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**EFFICACY OF TEN WEEKS' UNSTRUCTURED PHYSICAL ACTIVITY ON
ENHANCING HEALTH-RELATED FITNESS OF COLLEGE TRAINEES IN
MERU COUNTY KENYA**

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H60/22261/10

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unstructured physical*



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DECLARATION

This Thesis is my original work and has not been presented for a degree in any other university

Signature  _____

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ABSTRACT

Physical activity is essential for health, fitness and general wellbeing. It has been documented that young adults especially college students, participate less in physical activities, as their engagement in physical activity declines compared to their earlier years. It has also been noted that young adults are likely to have poor fitness level. This study investigated the efficacy of ten weeks of unstructured physical activity on the health-related fitness components of teacher trainees in Egoji and Meru teachers training colleges, in Meru County, Kenya. The study used quasi-experimental research design where the target population comprised trainees who were not involved in sports or any other physical organized activities at both colleges. Purposive and stratified sampling was used to select 80 participants, 40 from each college. The sample comprised equal gender representation in each year of study. The dependent variables evaluated were cardiovascular endurance, upper body strength-endurance, abdominal muscular endurance, low back flexibility and body mass index. The baseline test was conducted during the first week of the term, and an end line test was administered during the eleventh week of the term. Analysis of data was done using both inferential and descriptive statistics. Hypothesis testing was done at $P < 0.05$ significant levels. Efficacy of unstructured physical activity on health-related components was evaluated using paired samples T-test. Aspects of gender, year of study and college of study biases on the influence of physical activity on health-related fitness components were tested using one-way ANOVA. Results of t-test analyses showed efficacy of unstructured physical activity on enhancing cardiovascular endurance, upper body strength-endurance, abdominal muscular endurance and low back flexibility was significant (all at $P < 0.001$). Though, efficacy for improving body mass index was significant among Egoji TT College ($P = 0.013$) it was insignificant among Meru TT College ($P = 0.438$). Results of the ANOVA did not reveal any significant gender bias among any of the health-related components. Similarly, participants' year of study did not show any significant bias in any of the health-related components. However, there was significant college of study bias in cardiovascular endurance ($F = 13.509, P \leq 0.001$), upper body strength-endurance ($F = 3.976, P < 0.05$) and low back flexibility ($F = 29.945, P \leq 0.001$) but not for abdominal muscular endurance ($F = 0.053, P = 0.818$) and body mass index ($F = 0.243, P = 0.623$). This study concludes that overall, unstructured physical activity is effective in improving all the health-related fitness components except body mass index among teacher training college students of both gender and across all years of study; though specific college environmental factors could have intervening effects on efficacy, but not gender and year of study. This study recommends that to improve trainees' health-related physical fitness, unstructured physical activity should be encouraged in all teacher training colleges in Kenya.