

## **CHAPTER V CONCLUSIONS AND RECOMMENDATIONS**

### **A. Conclusions**

1. Based on individual characteristics, most respondents were female, and more than half of them reported having the habit of stretching every hour and resting their eyes by looking at a static object every 20 minutes while using a laptop. In terms of nutritional status, most respondents were in the normal BMI category, although underweight, overweight, and obesity categories were also found. The descriptive analysis showed that the respondents were generally in early adulthood, with a median age of 21 years, and the duration of sitting while using a laptop varied widely, with a median of 5 hours per day.
2. The results of posture assessment using the Rapid Upper Limb Assessment (RULA) instrument indicated that most respondents were in the slight risk category.
3. The assessment of musculoskeletal complaints using the Nordic Body Map (NBM) showed that most respondents experienced mild MSD complaints.
4. The results of Somers' D analysis indicated that there was no significant relationship between sitting posture while using a laptop and MSD complaints, although a positive tendency was observed, the strength of the relationship was not sufficient to demonstrate statistical significance.

### **B. Recommendations**

1. For Respondent  
Respondents are expected to maintain good posture when using laptops, as most of them already adopt the correct position and only experience mild MSDs. In addition, respondents are advised to continue stretching regularly and regulate their sitting time so that their symptoms do not worsen in the future.
2. For Educational Institutions  
Educational institutions are expected to provide regular education on ergonomics and the proper use of laptops to students. In addition, institutions can also facilitate an ergonomic learning environment, such

as providing standard-compliant desks and chairs, and encouraging students to adopt ergonomic body positions to minimize the risk of musculoskeletal complaints.

3. For The Next Researcher

Future researchers are advised to add other variables that may potentially influence MSD complaints, such as knowledge of ergonomics and ergonomic support facilities, add variations in sitting posture when using a laptop, and establish standards for taking valid photographs of respondents to make the analysis more objective.

