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| --- | --- | --- | --- |
| **Supplementary Table 2: Participant answers to questions on Universal design principles (1 = strongly disagree, 5 = Strongly agree)** | | | |
| **Question** | **Control device** | **Test device** | **p-value** |
| **Equitable use** |  |  |  |
| 1. Everybody can use this device in the same way. | 3.73 | 3.77 | .742 |
| 2. Differences in personal abilities will not influence the use of this device. | 3.24 | 3.29 | .732 |
| 3. This device appeals to all potential users. | 3.41 | 3.61 | .096 |
| **Flexibility in use** |  |  |  |
| 4. There is more than one way to effectively use this device. | 2.98 | 3.17 | .122 |
| 5. This device can be used with either the right or left hand alone. | 3.91 | 2.62 | .000\* |
| 6. This device does not require user accuracy and precision. | 1.94 | 2.35 | .001\* |
| 7. This device can be used at any pace. | 3.62 | 3.48 | .182 |
| **Simple and intuitive use** |  |  |  |
| 8. This device is as simple and straightforward as it can be. | 3.85 | 3.73 | .321 |
| 9. An untrained person could use this device without instructions. | 3.27 | 3.08 | .150 |
| 10. The most important features of this device are the most obvious. | 3.48 | 3.79 | .022\* |
| 11. This device provides feedback to the user. | 2.73 | 2.95 | .062 |
| **Perceptible information** |  |  |  |
| 12. The features of this device can be clearly described in words (e.g., in instruction manuals or on telephone help lines). | 3.77 | 4.02 | .041\* |
| 13. This device can be used by people who use assistive tools (e.g., hearing aids) | 4.03 | 4.11 | .321 |
| **Tolerance for error** |  |  |  |
| 14. The features of this device are arranged according to their importance. | 3.26 | 3.32 | .454 |
| 15. This device draws attention to errors or hazards. | 2.82 | 3.02 | .107 |
| 16. If the user makes a mistake with this device, it will not cause damage or injure the user. | 2.76 | 2.88 | .020\* |
| 17. This device prompts the user to pay attention during critical tasks. | 3.33 | 3.55 | .042\* |
| **Low physical effort** |  |  |  |
| 18. This device can be used comfortably, without awkward movements or postures. | 4.05 | 3.44 | .000\* |
| 19. This device can be used by someone who is weak or tired. | 3.64 | 2.94 | .000\* |
| 20. This device can be used without causing fatigue or pain. | 4.02 | 3.67 | .004\* |
| 21. This device can be used without needing to rest after use. | 4.20 | 4.06 | .161 |
| **Size and space for approach and use** |  |  |  |
| 22. It is easy to see all the important elements of this device from any position (e.g., from standing or seated), regardless of a person’s size. | 3.67 | 3.86 | .041\* |
| 23. It is easy to reach all the important elements of this device from any position (e.g., from standing or seated), regardless of a person’s size. | 3.91 | 3.85 | .454 |
| 24. This device can be used by a person with hands of any size. | 4.06 | 3.71 | .013\* |