# Appendix

Appendix A: Research on the List of Functional Requirements for the Intelligent Diagnosis and Treatment System for Cognitive Impairment in the Home

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| Key Features List | | |
| Please rate your comments on a scale from 1 (not useful) to 7 (very useful) | | |
| FU1 | Which training modality do I prefer during long-term cognitive training (1 = strong preference for clinical inpatient training to 7 = strong preference for home-based training) | 1 2 3 4 5 6 7 |
| FU2 | The use of VR headset equipment during training has worked for my training results | 1 2 3 4 5 6 7 |
| FU3 | Watching the introductory video helped me become more receptive to in-home training | 1 2 3 4 5 6 7 |
| FU4 | When I train at home I wish I had someone to train with. | 1 2 3 4 5 6 7 |
| FU5 | I think training with other people improves my workouts | 1 2 3 4 5 6 7 |
| FU6 | Communicate with other users with similar problems (share experiences, opinions, etc.) | 1 2 3 4 5 6 7 |

Appendix B：Measurement Information for the Extended UTAUT Model

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| Please rate your opinion on scale from 1 (Strongly Disagree) to 7 (Strongly Agree) | | |
| Strongly Disagree → Strongly Agree | | |
| Performance Expectations (PE) - the extent to which individuals believe that using BVHCT will help improve their health performance/quality | | |
| PE1 | I have found that using BVHCT will help monitor my health. | 1 2 3 4 5 6 7 |
| PE2 | I find that using BVHCT makes me feel safer in my daily life. | 1 2 3 4 5 6 7 |
| PE3 | BVHCT improves ease of access to health care services. | 1 2 3 4 5 6 7 |
| PE4 | BVHCT improves my quality of life. | 1 2 3 4 5 6 7 |
| PE5 | Overall, I found that BVHCT would be very useful. | 1 2 3 4 5 6 7 |
| Expectation of Effort (EE) - the degree of difficulty associated with the use of BVHCT | | |
| EE1 | I found it very easy to use BVHCT. | 1 2 3 4 5 6 7 |
| EE2 | I found it easy to learn to use BVHCT. | 1 2 3 4 5 6 7 |
| EE3 | I found BVHCT easy to understand and clear to me. | 1 2 3 4 5 6 7 |
| EE4 | All in all, I think it would be convenient to use BVHCT. | 1 2 3 4 5 6 7 |
| Social Influence (SI) - Influence of Peer and Colleague Opinions | | |
| SI1 | Peers and coworkers will support my use of BVHCT. | 1 2 3 4 5 6 7 |
| SI2 | People who influence my behavior will support my use of the BVHCT system. | 1 2 3 4 5 6 7 |
| SI3 | The people who are important to me will support me in using the BVHCT system. | 1 2 3 4 5 6 7 |
| Facilitating Conditions (FC) - Use of BVHCT technical support | | |
| FC1 | I'm sure I could use guidance in deciding whether or not to use BVHCT. | 1 2 3 4 5 6 7 |
| FC2 | I believe I have access to specialized instructions on using BVHCT. | 1 2 3 4 5 6 7 |
| FC3 | I'm sure there are specific people (or groups) that assist with difficulties with in-home cognitive diagnosis and treatment(e.g.,nursing services or call centers). | 1 2 3 4 5 6 7 |
| Computer Anxiety (CA) - Anxiety about using the BVHCT option | | |
| CA1 | With patience and motivation, anyone can learn to train with VR-style games. | 1 2 3 4 5 6 7 |
| CA2 | I don't hesitate to use VR-style game training to prevent mistakes. | 1 2 3 4 5 6 7 |
| CA3 | I'd like to learn about and train with VR-style games if I get the chance. | 1 2 3 4 5 6 7 |
| CA4 | I believe that computers are a necessary tool in educational and work environments. | 1 2 3 4 5 6 7 |
| Perceived Security (PS) - the extent to which information technology is used to manage personal health information | | |
| PS1 | I feel safe using the Internet and computers to send personal health information. | 1 2 3 4 5 6 7 |
| PS2 | The Internet is a safe way to send sensitive personal information. | 1 2 3 4 5 6 7 |
| PS3 | I feel completely safe giving out my sensitive personal information on the Internet. | 1 2 3 4 5 6 7 |
| PS4 | In summary, using BVHCT and an Internet connection is a secure way to transmit sensitive personal health information. | 1 2 3 4 5 6 7 |
| Doctor's Comment (DC) - The Expert Influence of Doctors | | |
| DC1 | I trust the doctor's judgment. | 1 2 3 4 5 6 7 |
| DC2 | The doctor's expertise makes him/her more likely to be right. | 1 2 3 4 5 6 7 |
| DC3 | Doctors are experienced and usually know the condition best. | 1 2 3 4 5 6 7 |
| DC4 | The doctor's knowledge is usually correct. | 1 2 3 4 5 6 7 |
| DC5 | I trust my doctor's judgment about using BVHCT. | 1 2 3 4 5 6 7 |
| DC6 | In the case of deciding to use BVHCT, I wasn't as clear as my doctor about what needed to be done. | 1 2 3 4 5 6 7 |
| DC7 | Doctors are smart. | 1 2 3 4 5 6 7 |
| Behavioral Intent to Use (BI) - the extent to which an individual intends to use BVHCT | | |
| BI1 | I would use it if there was a medical need for training therapy in a long-term home state. | 1 2 3 4 5 6 7 |
| BI2 | I think I will use BVHCT regularly in the future if medically necessary. | 1 2 3 4 5 6 7 |
| BI3 | I plan to use BVHCT in the future if medically necessary. | 1 2 3 4 5 6 7 |
| BI4 | If I had access to in-home cognitive therapy services, I would use them as needed. | 1 2 3 4 5 6 7 |
| Practical Acceptance (TA) - the degree of acceptance by individuals in practical applications | | |
| TA1 | After using BVHCT, I will take full advantage of the features and services it offers and actively participate in training and therapy activities. | 1 2 3 4 5 6 7 |
| TA2 | After a period of training and treatment, individuals observed a significant improvement in their health status with BVHCT | 1 2 3 4 5 6 7 |
| TA3 | Personally, I find BVHCT's interface design friendly, easy to use and compatible with one's life and daily activities | 1 2 3 4 5 6 7 |