The State of the Exercise Physiology Profession
Tommy Boone, PhD, MPH, FASEP
Professor and Chair, Director, Exercise Physiology Laboratories, Department of Exercise Physiology, College of St. Scholastica, Duluth, MN

“We must give our own story to the world.” – Carter G. Woodson

Part I: Introduction
This is an article I really don’t want to write. I decided to do so because I believe it is necessary on behalf of the emerging exercise physiology profession. In short, I am disappointed and concerned that many PhD exercise physiologists are not members of the American Society of Exercise Physiologists (ASEP). Obviously, there are a number of reasons for their “wait and see” thinking. But, time is critical and membership is important in fulfilling the ASEP effort in licensure and other professional issues.

While I certainly don’t claim to have all the answers, I have raised a number of questions. No one is forcing me to continue this work. The pressure is all mine and, in fact, my wife continues to inform me that my pay check comes from St. Scholastica and not ASEP! Yet, at times, her comments have helped immensely in shaping my ASEP thinking. I am especially grateful for her frank opinions and comments.
Change Takes Time!

What I have learned is that change takes time, but without persistent, even time won’t allow for change. The conditions for change are courage, risk, and loyalty to a noble idea of making circumstances better for all exercise physiologists. I have learned that regardless of having a professional organization, with a vision, goals and objectives, and, yes, even a Code of Ethics, many exercise physiologists nevertheless are not moved to act. So I have been shocked and even saddened by the state of the profession today, especially since so many of our young professionals are not able to locate a job with respect and a salary to support a family.

For decades, exercise physiologists have prided themselves that their work is a discipline of researchers, not a profession of professionals, and that no one, not even the most admired exercise physiology researchers, were part of a profession. The discipline of researchers established the bounds of the behavior other exercise physiologists are apparently willing to permit, and the laboratory work from which data collection and publishing occurs has set the standards for the PhD exercise physiologist. After all, in many ways, the center of the exercise physiologists’ existence has always been research. The one way to become recognized in the discipline was to publish research articles, and not in just any journal but in the “big” journals. Publishing is important. I publish my research. Teaching, service, and research are important and expected behaviors for all college teachers.

Important Questions

There isn't any question of the importance of doing research and publishing the work. Rather, the issue in this article is the lack of equal emphasis on other dimensions of professional development. As an example, please consider the following concerns:

- Why is it that an exercise physiologist who works at teaching and developing educational opportunities isn't recognized as an educator?
Why isn't teaching by itself considered important and on the same level as publishing?
Why aren't exercise physiologists at the college level discussing issues that relate to teaching?
Why aren't we analyzing the different instructional formats and methods we use at the undergraduate level?
Why isn't there any discussion at the national meetings about different aspects of preparing exercise physiologists, undergraduate through doctorate?
Why do those who teach PhD students spend so little time, if any, in teaching professionalism?
Why aren't our students engaged in discussions that deal with the employment market outlook and career options?
Why is it that the importance of networking, resume design, interview preparation, and specific information about career service centers receive so little attention?

**The Research Issue**

Instead, the question is "How many publications do you have?" "How many grants do you have?" or "How many classes do you have to teach?" This approach to who is an exercise physiologist and what is exercise physiology is still as much a part of what we do today as it was decades ago. However, the difference is that this thinking by itself is not productive. While it may have helped motivate us to do research and publish our results, today, it is an unfortunate continuation of misplaced thinking. What we need, however, are more curriculum directors and fewer laboratory directors! We need fewer students with incomplete resumes and interviewing skills. We need more college professors interested in helping a student's chances of gaining employment upon graduation.
From what I have learned during the past 10 years, the doctorate prepared person is not willing to entertain other responsibilities given the tremendous emphasis on research. However important it is to do research, there are other reasons for the academic position, including the exchange of ideas and views about professionalism and the dissemination of information that leads to better and more effective teaching. Until professionalism assumes an importance less than secondary, critical thinking skills and synthesis of information important to professional development will be slow. Hence, our brief history supports the notion that only the person with the doctorate can be an exercise physiologist. The academically prepared exercise physiologist without the doctorate is something new in the field.

