

Potential Effectiveness and Efficiency Issues in usability evaluation within Digital Health: A Systematic Literature Review

Bilal Maqbool^{a,*}, Sebastian Herold^a

^aDepartment of Mathematics and Computer Science, Faculty of Health, Science and Technology, Karlstad University, Universitetsgatan 2, Karlstad, 651 88, Värmland, Sweden

Primary selected studies (n= 610)

- [S1] M. Alabdulhafith, A. Alqarni, S. Sampalli, Understanding nurses' perception regarding the use of nfc application during medication administration, in: Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems, 2016, pp. 2976–2983.
- [S2] C. A. Alexandru, Considerations of interface efficiency in scaling up telehealthcare systems, *Procedia Computer Science* 98 (2016) 308–315.
- [S3] A. Atashi, R. Khajouei, A. Azizi, A. Dadashi, User interface problems of a nationwide inpatient information system: A heuristic evaluation, *Applied clinical informatics* 7 (1) (2016) 89–100.
- [S4] N. Baghaei, D. Nandigam, J. Casey, A. Direito, R. Maddison, Diabetic mario: Designing and evaluating mobile games for diabetes education, *Games for health journal* 5 (4) (2016) 270–278.
- [S5] N. B. Baltierra, K. E. Muessig, E. C. Pike, S. LeGrand, S. S. Bull, L. B. Hightow-Weidman, More than just tracking time: complex measures of user engagement with an internet-based health promotion intervention, *Journal of biomedical informatics* 59 (2016) 299–307.
- [S6] C. Boletsis, S. McCallum, Evaluating a gaming system for cognitive screening and sleep duration assessment of elderly players: a pilot study, in: International Conference on Games and Learning Alliance, Springer, 2016, pp. 107–119.
- [S7] B. Brown, P. Balatsoukas, R. Williams, M. Sperrin, I. Buchan, Interface design recommendations for computerised clinical audit and feedback: hybrid usability evidence from a research-led system, *International journal of medical informatics* 94 (2016) 191–206.
- [S8] D. Davis, S. Jiang, Usability testing of existing type 2 diabetes mellitus websites, *International journal of medical informatics* 92 (2016) 62–72.
- [S9] J. Dixon, J. Dehlinger, S. D. Dixon, J. Chakraborty, Usability testing results for a mobile medical transition application, in: International Conference of Design, User Experience, and Usability, Springer, 2016, pp. 569–577.
- [S10] L. C. Dukes, N. Meehan, L. F. Hodges, Usability evaluation of a pediatric virtual patient creation tool, in: 2016 IEEE International Conference on Healthcare Informatics (ICHI), IEEE, 2016, pp. 118–128.
- [S11] Y.-M. Fang, Y.-P. Chou, B.-C. Chu, Health information display for elderly people: interface attributes, usability, and emotional reaction, in: 2016 International Conference on Applied System Innovation (ICASI), IEEE, 2016, pp. 1–4.
- [S12] N. Genes, M. S. Kim, F. L. Thum, L. Rivera, R. Beato, C. Song, J. Soriano, J. Kannry, K. Baumlin, U. Hwang, Usability evaluation of a clinical decision support system for geriatric ed pain treatment, *Applied clinical informatics* 7 (1) (2016) 128.
