

## **Chapter 5**

### **Conclusions and Recommendations**

A survey of the Thammasat University staff was conducted to determine the situation of LBP and the potential risk factors of LBP. The results of this study indicate that the 6-month prevalence and incidence of LBP in Thammasat University staff was 22.3% (95%CI: 19.4%-25.2%) and 10.6% (95%CI: 6.3%, 15.0%) respectively. Based on the phase 1 cross-sectional study results, the physical activity as athletic level appears to have less LBP (OR=0.44, 95%CI: 0.2 - 0.9). Our findings have important implications for the prevention of occupational back pain, especially in the university staff. We recommend the development of educational program including enhancing activity take into account this risk factor in order to reduce the frequency of low back injuries in university staff and improve their work efficiency.

While in phase 2 cohort study, the size of our study does not provide the statistical power to detect differences of the trunk muscle performance characteristics. The small sample size may illustrate the lack of statistical power in this study. However, researcher recommended that the endurance of back muscles should be a predictive factor for LBP in the future study.

For further study for predicting LBP, we recommended that a larger sample size would improve the precision of our estimate. Future cohort study should be undertaken to evaluate the causality of LBP in the university staff, other aspects of work-related including ergonomic evaluation and work environment will be considered for a risk factor. Moreover, period of follow-up should be extended more than 6 month in order to track the long-term effect of trunk muscle performance on LBP.