

## **Fatigue Assessment Scale (FAS) Result and Discussion**

FAS, a questionnaire used to assess subjective fatigue over an extended period, comprises ten questions graded progressively from 1 to 5, indicating disagreement to agreement. Total scores range from 10 to 50, with higher scores indicating greater fatigue severity. De Vries *et al.* introduced the FAS scale [1], categorizing fatigue degrees as follows: scores below 22 indicate a healthy or normal fatigue degree; scores between 22~34 indicate mild to moderate fatigue; and scores over 35 indicate severe fatigue. In the experiment, the ten subjects completed the FAS questionnaires before and after participating. Their scores were observed to evaluate subjective fatigue levels. A comparison of the FAS questionnaires revealed that four of ten subjects were deemed healthy before the experiment, while five exhibited mild fatigue states. Subject 9 had already experienced severe fatigue before the experiment. Post-experiment questionnaire results indicated that eight subjects experienced a shift to severe fatigue, while the remaining two approached moderate and severe fatigue levels. The average pre-experiment score was 23.4, increasing to 37.5 post-experiment—an average rise of 14.1 points. This significant increase suggests that the experiment notably induced subjective fatigue among the participants. This finding will be compared with subsequent objective fatigue assessments to verify its accuracy.

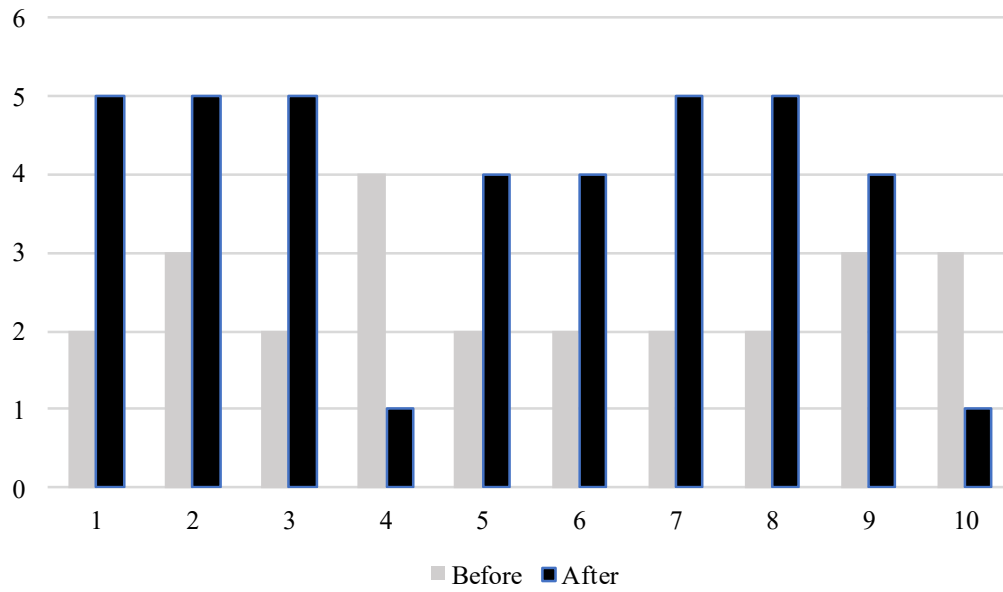


Figure 1 FAS questionnaire results for subject No. 1

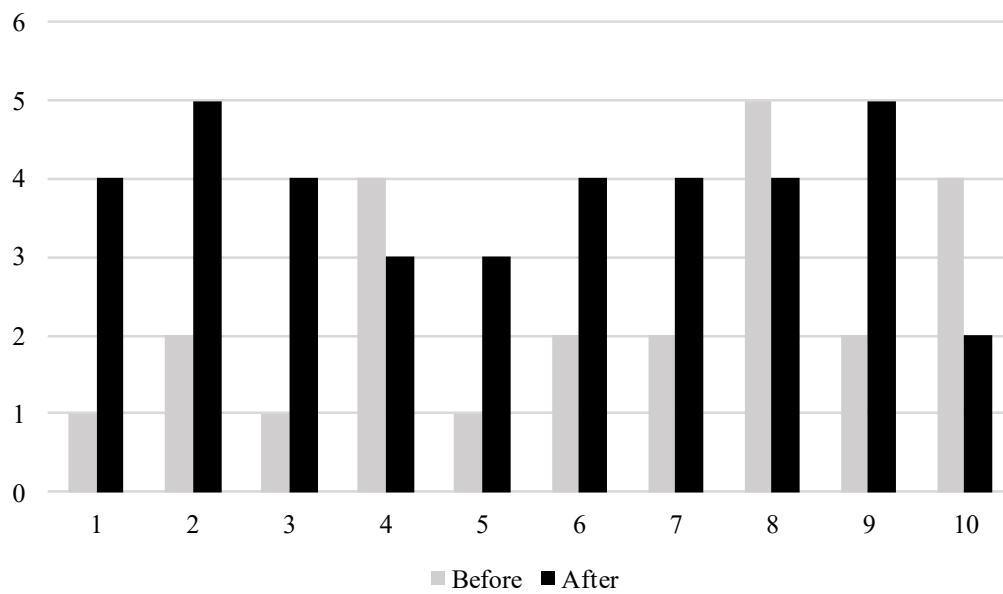