**Academic Development**

Why the academic exercise physiologists have not taken the lead in developing the profession is hard to understand. They are the professionals who troubleshoot the academic programs. They are (or should be) responsible for the development of academic programs in exercise physiology. They represent the program, and are frequently responsible for persuading students to get involved with the department. There is a problem with this thinking, however. While it might appear that we are putting the interests of the students ahead of our own, in actuality, it isn’t a matter of altruism. Very likely, it is about the college professor keeping his/her job. There must be students to fill the classes or there is little reason to have college professors. Having the opportunity to engage in research means having a department with students that is accepted by the administration. Satisfying students then sets the stage for doing what the academic exercise physiologists believes is important, that is, doing research. The opportunity to practice exercise physiology comes only after the department courses are filled with students.

In my way of thinking, students don’t attend college so that academic exercise physiologists can do their research. It is just the opposite. Academic exercise
physiologists are hired to serve students. It is their responsibility to help students understand the issues and concerns surrounding the academic major. But, in fact, too many times, college teachers have been willing to look the other way, or even plan in advance their defense when students ask questions by stating the importance of not just the PhD degree but the post-doctorate experience to locate “the” job.

Everyone Can Teach, Right?
All of us have heard the statement, “When I retire, I’m going to teach”? Most people, including many would-be teachers don’t understand the work that goes into teaching, especially the responsibility of aiding and helping others realize their dreams. Teaching is not a given, and it certainly isn’t simple. Not everyone can teach or has the motivation, time, and desire it takes to learn how to teach or to even care for their students.

When I was a young PhD I didn’t understand that to be an excellent teacher required work, a lot of it. I was like most of my colleagues confident that I could teach and that anyone hired to teach could do so. I respected my colleagues and believed that they could teach, too. To my surprise, I learned that many of them were not interested in teaching and, frankly, some were really bad teachers. Discovering this point resulted in a certain thinking that questioned the ethics of hiring college teachers without the demonstrated skills and observations require to document confidence and ability as a teacher. Yet most administrators trust that anyone with the PhD can teach, which raises the point “let the student beware”.

The "Wait and See" Attitude
All of this is again to argue that change is a very slow process. Change is literally the act of “hitting your head against the wall” time after time when it doesn’t make sense that otherwise nothing seems to be changing. But, this is true of all professions. Take law, as an example, the American Bar Association.
An African-American lawyer was not allowed membership until 1954. According to Linowitz and Mayer (1), women were not allowed to attend Harvard Law School until 1950, or to the Washington and Lee School of Law until 1972. Most people would have thought that the profession of Law understood the importance of fair play earlier than other professions.

What is unchangeable is changeable, but only with time. I understand this point. What I don’t accept, and I have allowed time for a change in thinking, is the view that a few of my colleagues and friends have taken the “wait and see” approach to ASEP. The question, it seems, is the philosophy from which ASEP is based legitimate? Is this willy-nilly of a few exercise physiologists worth my time? The leaders in exercise physiology, those who have written our texts and have presented at professional meetings, they know who they are, need to stop avoiding ASEP. They have no reason to scoff at the notion that other exercise physiologists have a right to their own professional thinking. They must consider the narrowness of their own view.

**The Chase vs. The Calling**

In reforming exercise physiology, it is time to stop the “sports medicine chase” and bring all practitioners together under *one* professional organization and scope of practice. The relationship between organization and practice should be obvious, although it might be difficult to know which should come first. Similarly, Linowitz and Mayer (1) point out that “like the ministry, law is a calling” or, is it that a *calling is a ministry* that permits a contribution to society. Is exercise physiology a calling? For those of us who understand the joy and passion non-PhD exercise physiologists profess with their work, it isn’t too hard to believe that it must be a calling. We hear far too little of these professionals, and far too much of the doctorate prepared.

Time has come for exercise physiologists to answer the questions who are we, where do we wish to end up, and how are we going to get there? We can stay
lost, or we can choose to find our way. We simply can’t continue to deny the argument that ASEP is right and, perhaps, for now, less is more (in organization membership) when it comes to defining our profession. I have said it before, “we should not be in the business of training technicians, but rather educating professionals.”

Can we really exist as technicians? The short answer is "no" even if we wanted to. We are more and have been more for a long time, but the sad fact is that we appear to have little desire to break from the sports medicine chase. However, if we don’t, the chase will leave us some distance from our goals. It will also hinder achieving our mark of professionalism. Judge it as you will, but unless we shun the chase we will not realize the devotion to our own skills, body of knowledge, and canons to make the right decisions and to take responsibility for them.

