ABSTRACT: With rapid evolution of computer and the Internet technologies, e-learning has become a prevalent learning style for students and learners in different professional fields nowadays because of its convenience and flexibility along with the variety of embedded multimedia applications. In the meanwhile, in response to the potential health risk of extended computer use, many ergonomics training methods have been developed. Nevertheless, even though most people are aware of the potential benefit of the programs, they still feel hesitated to adopt the interventions because of the concern on possible diminished attention level and work performance attributable to frequent occurrence of break. As the old saying goes, “Taking a rest helps going further.” Therefore, often people would leave background music on while working, if possible, or spontaneously stand up, stretching out the body and limbs when reaching the point of exhaustion, in which the aforementioned concern still remains. In this study, we developed an intermittent computer break program and produced a series of music clips to be embedded in the working process, respectively, for prolonged-sitting computer users to examine the effects on users’ attention and learning performance correspondingly. A quasi-experimental design was adopted and 57 college students aged 18-23 from a university were recruited with written consent. Clips of selected piano classic music and stretching exercise animation were scheduled to playback every 10 minutes for 90 seconds for the Music group and Exercise group, respectively. Participants in the control group did not receive any computer break activity. The attention level was detected objectively by the NeuroWave device. Information about the users’ self-perceived benefit was collected from questionnaires. The learning performance was measured by 10 multi-choice questions based on the content of online learning materials. In addition to descriptive statistics, ANOVA and t-test analyses were conducted to test for mean differences among the groups. The results show that while the objective attention levels did not reach significant difference among the three groups, the self-reported attention levels demonstrated significant difference with the Exercise group reporting the highest and the Music group the lowest. Similar results were obtained on the self-reported benefit and learning performance. In summary, intermittent computer break demonstrated to be an effective approach to relieving the concern about working performance and attention from prolonged computer use.