Figure 2 FAS questionnaire results for subject No. 2

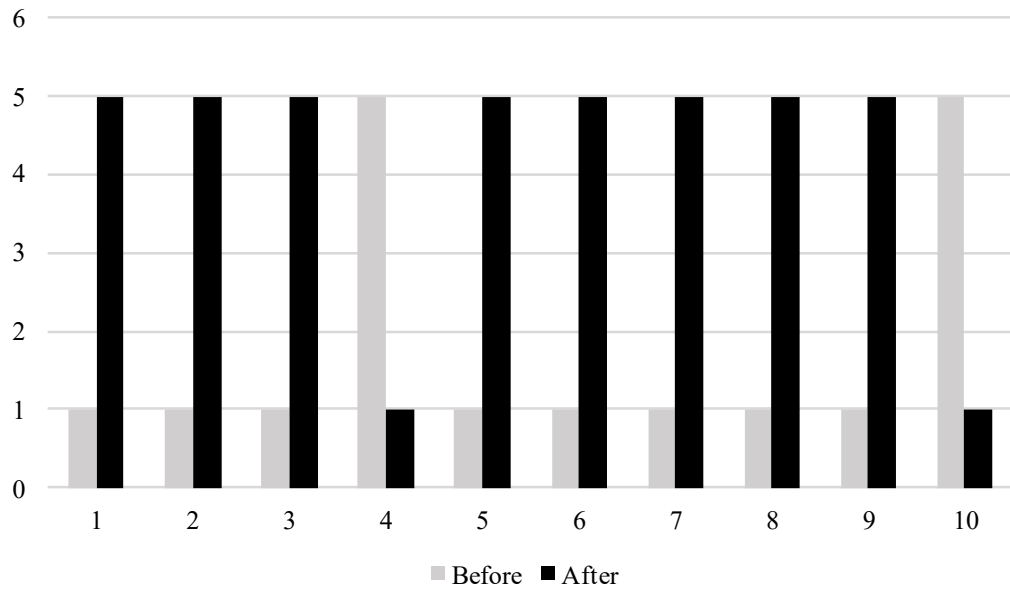


Figure 3 FAS questionnaire results for subject No. 3

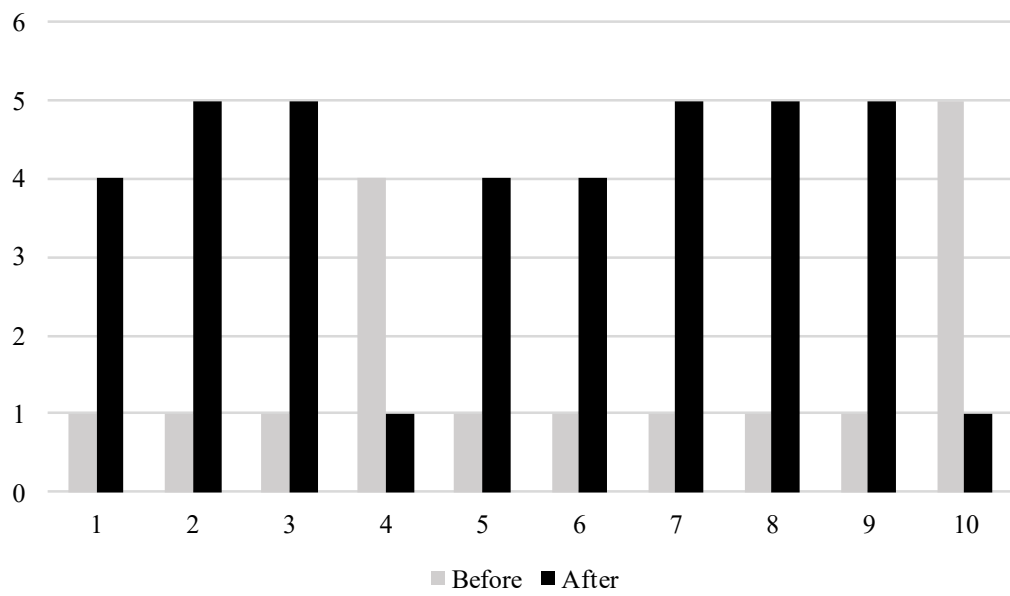


Figure 4 FAS questionnaire results for subject No. 4

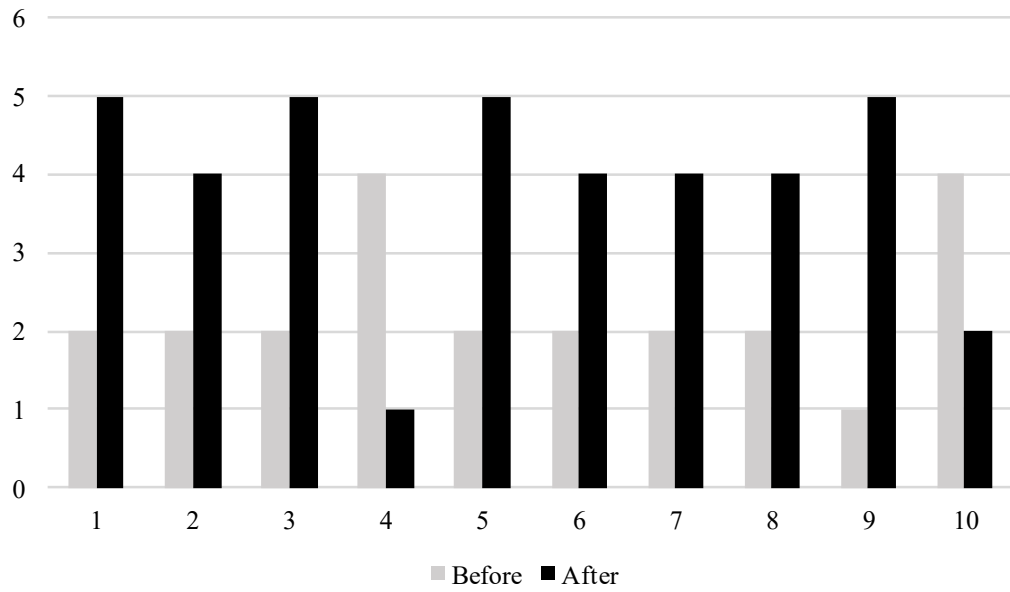


Figure 5 FAS questionnaire results for subject No. 5

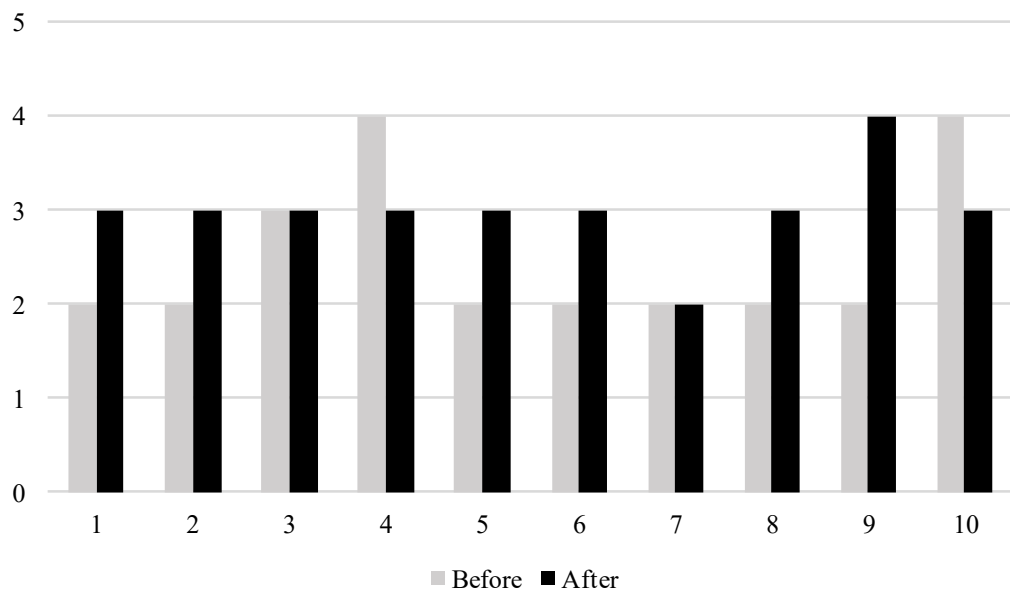


Figure 6 FAS questionnaire results for subject No. 6

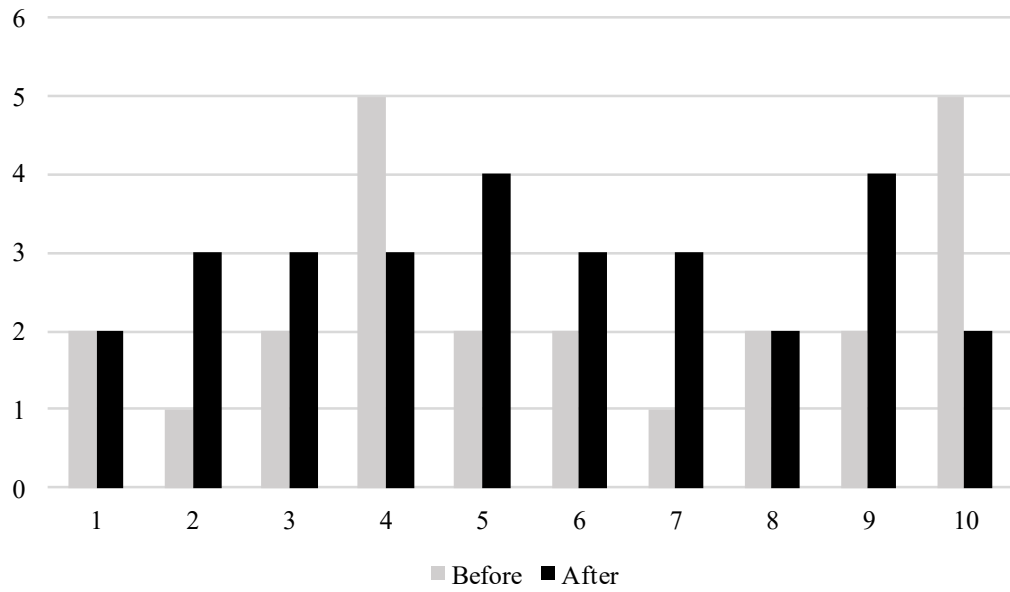


Figure 7 FAS questionnaire results for subject No. 7

