Productivity is an important indicator of economic growth and social health. It is vital in identifying key factors that are described to workers’ health in their workplace and life. Work-related musculoskeletal disorders (WRMDs) are becoming prevalence among the administrative workers around the world due to increased work-related stress instigated by structured and routine workloads which put extreme pressures on their physical and emotional states. This occurrence instigates stress to upsurge, making workers vulnerable to WRMDs. In a highly demanding working environment, the problem of WRMDs is getting more serious as compared to previous days. This phenomenon brings significant negative effect on the productivity of the employees. More recently, psychosocial factors in the work environment have been considered; however, findings across these studies have not been consistent. Therefore, the present study was conducted to investigate the factors that contribute to the prevalence and severity of WRMDs, and to examine the influence of WRMDs on employees’ productivity i.e. absenteeism as well as presenteeism. This study also aims at investigating the moderating role of coping styles on the relationship between stress and WRMDs among administrative workers. Analyzing a total of 368 responses collected from respondents, the findings specify that the prevalence of WRMDs among administrative workers that includes neck (67.1%), shoulders (73.4%) and upper-back disorders (70.1%) was very high. Furthermore, using logistic regression and multiple regression analyses, the present study empirically establishes that personal risk factors are the most important predictor that contributes to the prevalence of WRMDs. The findings also indicate that stress has significant association with seven regions of WRMDs. Besides, WRMDs have significant association with productivity i.e. absenteeism and presenteeism. In this study, personal risk factors are the most influential predictor between psychosocial, WRMDs and productivity. The results of the study also reveal that nine of musculoskeletal regions partially mediate the relationship between stress and absenteeism and presenteeism. On the other hand, this study revealed that there is only significant relationship between stress and emotional coping styles. These findings pose several implications to the managers, among others, managers have to be constantly aware of the psychosocial factors of their subordinates so that appropriate actions can be taken to avoid prolonged effects especially on their productivity i.e. absenteeism and presenteeism. Managers also should be constantly aware on the stress level of their subordinates to avoid from burnout and contribute to WRMDs and as well as work productivity.