10-fold increase in papers retracted for fraud could cast a pall on science in a manner similar to that of a community reporting a 10-fold increase in crime.

-- Ferric Fang

Whether it is sabotaging an athletic competitor or providing a biased peer review for a colleague, the misconduct and lack of integrity are inappropriate. Proof of this fact is the University of Vermont professor, Eric Poehlman, who spent 12 months in a federal prison for falsifying data (6). The competitive academic climate to publish, the financial interests, and the prejudices due to personal beliefs need fixing, but first this problem has to be acknowledged by the academic community from the President’s level down to the Instructor.

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| **People making the decisions on who gets promoted or tenured should place more emphasis on the quality of the work and less on quantity.****-- Dr. Fang** |

Without question, it will continue to be detrimental to the necessary emphasis on teaching.  In fact, the lack of interest in teaching is ethically questionable. Look at what one university department of exercise physiology says to their graduating seniors: “The Master of Science in Exercise Physiology degree program prepares you to begin graduate studies for health professions such as physical therapy.” Guess what? Regardless of how many websites you bring up today, next month, and year from now, 98% will say the same thing. This means the administrators of these departments do not see exercise physiology as a career-driven and/or market-driven degree program. That is very bad news for the students.

Whether it is fraudulent scientific research, cheating in sports, or the failure to place the appropriate emphasis on teaching, the overall system academia has a big crack in it. I know it, you know it, and it’s only maybe the students that don’t get it yet. This isn’t how the game (so to speak) was meant to be played. There are rules and they need to be held up high so everyone can read them and abide by them. It isn’t all about the researcher, the athlete, or the money.

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