**Partnership of Exercise Physiologists**

We desperately need a *partnership of exercise physiologists*. Our strength and luster depend on our ability to partner with each other under the compelling beliefs ASEP members. Naturally, I believe ASEP is the way and the beginning of a personal relationship among exercise physiologists that isn’t possible in an organization representing multi-groups of professionals. Professionalism requires an exercise physiologist to face up to the truth that sports medicine is not exercise physiology. Indeed, it doesn’t take even a first-year college education to understand this point. In the end, professionals have to stand responsible for their negative attitudes, actions, and comments that reflect on others. We are all partners in our attempts to discern the unique applications of what we do and how we may extend our entrepreneurial healthcare thinking to the public sector. .

This brings me to the point of saying that while some exercise physiologists may continue with sports medicine for years to come, it isn’t in everyone’s best interest if they continue to share the sports medicine antagonisms towards
ASEP. Where is the respect due to the ASEP exercise physiologists who believe that the right course for them is ASEP? What does it mean when non-ASEP exercise physiologists advance the argument that certain members of ASEP have demonstrated less than professional behavior (by either creating or associating with ASEP). While there are a litany of other questions, it comes down to the business of fair play. No one or group has exclusive contract on how to think or what to think. It just doesn’t stack up well for the lack of cooperation between professionals. Without the right shift towards an increase in shared responsibility for the emerging profession and without a strategic plan to promote exercise physiology, negotiating the future of exercise physiology becomes increasingly complex.

Another interesting point is that in the absence of independent thought, exercise physiologists are likely to continue uninformed about professional issues with measurable negative results in just a few years. I believe that many problems in exercise physiology stem from the idea that exercise physiology is defined by the doctorate degree and non-PhD exercise physiologists are defined as clinical exercise physiologists (CEPs). I have written about this point several times earlier in the PEPonline journal. Regarding this point, just to avoid any misunderstanding, it isn’t that I have a problem with CEPs. Not at all. The problem is that if too many people think cardiac rehabilitation is the only job market for exercise physiologists, then an enormous opportunity for professional development and entrepreneurial businesses will fall to the side undeveloped. Hence, specialization is not the problem either and, in fact, it is unavoidable. What we can avoid to a large extent is a too narrow definition of what exercise physiologists can do in the public sector. The interested reader may want to review the ASEP Scope of Practice for career options in the field.

Though exercise physiologists may insist that they aren’t influencing their profession when they embrace the goals and objectives of organizational development other than ASEP, the move from ASEP to "whatever organization it
may be” results in a certain loss of collective strength, power, and autonomy. If you are a sports medicine advocate, and the organization is rewarding you for committee work and so forth, and you attend their meetings every year, and you are involved in decision making process, and have an investment in decisions that are made, then you are going to look for contrary arguments to ASEP. It is inconceivable that the interests of ASEP members will be looked out for and reasonable, therefore, to conclude that you recommend the transactions (such as certifications) that run counter to ASEP. I don’t think this view misses the mark too far. Exercise physiology professionalism presumes that in professional matters the exercise physiologist’s best interest is supported and targeted to benefit all exercise physiologists.

To Fantasize
The final part of Part I of this brief essay is to “fantasize” about exercise physiologists as responsible professionals who once again, as years earlier, step forward with the dignity, independence, and willingness to sacrifice personal position and reward for pride in their profession. Academic exercise physiologists, in particular, should be eager to stand up before the Internet community and assert the rights of all exercise physiologists to their personal dreams. To fantasize, such that only exercise physiologists can do for the profession of exercise physiology, that we must come together, even as we disagree, and confront professionally with respect our desire to sustain and empower all exercise physiologists. If we don’t, we are too blame for our biases and too common beliefs. If we do resolve the obvious differences in thinking, it will be uncommonly helpful for all exercise physiologists. The end result is in our hands, as is inevitably the case in all matters like this one.

