

**PENERAPAN *WORKPLACE STRETCHING EXERCISE* DAPAT  
MENURUNKAN KELUHAN MUSKULOSKELETAL DAN KEBOSANAN  
SERTA KONTRIBUSINYA TERHADAP PRESTASI BELAJAR PESERTA  
DIDIK DI SMA NEGERI 1 SERIRIT**

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**ABSTRAK**

Penelitian ini bertujuan untuk mengetahui penerapan *workplace stretching exercise* dapat menurunkan keluhan muskuloskeletal dan kebosanan peserta didik serta kontribusinya terhadap prestasi belajar peserta didik. Penelitian ini berupa penelitian eksperimental semu (*quasi experimental*) dengan rancangan *randomized pre and post test group design (treatment by subject design)* atau rancangan sama subjek dengan variabel berupa (a) keluhan muskuloskeletal peserta didik didata dengan kuesioner *Nordic Body Map*, (b) kebosanan peserta didik yang didata dengan kuesioner kebosanan yang sudah valid dan reliabel, dan (c) kontribusi keluhan muskuloskeletal dan kebosanan terhadap prestasi belajar peserta didik yang didata dengan memberikan tes di akhir pembelajaran. Perlakuan yang diberikan pada penelitian ini berupa *workplace stretching exercise*. Data yang diperoleh dianalisis dengan uji t-paired dan uji regresi pada taraf signifikansi 5%. Berdasarkan hasil uji hipotesis menggunakan uji t-paired didapatkan nilai  $p=0,0001$  ( $p < 0,05$ ). Itu berarti terdapat penurunan yang signifikan pada keluhan muskuloskeletal dan kebosanan sebesar 33,90% dan penurunan kebosanan sebesar 28,90% serta keluhan muskuloskeletal dan kebosanan tidak berkontribusi terhadap prestasi belajar peserta didik karena kontribusinya hanya sebesar 1,4%. Berdasarkan analisis tersebut dapat disimpulkan bahwa penerapan *workplace stretching exercise* dapat menurunkan keluhan muskuloskeletal dan kebosanan peserta didik, akan tetapi keluhan muskuloskeletal dan kebosanan tidak berkontribusi terhadap prestasi belajar.

**Kata kunci:** Kebosanan, Keluhan muskuloskeletal, Prestasi belajar, *workplace stretching exercise*

**THE APPLICATION OF WORKPLACE STRETCHING EXERCISE CAN  
REDUCE MUSCULOSKELETAL DISORDERS AND BOREDOM AND  
ITS CONTRIBUTION TO STUDENTS LEARNING ACHIEVEMENT IN  
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**ABSTRACT**

This study aims to determine the application of workplace stretching exercise can reduce musculoskeletal disorders and boredom of students and their contribution to students' learning achievement. This study was a quasi-experimental study using a randomized pre-test and post-test group design (treatment by subject design) or the same subject design with variables in the form of (a) musculoskeletal disorders of students recorded with Nordic Body Map questionnaire, (b) boredom students who are recorded with a boredom questionnaire that is valid and reliable, and (c) the contribution of musculoskeletal disorders and boredom to the learning achievement of students who are recorded by giving a test at the end of learning. The treatment given in this study is in the form of workplace stretching exercise. The data obtained were analyzed by t-paired test and regression test at a significance level of 5%. Based on the results of hypothesis testing using the t-paired test, the value of  $p = 0.0001$  ( $p < 0.05$ ) was obtained. That means there is a significant decrease in musculoskeletal disorders and boredom by 33.90% and a decrease in boredom by 28.90% and musculoskeletal and boredom complaints do not contribute to student achievement because the contribution is only 1, 4%. Based on this analysis it can be concluded that the application of workplace stretching exercise can reduce musculoskeletal disorders and boredom of students, but musculoskeletal and boredom complaints do not contribute to learning achievement.

**Keywords: Boredom, musculoskeletal disorders, learning achievement, workplace stretching exercise**