Motor behavior Pro app

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Kinesiology is defined as an interdisciplinary field that includes the study of physical activity and its impact on society, health, and quality of life. It involves but not limited to areas such as motor control, exercise science, athletic training, sports business management, fitness leadership and clinical health-related filed. Sub-disciplines are defined as related fields that cover the basic aspect of kinesiology. Kinesiology is learned in three different ways. One is through physical activity in which an understanding of kinesiology is developed through the direct personal experience of performing physical activity. The second way of learning kinesiology involves reading, researching, and discussing the practical aspects of physical activity. Those people who research motor learning, biomechanics and other sub-disciplines of kinesiology develop strong foundational knowledge of the subject(Lippert & Minor, 2017). A sub-discipline in kinesiology is related to more established and broader disciplines such as physiology, history, biology, philosophy, and sociology. For example, exercise physiology draws on basic theories and concepts from physiology.

The study of motor behaviors focuses on psychology whereas the philosophy of physical activity focuses on the philosophy general field. This relationship states that students of kinesiology should develop knowledge of the theories, language and conceptual framework of different disciplines. This will help them to apply this concept in physical activity. Sub-disciplines of kinesiology focus on the effect of physical activity in a specific population such as children, adults, and persons affected by disability and disease. Sub-disciplines of kinesiology include health promotion, motor behavior, exercise physiology, biomechanics, exercise, sports physiology and sports pedagogy. Physiology is a study of the mechanism and function which works within living organisms. Exercise physiology deals with the mechanics of body movement and how physical exertion affects the human body. Exercise physiology helps maximize athletic performance support recovery and prevent illness from a variety of different health conditions. Sports physiology is the study of the short and long term effect of training on athletes. This is a specialized field of study in which principles of sports training are heavily rooted. The main goal of exercise physiology is to understand the physiology of humans to improve sports performance. The main goal of exercise physiology is to enhance the fitness level and implement the concepts of physiology to understand health. Application of exercise physiology improves fitness and health, prevent diseases and also improves motor performance. The applied filed of exercise physiology includes Adult fitness, athletic training, senior fitness conditioning, and corrective exercise specialist.

Biomechanics is the study of the function, motion and structure of the mechanical aspects of the biological system at all levels. Motor behavior is related to sport and exercise psychology and biomechanics. It is a process in which motor skills are developed that facilitate skill development.

Sports physiology is defined as an interdisciplinary science that draws knowledge from many related fields such as psychology, kinesiology, physiology, and biomechanics. This sub-discipline involves the study of different psychological factors that affect performance. It also focuses on how exercise and sport affect physical and psychological factors. Another sub-discipline of kinesiology is motor behavior. This is a study of how motor skills are controlled, learned and developed to help people in physical activity Kinesiology is very important in athletic training as this provides an understanding of the assessment, prevention, diagnosis, management, care, rehabilitation of illness and injuries. Athletic training is associated with the examination, prevention, diagnosis, rehabilitation and treatment of acute, emergent and chronic medical conditions. Authentic trainers are health care professionals who interact and collaborate with physicians to provide emergency care, preventive services, therapeutic intervention, clinical diagnosis and rehabilitation of medical conditions and injuries. The knowledge about physical activity that is incorporated in the field of kinesiology is highly organized and scientifically approved. Sports medicine is directly linked with injuries present in physical activity, exercise, and sport including their diagnosis, prevention, and treatment. Kinesiology deals with all these areas of physical activity and very effective in preventing and treating physical activity-related injuries.

In athletic training, accurate and fast execution of movement is required. It is shown that implicitly learned movement are less vulnerable as compared to the explicitly learned movement. For well-performing athletes, studies have focused on the psychological, neurocognitive and physiological characteristics. The physiological characteristics in athletic training include endurance capacity and sprint performance. Psychological factors such as concentration, self-confidence, and motivation are also important in creating expertise among athletes. One of the most important neurocognitive function in athletes is the ability to possess complex movement. A recent study was conducted in which motor learning in athletes was determined and it was found that motor skills are important in developing learning capacity among athletes (Reneker, Latham, McGlawn, & Reneker, 2018).

Perceptual motor skills are learned and performed in many ranges of human life context. For example, a major league basketball batter attempts to strike a ball into the play filed to get on base or attempt by an individual to master some fundamental motor skills of the run, jump, throw and catch during the kinesiology class. Recently one of my friends who is an athletic trainer shared with me that in his career as an athlete he was shown a biomechanical analysis of throwing technique, indicating where he could generate more force. The biomechanics experts said to his group elite thrower "I showed you what to do and now it’s your turn to it" one question was that "how?" that is where the concept of motor learning comes in. Another case is from a skilled sprint coach. Loren Seagrave in the 30 years of his career of coaching found that there is a lack of understanding regarding what is needed to change a motor behavior program to a more efficient one. According to him, a lot of information is present about sprint performance but no one is sure how to trained athletes with correct sprint techniques.

Motor learning offers strategies and techniques that work best for coaching. Kinesiology provides a basic concept that is important in finding the instructional sequences and progression to learn the athlete skills. Required knowledge for athletic training is very important as it provides a key connection between coaching in the real world of athletes and principles of sports training.

**References**

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