Part II: Congratulations!
You have completed the first section of this article. I’ve shared with you what I think, and you now understand a little bit about me. You’re learned that I don’t have a lot of respect for academic exercise physiologists who don’t support
ASEP. Why? Because “what I want” is simply what is proper and correct for our students. When they aren’t supported, it bothers me and yet no one seems surprised let alone asking questions about it. As a matter of fact, it is clear to me essentially no PhD exercise physiologists has anything to say about the subject of professionalism. If there is one person who can prove me wrong, then why not publish your ideas in PEPonline? Have you heard that PEPonline is the only journal, print copy or otherwise, where an exercise physiologists can write about professionalism? Well, if you haven’t, try publishing your non-research professionalism manuscript in the Journal of Applied Physiology. Okay, try publishing it in the Sports Medicine journal, or why not the popular sports medicine publication, Medicine and Science in Sports and Exercise! What good are the journals if they don’t provide an opportunity to discuss matters of professionalism? If you should know the answer, please write about it, and why not publish your thoughts in PEPonline?

One of the things I learned some years ago is that the quality of group of professionals is consistent with the quality of their professional thinking and publishing. It’s therefore important to be able to write about professionalism and about strategies that might more precisely elevate exercise physiologists to a higher level within the public sector. Hence, the main point of this essay is that successful people aren’t necessarily professionals! Excellence in doing research is hardly the power necessary to model professional thinking. To be a complete professional, the exercise physiologist must reach out to his/her students. Sounds simple, but apparently rather difficult to do. Right? Why? Because there are so few PhD exercise physiologists who are willing to take control of their profession by initiating contact and membership with ASEP; an organization designed to certify the bachelor-prepared exercise physiologist.

What Do We Want?
Still, the key to all of this is knowing what we want. We must be clear about what we want. So, what do we want? Very simply, we want to be recognized as
professionals. All exercise physiologists, from bachelor to doctorate, should be given the same respect (regardless of pay or status). What do we want? We want to professionalize exercise physiology and, very importantly, when we focus with serious intent, we learn that standing together increases our chances of realizing our goals. Thus, it is true, the saying that “winning starts with beginning”. We must begin the shift from yesterday’s thinking to today’s thinking. We need to create our future by working to realize our goals. Clear thinking is very powerful.

Think about the people you want to associate with and the places you expect to do so. Without trying too hard, if your dream is to be recognized as a professional, ASEP is within your grasp. Let your mind roam for a moment, and consider the benefits of joining ASEP. Who are they? Where do they exist? Think about it. They are exercise physiologists throughout the United States. They are the program director of the cardiac rehab program in your community, the professor at your college, or the business-minded fitness and healthcare promotion specialist with his/her own company. There are other members doing all kinds of exercise physiology jobs within the community. They have made the journey to commit to professionalism through ASEP. They understand why it’s important to have an empowering vision of the future. They have a plan to achieve that which is created in their minds.

**Speak With Conviction**

Where there is a vision, the people flourish. When people are convinced of the need for professionalism, then it is just a matter of time before everyone is convinced of the same thinking. So, when you speak to others about ASEP, speak with complete conviction. The end result is your thinking will help shape the state of the exercise physiology profession. Take a second to think about it. Your thinking and your actions will help others model after your behavior. This gives you the power to redirect the thinking of others and to change their feelings about ASEP’s communication with exercise physiologists via the ASEP web site.
Isn’t it interesting that you have the power to influence the future of exercise physiology? *Every step, every conversation, and every intersection in your work there is the opportunity to inform, to organize your thoughts and actions, to structure your communication, and do whatever is logical and right to elevate exercise physiology to professional status.* Nothing is impossible, especially when you are driven to look for what is instinctively logical and right.

Well, what do you think? The underlying theme of the first half of this essay was crucial to understanding the reluctance to change. The lack of intellectual flexibility is numbing, especially its regularity. It is called groupthink, which is in essence an elegant redirect of all reasoning aligned to dispute any sort of discriminatory practice toward the group. It is the group’s power to keep individual members down and intellectually deprived from a richer perspective. It is the wrong impulse designed to stop a new way of looking at things.

The world is full of groupthinkers! But, the one thing we’ve got to do as ASEP members is communicate and nurture the new image of exercise physiology. With this in mind, when each of us expect change, then it is just a matter of time that the mind makes its happen. There is hope for all exercise physiologists. The power of ASEP can only increase. Together we’ve come a long way.

*“Determination and perseverance move the world; thinking that someone else will do it for you is a sure way to fail.”* — Marva Collins

**References**


Copyright ©1997-2000 American Society of Exercise Physiologists. All Rights Reserved.