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What Are The Limits of Change?

Tommy Boone, PhD, MPH, MAM, MBA
Board Certified Exercise Physiologist

When you take the time to learn how to change your thinking and become a better thinker, you are investing in yourself.

-- John C. Maxwell

“WHAT ARE THE limits of change?” is an interesting question. Is it possible that the effort itself distracts from changing? Can change take place after reading one article about professionalism? Is it possible to expect a change in how a person thinks about the importance of an exercise physiology code of ethics from a 10-minute presentation? Can the argument for change really change a person, increase his interest in professional development, and can journals such as *PJEP* and *PEPonline* prevent further continuation of yesterday’s thinking? These are important questions for exercise physiologists.

Let’s face it. Based on the writings of John C. Maxwell (1), “...a change in thinking doesn’t happen on its own.” That is why the study of how to change what people think is critical to the change process. If you want something better for the students of exercise

What we outwardly are, and what we are to become depends upon what we are thinking.

-- Ernest Holmes

physiology, you must be willing to develop and present new ideas. Although it sounds rather straightforward, the process of change can be complex. Without the effort to think as an exercise physiologist, without the will to think differently to solve our problems, and the effort required to stay the course, the difficult task of changing will not take place.

All change requires the investment in time, energy, and desire just as it is clear to exercise physiologists that physiological responses to exercise training depend on intensity, duration, and frequency. Thus, to become an ASEP exercise physiologist, a person must engage in an ongoing process that encourages change. One might ask, “Are exercise physiologists recognized as healthcare professionals?” The answer depends on his or her approach to the following question, “What is exercise physiology?” In other words, the answer depends on the person’s approach to exercise physiology. If the person believes it is entirely about research and publishing, then, the exercise physiologist is not likely to think as a healthcare professional.

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| To learn how to think is to learn how to be an exercise physiologist. |
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Are exercise physiologists who emphasize research aware of the preventive and regenerative effects of exercise? In short, there is little reason that they would not be aware of the benefits of regular exercise. Exercise as medicine or as the ASEP leaders say “exercise medicine” is increasingly today more central to the practice of exercise physiology than ever before. Just as the athlete improves with training and maximizes performance, the non-athletes improve their muscle mass and strength. Regular exercise helps to decrease the chronic degenerative diseases (in particular, coronary heart disease, type 2 diabetes, obesity, high blood pressure, and osteoarthritis).

The importance of exercise medicine in healthcare has promoted the exercise physiologist to the forefront in health and maintenance. While it is important to recognize that this recognition is not only good for the profession of exercise physiology (*vs.* the research discipline of exercise physiology), it is also good for all exercise physiologists. But, this means that exercise physiologists with and without the doctorate degree must be concerned with the “language of professionalism.” They must learn to read professionalism articles and spend time studying what it means to be a healthcare profession, the significance of professionalism in exercise physiology and professional development of exercise physiologists, and the role of the professional organization in changing and promoting the ability to think well and change.

As an example, this article emphasizes understanding exercise physiology from the “profession” standpoint of healthcare that is no different from physical therapy or nursing or other established healthcare professions. Hence, to refer to exercise physiology as “the field of exercise physiology” is to miss the point of exercise physiology as a profession much less as a healthcare profession. In the latter, credible professionals are those who can identify themselves with their own profession-specific organization that is designed to improve their capacity to perform as healthcare practitioners. By the way, while the interest in exercise physiology research is widespread, where are the exercise physiologists who have published reports that recommend aligning the undergraduate degree title (exercise physiology, not exercise science) with the professional title (exercise physiology), the accreditation of exercise physiology, the significance of an exercise physiology code of ethics and standards of professional practice?

It makes no sense to emphasize the importance of research and publishing to exercise physiologists without the doctorate degree if there is no likelihood of finding a research job after graduating with an undergraduate degree. Rather, exercise physiologists should emphasize professional development and other aspects of professionalism, such as the exercise physiologists’ code of ethics and standards of

practice. This thinking is no different from the gymnast who is ill advised to do 50 miles of running a week. The aerobic training has nothing to do with the enzymatic functions at the cellular level that are used to fuel the anaerobic activity of gymnastics.