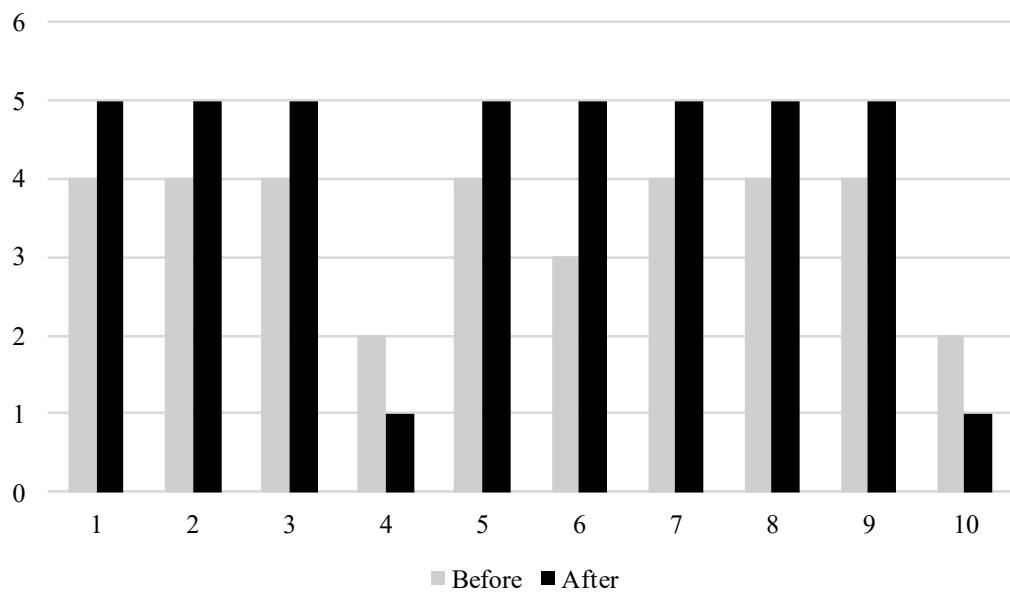


Figure 8 FAS questionnaire results for subject No. 8

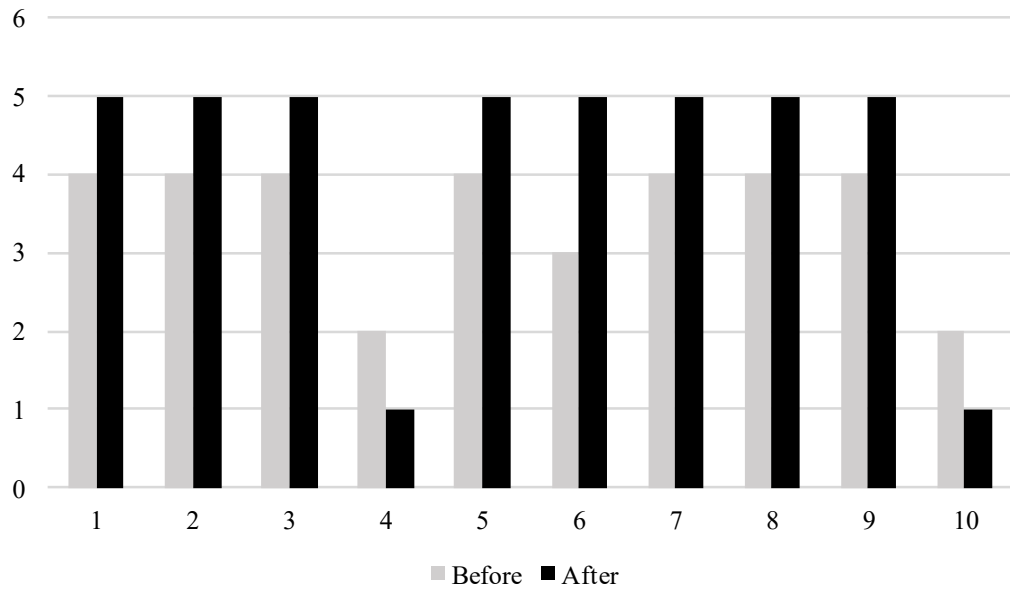


Figure 9 FAS questionnaire results for subject No. 9

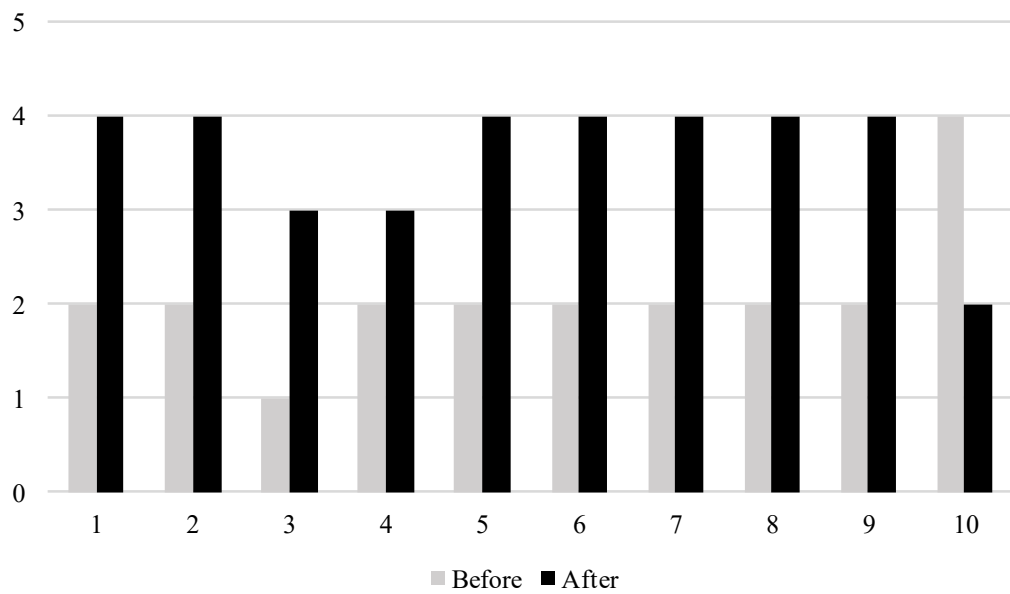


Figure 10 FAS questionnaire results for subject No. 10

## References

1. J. De Vries, H. Michielsen, G. L. Van Heck, M. Drent, Measuring fatigue in sarcoidosis: the Fatigue Assessment Scale (FAS). *British journal of health psychology*, 9(3) (2004), 279-291. <https://doi.org/10.1348/1359107041557048>.