

# Professionalization of Exercise Physiologyonline

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## The Truth about Exercise Science Websites

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| You never find yourself until you face the truth.  
|-- Pearl Bailey

**WHAT IS** a true statement? Sounds simple enough ask. Maybe the answer isn't so simple. To provide a brief backdrop to this topic, it was earlier this week that I read a statement to my graduate students, explaining the problems with what I read. In short, I felt the statement wasn't true. Yet, later in the day, I very briefly discussed this point with a colleague. He thought it was true. Before I get to the actual statement, it should be helpful to lay the basic ground work for answering the question, "What is a true statement?" Stated somewhat differently, "How do you know when a statement is true?"

My approach to answering the questions centers specifically on a more general direction of thinking and less so on the nomenclature and etymology of what is truth. Very simply, this commentary is about what constitutes a logical truth. For example, "All wives are married?" The statement is a logical truth. All wives are married because by definition a person cannot be a wife without being married. Hence, the statement cannot be untrue. All wives are married because the intent of the statement corresponds to the actual state of affairs of being a wife and married?

### Truth Matters

In the simplest of terms possible, a statement is truthful if it is accurate. "All wives are married" is an accurate statement. Truth matters in much the same way as honesty matters. Without truth and honesty, a written statement cannot be accurate. Lack of accuracy is a problem because one can't really know reality without truth. Although this distinction is not difficult to understand, it does take time to digest as is often the case with deception. Most people fail to grasp the art of deception, and yet it is clear (or it should be) that deception is a form of thinking driven by language lacking truth.

Take the following statement: ‘Upon completion of the undergraduate exercise science program, students are qualified for graduate programs in medicine, physical therapy, occupational therapy, nurse practitioner, and physician assistant.’ Is this statement true? As a criterion of truth, is the statement consistent with other knowledge? For example, do all students who graduate from an exercise science program “qualify” for physical therapy? Do they all qualify for entrance into medicine? If not, how about upon completion of the undergraduate exercise science major, do the students automatically qualify for graduate programs in occupational therapy? If the answer is “no” for each of these programs, then, the statement is untrue. It is an illusion?

In plain English, a friend said: “I believe it is possible to know that something is true or false according to one’s experiences and personal frame of reference?” Why not I thought? More than once, a friend has been heard to say, “I know this is true.” Others say, “I know this is false.” Experience, facts, and critical analysis are often used singly or collectively to guide most people away from deception and illusion towards the truth.

**Deception** involves acting in such a way which leads students to think a particular view about exercise science, that the exercise physiology faculty members, do not believe themselves.

### **Exercise Science is Deception**

Why would anyone believe the exercise science statement is true? While it is well-known that medical schools are willing to accept applicants of essentially any academic major, provided they complete the requisite coursework (biology, English, organic chemistry, inorganic chemistry, physics, and calculus), have a high overall GPA and science GPA, and high MCAT scores, there is still this disconnect or, if you will, the question of truth with the statement that exercise science is a degree program for candidates applying to medical school. Perhaps, the difficulty comes from 40 years of college teaching and my understanding of the exercise science degree. There is very little about the curriculum that warrants a heavy emphasis on “science.”

Perhaps, this is why the obvious pre-med majors are chemistry, biology, biochemistry, human physiology, general science, mathematics, physics, and psychology. Each one is likely to require course work that matches up with the pre-med recommended classes. Experience and facts argue that exercise science is not typically considered an appropriate degree plan for application to medical school, except in rare cases at certain institutions. After all, there are the occasional students who are interested in athletics who are also academically gifted. If they do exceptionally well on the MCAT exam, they have a shot for an interview. This simply isn’t the case for the majority of the students. While they may have the ability to do excellent work, the curriculum and the expectation that associates with exercise science are less than optimal.

### **Is it Physical Education or Exercise Science?**

Perhaps, the short answer to the question of truth is a function of a combination of historical considerations. After all, it is a recognized fact that the academic quality of the physical education degree across the United States came up short in the 1960s only to

surface later under numerous other names [1]. One must wonder whether this paper is about exercise science or physical education. The curriculum for each is essentially the same. This conclusion is a true statement based on actual facts from the analysis of more than 75 exercise science websites. The Achilles heel of the exercise science curriculum is that it doesn't consist of a credible list of courses.

This raises reasonable concern that web posting of information that is not true should be recognized as outside the scope of ethical advertising, which constitutes an unethical practice by deception. In other words, just as it has been determined that the financial

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*If department chairs and exercise physiologists don't have anything to hide, why not tell the students the truth?*  
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interests of researchers and educators can bias their scientific papers and lectures, the same is true for academic departments. After all, it is common knowledge that the academic institution is more of a business today than it has ever been in the past. The commercialization of colleges and universities is real. This truth, as rendered from the facts, has significant professional and ethical implications.

### **Reason to Tell the Truth**

Teachers should be concerned about the business approach to academia because often the financial issues and concerns end up driving the decision making process. Students end up caught in between facts and deception. This point has already been thoroughly addressed in regards to sports nutrition [2]. Some professors who consult for the sports industry publish slanted findings while keeping hidden their relationship. There is no reason to believe that it doesn't exist within exercise science as well. Hence, it is a fair statement to conclude that some of the web postings, such as the expected career options on the exercise science web sites, are slanted while not telling the truth.

From the students' perspective, they end up misled by academic claims that are untrue. This is very unfortunate since their degree program comes with a tuition cost that is usually rather considerable. Students have the right to know the truth. Also, college teachers must appreciate the simple fact that not telling the truth hurts students. Only when teachers act with integrity can students then make informed choices about career opportunities and other important aspects of their college education. Lastly, telling the truth can defuse the student's resentment and decrease the risk of legal action against academic institutions.

Department chairs and faculty need to ask the question, "Are we writing the truth about exercise science?" If they are, then, the websites will no longer be designed to convince students of things that are not true [3]. After all, as is commonly understood, integrity means doing the right thing simply because it is the right thing to do. Why not tell the truth? Nothing is worth the loss of an educator's integrity. Honesty is all about telling the truth. Leaders and educators know the importance of integrity, and they are driven to hold each other accountable for their actions [4].

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