The Power of Seeing the Possibilities in Exercise Physiology
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To change your world, you first have to change your own thinking.

Yoram Wind and Colin Crook (1)

Are you having trouble changing how you think about exercise physiology? Are you stuck in yesterday’s way of thinking? Are you finding that your career is stalled? Are you resistant to looking at the exercise science degree from the eyes of an exercise physiologist? If your answer is “yes” to these questions, is it likely you are a victim of your own failure to transform yourself. This article is written to help you rethink and assess what you need to do today to start living the life you deserve.

First of all, you earned a college degree. You are a college educated person. None of it was easy, and there was a price both in money and time. You believed that getting a degree would help you find a credible career; one that would change your life. The truth is you didn’t do anything wrong, but others did. The image of success now after college is different from what you were led to believe. Now, when it seems very late in the game, you realize there are few credible, financially stable, and respected exercise science careers in the public sector.

This conclusion is self-evident when you find yourself applying for a job only to realize that the personal trainer or fitness instructor jobs are taken by students who are enrolled in one of many similar exercise science degrees or even a person with a degree in psychology with a weekend warrior certification. If you knew this outcome when

The ASEP leaders learned very early on that if exercise physiologists were going to be successful in creating credible career opportunities in the public sector, they would have to help change the minds of the academic exercise physiologists.
you were an undergraduate, would you have considered a different academic degree? The reality of the situation that you find yourself in as a college graduate without a credible career-driven job is such that, in this case, you would have spent more time evaluating the career opportunities with other academic majors. But, on the other hand, you may say just as quickly that “As long as the exercise science degree helps me become a physical therapist, then, it is all good.”

That is the mindset of many undergraduates, that is, if they are thinking about a career at all. It is unfortunately but true nonetheless that many students are thinking about other things. Understanding this point could be the stimulus for a greater influence of the faculty on the students’ actions and possibilities. Of course, this would mean that the faculty must think the same future for the students if they are to prepare for the same job outcome. After all, what is truly important is not just the college degree but the credible job that is linked to the degree.

In this paper, the word “credible” means that without the appropriate degree a person would not qualify to apply for the job. Hence, it makes no sense at all for a psychology major to apply for a physical therapist position in the hospital. Now, having said that, what are the so-called credible careers in exercise science? The short answer is “not many.” Colleagues have asked college graduates to count the number of times the exercise science degree resulted in a credible job after college. Most graduates were so thoroughly upset with the academic system and failed rhetoric of the faculty that they understood their only option was to apply to graduate school in either a related area (e.g., kinesiology, human performance, or exercise physiology) or an unrelated area (such as physical therapy, occupational therapy, or nursing).

Understandably, it is hard to imagine that the majority of the doctorate prepared exercise physiologists are so involved in upholding yesterday’s thinking that it is the only thing important to them. They simply don’t see what is going on right before their eyes. Rather than working as healthcare professionals, given the prescriptive power of exercise medicine, they are inclined to publish yet another paper without realizing what they are giving away. Their minds are so buried in their work to be tenured, promoted, and recognized at national meetings that they haven’t even realized their students, their work, and their careers have become default programs of transition to PT, OT, nursing, and athletic training. Simply stated, they don’t see their own everyday reality. If they were to realize the weaknesses of exercise science and related programs, it seems certain they would not let it happen.

To change from the exercise science degree without a future to the profession of exercise physiology with a future is to understand the importance of thinking the as yet uncommon possibilities. One such viable possibility is the American Society of
Exercise Physiologists (ASEP). The Society was founded in 1997 as a new way to think about exercise physiology as a healthcare profession versus a research discipline. The ASEP mental model is one of credible career opportunities for college students who earn an undergraduate degree in an ASEP accredited exercise physiology degree program. In other words, to achieve an increased quality of life for college students who are interested in the scientific aspects of exercise, health, and athletics, it is critical that the undergraduate exercise science and related degrees are changed to create the career opportunities needed for success after college.

Academic exercise physiologists, in particular, need to update their way of seeing exercise physiology. For certain, it is not exercise science and it is not just about doing research or even athletics. While both are important, exercise physiology is “the” new 21st century healthcare profession. It is not limited to teaching athletes how to run faster or jump higher. It is much more with opportunities that are equal to PT, OT, AT, and nursing. Exercise medicine should be prescribed by ASEP board certified exercise physiologists. Quite simply, the challenge for exercise physiologists at all levels of education is to transform their thinking by understanding and promoting the purpose of the ASEP vision and mission statements, goals and objectives, exercise physiologists’ code of ethics and standards of practice, and professional philosophy.

