

**Interaction between risk factors and musculoskeletal disorders among teachers:  
structural equation model analysis**

**ABSTRACT**

One of the occupations that suffered from musculoskeletal disorder (MSD) is the teaching profession. Previous studies suggested that teachers also experienced musculoskeletal disorders (MSD); however, not many studies have been undertaken in Malaysia. Given this, it is not clear regarding the magnitude and impact of the problem towards those in the teaching profession. The present study was to examine physical factors, psychosocial factors, workload, work-life balance, and general well-being factors predict (influence) MSDs among primary school teachers in Kota Kinabalu. Accordingly, this cross-sectional study conducted among primary school teachers in Kota Kinabalu. Information on demographic, physical factors, psychosocial factors, workload, work-life balance, general well-being, and MSDs was collected using a self-administered questionnaire. A Structural Equation Modeling approach was used in which a structurally fitted model, with satisfactory goodness of fit indices, was developed. The strongest correlation was found between physical factors and general well-being towards MSDs among teachers in Kota Kinabalu, Sabah. Physical factors and general well-being are significant predictors of MSDs among teachers. However, the path from psychosocial factors is not apparent to give an impact on MSD. Physical factors served as the predictors of MSD which independently and significantly influence MSD. While psychosocial factors have to work hand in hand with the workload and work-life balance to give the impact slowly through general well-being to MSD. In other words, psychosocial factors, workload, work-life balance, and general well-being is the 4 factors measurement models which they correlated with each other and give the impact to MSD. Thus, understanding the relationship is valuable and will assist those teachers in planning, designing, or implementing preventive intervention programs to reduce the risk of MSDs.