

# Difference between clinical exercise physiology and applied exercise physiology?

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## Abstract

They have similar names, but clinical exercise physiology and applied exercise physiology represent two different areas of study. Clinical exercise physiology prepares students to work with individuals to prevent disease or to work with those who have a chronic disease condition that may benefit from exercise training and lifestyle interventions. Clinical exercise physiologist can choose to be practitioners or focus on clinically-oriented research. (Interested in clinical exercise physiology? We offer a program at the master's level. Applied exercise physiology focuses on basic and applied research. More than 90 percent of Springfield College graduates at the master's level go on to pursue a doctoral degree and others have gone on to medical school. From our doctoral exercise physiology program, all students who have graduated have gone on to pursue a degree in higher education.

Humanity's love affair with exercise may seem like a relatively recent development, but movement has been a part of medicine for thousands of years. The first recorded instance of a doctor prescribing exercise for patients occurred in 600 BCE, when an Indian physician named Sushruta recommended that patients exercise daily to prevent and treat diseases and promote recovery from physical injuries. In the centuries since, medicine has consistently asserted that movement can strengthen the body, keep the mind sharp, and prevent illness. Today, doctors regularly write exercise prescriptions and prescribe other movement therapies. Various specialists, from physical therapists to coaches, help patients meet their fitness, mobility, and movement goals. Exercise physiologists (sometimes called kinesiotherapists) and physical therapists are two types of providers who use movement to help patients structure physical activities to help alleviate pain, restore flexibility and range of motion, and restore health. There are plenty of other similarities between these specialists. Both study anatomy, biomechanics, the cardiopulmonary system, and nervous system. Both work with people of all ages and with all kinds of conditions. However, there are also significant differences between exercise physiologists and physical therapists. The biggest might be that physical therapists are always considered medical providers, meaning that they can diagnose patients. They can work in hospitals and nursing homes and bill patients' insurance companies in the same way doctors do. In contrast, only some exercise physiologists (specifically clinical exercise physiologists) can work in medical settings. That doesn't mean that exercise physiologists are less essential than physical therapists. They can play a very significant role in a patient's recovery—especially in sports medicine.

## Exercise Physiology

Exercise physiology is a branch of healthcare focused on the biological effects of exercise and physical activity on the body's systems (including the brain). Exercise physiologists are not athletic trainers, conditioning coaches, or fitness coaches. Rather, they are practitioners who work with patients to treat and prevent diseases and promote recovery after injuries. Exercise physiologists may also conduct research into how movement and exercise can reduce or reverse the progression of diseases. In general, the goal of exercise physiology is to enhance quality of life by increasing fitness levels.

## Physical Therapy

Physical therapy is a branch of healthcare focused on restoring patients' quality of life by improving functional abilities, increasing the range of motion, and building strength. Physical therapy treatment plans include exercise but may also utilize electrical muscle stimulation, manual therapy, hot and cold therapy, laser therapy, and traction. The goal of physical therapy is to enhance quality of life by using movement to manage pain, recover from injuries, and get well after an illness.