

THE EFFECTIVENESS OF BIKE FITTING IN IMPROVING TIME ON A 1-KM CYCLING TIME TRIAL OF AN AMATEUR ROAD CYCLIST

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ABSTRACT

Low back pain, particularly in the lumbar region, is a pervasive global health issue, posing a significant burden on individuals, healthcare systems, and economies. According to Wu et al. (2020), it is the leading cause of disability globally, affecting people of all ages, ethnic backgrounds, and socioeconomic statuses. As stated by the World Health Organization (WHO) categorizes it as a major contributor to years lived with disability (YLD), emphasizing its substantial socioeconomic implications. Notably, Low Back Pain (LBP) is not confined to a specific age group, with children, adolescents, and individuals of all ages susceptible to its impact. The researchers aim to shed light on the acceptability of the Vibration Device among Physical Therapists in the realm of low back pain management. The study aims to contribute valuable insights into the practicality and user satisfaction of incorporating a vibration device into therapeutic practices. The emphasis on acceptability aligns with a wider goal of understanding non-invasive interventions, prioritizing their role in enhancing pain relief and elevating overall quality of life, thereby making a substantial impact in clinical settings. The Methodology of the study used a quantitative research design, specifically a survey design by Bhandari (2020). The process of gathering and interpreting numerical data is referred to as quantitative research. It can be used to identify patterns and averages, formulate hypotheses, examine relationships, and generalize findings to larger populations. With this design, the researchers conducted their studies and gathered data using surveys that provide open-ended questions that can be answered using the Likert scale. The result of the overall acceptability of the device has a mean of 3.86 which has a verbal interpretation of moderately acceptable according by Salac, D. (2020). This is based on the sub-problems of appearance, quality, safety, ease of use, and usefulness. The results of the study have concluded that the device is accepted by the physical therapists for implementation in the realm of low back pain management.

Keywords: Bike fitting, Amateur cyclists, Cycling time trial, Road cycling