- [S13] M. Georgsson, N. Staggers, An evaluation of patients' experienced usability of a diabetes mhealth system using a multi-method approach, *Journal of biomedical informatics* 59 (2016) 115–129.
- [S14] M. Georgsson, N. Staggers, C. Weir, A modified user-oriented heuristic evaluation of a mobile health system for diabetes self-management support, *Computers, Informatics, Nursing* 34 (2) (2016) 77.
- [S15] M. Georgsson, N. Staggers, Quantifying usability: an evaluation of a diabetes mhealth system on effectiveness, efficiency, and satisfaction metrics with associated user characteristics, *Journal of the American Medical Informatics Association* 23 (1) (2016) 5–11.
- [S16] A. L. Hartzler, B. Weis, C. Cahill, W. Pratt, A. Park, U. Backonja, D. W. McDonald, Design and usability of interactive user profiles for online health communities, *ACM Transactions on Computer-Human Interaction (TOCHI)* 23 (3) (2016) 1–33.
- [S17] G. Hultman, J. Marquard, E. Arsoniadis, P. Mink, R. Rizvi, T. Ramer, S. Khairat, K. Fickau, G. B. Melton, Usability testing of two ambulatory ehr navigators, *Applied clinical informatics* 7 (2) (2016) 502.
- [S18] M. Immonen, H. Similä, E. A. Arabiurutia, M. J. C. Mañas, J. B. Laguña, C. P. García, C. G. Gordillo, Development and user feedback of home technology for preventing falls in older adults, in: 2016 IEEE-EMBS International Conference on Biomedical and Health Informatics (BHI), IEEE, 2016, pp. 122–125.
- [S19] H. M. Johnsen, M. Fossum, P. Vivekananda-Schmidt, A. Fruhling, Å. Sletebø, Teaching clinical reasoning and decision-making skills to nursing students: Design, development, and usability evaluation of a serious game, *International journal of medical informatics* 94 (2016) 39–48.
- [S20] S. Jones, A. Keane, A. Stawiarski, R. Fatus, B. Kane, The impact of application system messages on the usability of healthcare software applications, in: 2016 IEEE 29th International Symposium on Computer-Based Medical Systems (CBMS), IEEE, 2016, pp. 306–311.
- [S21] M. Jung, S.-M. Park, Y. Ryu, G. Lim, J. Song, Understanding patients' needs in diabetes for mobile health—a case study, in: 2016 IEEE 29th International Symposium on Computer-Based Medical Systems (CBMS), IEEE, 2016, pp. 66–67.
- [S22] A. Karakostas, I. Lazarou, G. Meditskos, T. G. Stavropoulos, I. Kompatiaris, M. Tsolaki, Intelligent user interfaces to support diagnosis and assessment of people with dementia: An expert evaluation, in: International Symposium on Pervasive Computing Paradigms for Mental Health, Springer, 2016, pp. 196–206.
- [S23] P. Kardas, K. Lewandowski, S. Bromuri, Type 2 diabetes patients benefit from the commodity12 mhealth system: results of a randomised trial, *Journal of medical systems* 40 (12) (2016) 1–8.
- [S24] E. Kaur, P. D. Haghghi, A context-aware usability model for mobile