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Just as the capacity to sustain increasingly higher levels of aerobic activity (i.e., maximal oxygen consumption, VO_2 max) depends on the cardiovascular system, the maximal rate at which a gymnast can perform on the parallel bars or rings depends on the mitochondria of the upper body muscles to use oxygen and produce high energy phosphate compounds to fuel muscle contraction. Exercise physiologists who believe that exercise physiology is a research discipline approach their work from the research perspective that serves to increase athletic performance through a better understanding of the interrelated aspects of VO_2 and

cardiovascular (aerobic) fitness. From the healthcare perspective, the physiology of exercise medicine, as implemented by ASEP board certified exercise physiologists, serves to benefit society by helping to decrease cardiovascular diseases.

Key Point: *When you shape a thought, you find out what you believe and what really counts.*

-- John C. Maxwell

Maxwell's statement about "a thought" is impressive. It hits at the heart of this brief article. What do you believe about exercise physiology? Is it a field, discipline, or a profession? Because "academic" exercise physiologists (in particular) have spent their lives shaping the relationship between VO₂ max and physical work capacity (i.e., power output), they have developed an engaging scientific body of knowledge that is respected and studied by researchers, scientists, and professionals across the spectrum of athletics and health. But, the reality of "what really counts" with a college degree is whether it is helpful in getting a job following graduation. If this point doesn't hit home even with college teachers and their children, something is seriously wrong!

For anyone who has purchased a completely new car, it is accomplishment. That person is eager to drive it, show it off, and take care of it. But, if the car fails to start, then, there is disappointment knowing that the price of the car should match the expectation owner's expectation. If the reader will spend time mentally shaping this point, it will become clear that paying thousands of dollars in tuition fees and living costs for a college degree is very similar to buying a new car. There are expectations of a real job after college with financial stability and healthcare benefits. When none of these things happen, there is disappointment and resentment. But, what do many college teachers say to their students? John, "Complete an application for graduate school." It is almost the same as saying, "If your car is broke, buy another car." That is, spend more money, and maybe that one will work.

This combination of failed rhetoric is a mess and a kind of formula for people who have failed to stretch their thoughts from yesterday's thinking and status quo. They have a job, and it appears that is all that matters to them. If you are an academic exercise physiologist, ask yourself this question, "Am I part of a research discipline or a

healthcare profession?” Likewise, ask yourself, “Does it matter to the welfare of my students if the undergraduate degree is simply a transitional degree to the established healthcare professions?” It is unfortunate but true that you hear someone say exercise physiology is a research discipline. Why, because that is what they were taught in doctorate school. To create new thinking, to stretch one’s mind to see exercise physiology differently, and to think as a healthcare professional requires change.

Never limit your view of life by any past experience....It is simply a question of sticking to an idea until it becomes a tangible reality.
-- Ernest Holmes

Does it matter to the students that they fail to locate a credible job with their BS degree? Yes, of course it does. But, just as there are many factors affecting the training process, from stress, strain, resistance development, exhaustion, recovery, overload, specificity, genetics, attitude, and much more, there are factors that limit change. That is, if change is to occur in how exercise physiologists think about themselves and what they do on behalf of their students, then, they must be willing to engage each other in a shared willingness to think and act as healthcare professionals.

You have to think anyway, so why not think big.

-- Donald Trump

“Why not think big?” After all, there is power in exercise medicine that is regulated by a professional organization. Here, it is noteworthy to point out that ASEP isn’t just interested in helping the general population to be healthier. It isn’t about promoting 30 minutes of physical activity of moderate intensity at least 3 times a week. It isn’t just about teaching clients that exercise helps to manage obesity, diabetes, colon cancer, and osteoarthritis. No, it isn’t even about arguing the case for regular exercise helping to decrease the symptoms of depression and anxiety.

No doubt it is obvious that these byproducts of regular exercise are essential for the health and well-being of clients. But, the “power of exercise medicine” is much bigger when administered by an ASEP Board Certified Exercise Physiologist. It is the work of the exercise physiologist as a healthcare professional to *educate* the client in

the physiology of exercise medicine (2), the specifics of a safe and progressive exercise program, and the psychophysiology of exercise (i.e., spirituality and healthcare). No doubt what limits change is the same as what limits the organizations, professions, and individuals from understanding a new way, respectively.

Exercise physiologists may choose not to give birth to the professionalism of exercise physiology or they may decide to adapt to the academic and professional demands of the 21st century conditions and challenges. The choice is between those who embrace yesterday's thinking and those who embrace today's reality. It's also between those who find security in status quo and those who want to change it. As an exercise physiologist who dreams of something better for all exercise physiologists at all levels of education – and as an optimist who looks to change as a necessary vision to survive and as an inspiration of what can be – I have found that there are no limits to change.

References

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