

## Supplementary Materials

**Table S1. Items of secondary outcome variables (except PSQI scores).**

|  |                      |                                  |                        |                  |
|--|----------------------|----------------------------------|------------------------|------------------|
| 1. How do you get along with your roommates at present?  |                      |                                  |                        |                  |
| ① Very Bad   | ② Bad                | ③ Ordinary                       | ④ Good                 | ⑤ Very Good      |
| 2. Have you considered the influence of your own behavior on your roommates when she or he was asleep in the last month?                   |                      |                                  |                        |                  |
| ① Never  | ② Occasionally       | ③ Sometimes                      | ④ Often                | ⑤ Always         |
| 3. In the last month, if your behavior had affected your roommate's sleep, after you realised or were reminded by your roommate you would: |                      |                                  |                        |                  |
| ① stop immediately   | ② stop later         | ③ continue to do, but be careful | ④ ignore him (her)     |                  |
| 4. Has there been any conflict in your dormitory due to sleep problems in the last month?  |                      |                                  |                        |                  |
| ① Never  | ② Occasionally       | ③ Sometimes                      | ④ Often                | ⑤ Always         |
| 5. How important do you think sleep is?  |                      |                                  |                        |                  |
| ① Completely unimportant   | ② Not very important | ③ Moderate                       | ④ Relatively important | ⑤ Very important |

**Table S2. Items in the feedback survey for the intervention group.**

|   |                                |                          |                     |   |
|---|--------------------------------|--------------------------|---------------------|---|
| 1. After the intervention, what changes do you think in the sleeping environment of your dormitory? |                                |                          |                     |   |
| ① Significantly got worse   | ② A little worse               | ③ No change              | ④ Improved a little | ⑤ Significantly improved                |
| 2. After the intervention, do you feel your sleep quality has changed?                              |                                |                          |                     |   |
| ① Significantly got worse   | ② A little worse               | ③ No change              | ④ Improved a little | ⑤ Significantly improved                |
| 3. In general, can you accept this form of sleep intervention?                                      |                                |                          |                     |   |
| ① Completely unacceptable   | ② Not very acceptable          | ③ Reluctantly acceptable | ④ Acceptable        | ⑤ Very acceptable                       |
| 4. Which intervention measures do you think are the most effective? (Multiple choices are allowed)  |                                |                          |                     |   |
| ① Health education (oral presentation+ brochures)   | ② Making dormitory sleep rules | ③ Provide earplugs       | ④ Provide eye mask  | ⑤ Other measures, please explain: _____ |

**Table S3. Results of the sensitivity analysis.**

| Sensitivity analyses                           | Outcome variables                                | Interaction term: time*group |      |         |
|--|--|------------------------------|------|---------|
|  |  | $\beta$                      | SE   | p value |
| Linear mixed-effects models with no covariates | PSQI total score                                 | -0.54                        | 0.26 | 0.041   |
|  | Self-rated dormitory sleep environment           | 0.11                         | 0.10 | 0.292   |
|  | Roommates' influence on sleep schedule           | -0.20                        | 0.11 | 0.076   |
|  | Dormitory environment influence on sleep quality | -0.06                        | 0.11 | 0.544   |
| Adjusting for additional covariates            | PSQI total score                                 | -0.65                        | 0.25 | 0.008   |
|  | Self-rated dormitory sleep environment           | 0.13                         | 0.11 | 0.228   |
|  | Roommates' influence on sleep schedule           | -0.21                        | 0.11 | 0.069   |
|  | Dormitory environment influence on sleep quality | -0.08                        | 0.11 | 0.480   |

*Note.* SE = standard error.