British cartoonist William Ely Hill (2) published "My Wife and My Mother-in-Law" in 1915. Do you see the old woman or the young woman? The young woman's chin is the old woman's nose. The old woman's chin is the young woman's chest. By parallel, we seldom question what we are doing as “professionals.” Yet, one day, as Chair of the Department of Exercise Physiology, I was asked several very important questions by parents who were concerned about their son majoring in exercise physiology. Specifically, what will be his career opportunities when he graduates? How do related degree programs improve or distract from his success in locating a financially stable career?

While there were similar questions asked by the parents, it was evident that something had to change among exercise physiologists if their son was going to be successful. First among many considerations was the fact that most academic exercise physiologists see the old woman version of the illustration, which is the failed rhetoric of exercise science and sports medicine. They do not see the young woman of what can be exercise physiology if only they would work at making
sense of an entirely different perception of what is exercise physiology and who is an exercise physiologist. Yes, it requires unlearning the old context of a research driven perspective and allowing the mind to accept an entirely new mental model. That model is the ASEP mental model of exercise physiology that defines it 100% as a healthcare profession.

Exercise physiologists are what they see themselves being. If they see themselves as healthcare professionals, then that is what they will think of themselves to be. This is why the ASEP exercise physiologists have organized themselves around accepted practices such as a Code of Ethics, academic accreditation, specialized certification, standards of practice (3) that are common to other healthcare professions. However, this thinking is not true for exercise science graduates. The mental model that shapes the way they see themselves is defined by their advisors and teachers who constantly say to them, “When you graduate you can always apply to PT school.” Seldom are they engaged in a worthwhile analysis of the degree itself or the fact that it is a generic degree without a credible link to a profession-specific career. This analysis is not to pass judgment on the advisors and faculty for their failure to help the students achieve a meaningful outcome. But, it does offer an example of a common model of thinking that is virtually meaningless.

It doesn’t have to be this way. Exercise physiologists can consciously change their mental models before they are forced to do so when it becomes apparent to society that exercise science is ultimately a degree created by a mindset that failed to look into the future. Often, it appears that the academic types, in particular, believe that if they keep their emphasis on research and publishing, they will survive and progress. Will they? What will happen when the minds of the students wake up and see the freight train of disappointment barreling down the graduation track? How willing are they going to be when the truth comes out? There has to be a limit to getting essentially nothing in return for a large tuition bill across 4 or more years. Students (and their parents) can learn and they will learn of the mindset that has failed them.

Transforming the undergraduate academic degree begins with changing the way the faculty think about it. The more they understand the role of right thinking versus failed thinking (however common), and the better they are able to recognize that the two models exists, the better they can examine the weaknesses of the exercise science model and the strengths of the exercise physiology mental model and opportunities that come with it. Getting ahead – instead of being left behind – is to know when to stop being part of the old model. Other healthcare professions understand this point. That is why they have moved on, which is exactly what exercise physiologists must do if they want to be part of the healthcare community that delivers credible exercise medicine.

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*All growth is a leap in the dark, a spontaneous, unpremeditated act without benefit of experience.*

-- Henry Miller
To do so, however, academic exercise physiologists must speak out and keep doing so even when the naysayers argue otherwise.

Knowing when to switch mental models is the equivalent of avoiding the loss of professional ownership of exercise medicine. Knowing when to make a move is to know when to stop being mentally foolish by failing to pay attention to the healthcare market. Existing without seeing is like living in darkness. Instead, why not look at what other healthcare professionals have done, are presently doing, or plan to do in the very near future? Why not analyze their educational programs and professionalism requirements to “see” if what you learn helps in “seeing” the importance of their profession-specific accreditation, certification, and standards of practice?

Fortunately, for the reader who has not thought about the progression of exercise physiology from a discipline to a profession, the ASEP leaders knew the need existed almost 20 years ago. That is why they put the old model of exercise science behind them and designed from scratch the first-ever professional organization of exercise physiologists. A different infrastructure was built to support exercise physiologists breaking up with the old and adjusting to the new model.

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**References**


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*Seeing, in the finest and broadest sense, means using your senses, your intellect, and your emotions. It means encountering your subject matter with your whole being. It means looking beyond the labels of things and discovering the remarkable world around you.*

-- Freeman Patterson