*Corresponding author

Email addresses: bilal.maqbool@kau.se (Bilal Maqbool), sebastian.herold@kau.se (Sebastian Herold)

- health applications, in: Proceedings of the 14th International Conference on Advances in Mobile Computing and Multi Media, 2016, pp. 181–189.
- [S25] S. Khodambashi, Ø. Nytrø, Usability evaluation of published clinical guidelines on the web: a case study, in: 2016 IEEE 29th International Symposium on Computer-Based Medical Systems (CBMS), IEEE, 2016, pp. 140–145.
- [S26] K. Kim, Y. Lee, D. Oh, Development and testing of a serious game for the elderly (title: 'paldokangsan3'), in: International Conference on Games and Learning Alliance, Springer, 2016, pp. 276–285.
- [S27] G. Koch, B. J. Wakefield, G. L. Alexander, M. A. Wilson, C. Becker, Usability of american nurses association state web sites: A follow-up evaluation, *CIN: Computers, Informatics, Nursing* 34 (5) (2016) 215–223.
- [S28] E. I. Konstantinidis, A. S. Billis, C. A. Mouzakidis, V. I. Zilidou, P. E. Antoniou, P. D. Bamidis, Design, implementation, and wide pilot deployment of fitforall: an easy to use exergaming platform improving physical fitness and life quality of senior citizens, *IEEE journal of biomedical and health informatics* 20 (1) (2016) 189–200.
- [S29] C. Kostaki, C. Goumopoulos, Development and evaluation of an exergaming application for improving seniors' well-being, in: Proceedings of the 20th Pan-Hellenic Conference on Informatics, 2016, pp. 1–6.
- [S30] T. Le, H. J. Thompson, G. Demiris, A comparison of health visualization evaluation techniques with older adults, *IEEE computer graphics and applications* 36 (4) (2016) 67–77.
- [S31] H. Lei-Juan, L. Jian-Bing, X. Xin-Zhu, Applying usability testing in the evaluation of products and services for elderly people, *DEStech Transactions on Engineering and Technology Research (sste)*.
- [S32] Y.-C. Liu, C.-H. Chen, C.-W. Lee, Y.-S. Lin, H.-Y. Chen, J.-Y. Yeh, S. Y.-H. Chiu, Design and usability evaluation of user-centered and visual-based aids for dietary food measurement on mobile devices in a randomized controlled trial, *Journal of biomedical informatics* 64 (2016) 122–130.
- [S33] A. I. Martins, A. Queirós, A. G. Silva, N. P. Rocha, Usability evaluation of ambient assisted living systems using a multi-method approach, in: Proceedings of the 7th international conference on software development and technologies for enhancing accessibility and fighting info-exclusion, 2016, pp. 261–268.
- [S34] M. A. McClellan, R. P. Karumur, R. I. Vogel, S. V. Petzel, J. Cragg, D. Chan, J. A. Jacko, F. Sainfort, M. A. Geller, Designing an educational website to improve quality of supportive oncology care for women with ovarian cancer: an expert usability review and analysis, *International journal of human-computer interaction* 32 (4) (2016) 297–307.
- [S35] P. R. Mosaly, L. Mazur, L. B. Marks, Usability evaluation of electronic health record system (ehrs) using subjective and objective measures, in: Proceedings of the 2016 ACM on Conference on Human Information Interaction and Retrieval, 2016, pp. 313–316.
- [S36] S. Noori, E. I. Mansor, N. Ibrahim, J. Hinds, Promoting awareness of depression with a mobile application: A usability study and evaluation, in: 2016 4th International Conference on User Science and Engineering (i-USER), IEEE, 2016, pp. 57–62.
- [S37] P. Pesl, P. Herrero, M. Reddy, M. Xenou, N. Oliver, D. Johnston, C. Toumazou, P. Georgiou, An advanced bolus calculator for type 1 diabetes: system architecture and usability results, *IEEE journal of biomedical and health informatics* 20 (1) (2016) 11–17.
- [S38] A. Pyae, T. N. Liukkonen, T. Saarenpää, M. Luimula, P. Granholm, J. Smed, When japanese elderly people play a finnish physical exercise game: A usability study., *Journal of Usability Studies* 11 (4).
- [S39] A. Pyae, M. Luimula, J. Smed, Pre-studies on using digital games for the elderly's physical activities, in: International Conference on Well-Being in the Information Society, Springer, 2016, pp. 82–96.
- [S40] A. Pyae, R. Raitoharju, M. Luimula, P. Pitkäkangas, J. Smed, Serious games and active healthy ageing: a pilot usability testing of existing games, *International Journal of Networking and Virtual Organisations* 16 (1) (2016) 103–120.
- [S41] P. Rasche, P. Choe, S. Theis, M. Wille, C. Bröhl, L. Finken, S. Becker, C. M. Schlick, A. Mertens, Usability evaluation of blood glucose meters for elderly diabetic patients, in: International Conference on Cross-Cultural Design, Springer, 2016, pp. 686–694.
- [S42] S. Razaq, A. Batool, U. Ali, M. S. Khalid, U. Saif, M. Naseem, Iterative design of an immunization information system in pakistan, in: Proceedings of the 7th Annual Symposium on Computing for Development, 2016, pp. 1–10.
- [S43] J. Reis, L. MacKenzie, T. Soelberg, J. Smith, Assessment of the usability and impact of the idaho health data exchange (ihde), *Journal of medical systems* 40 (4) (2016) 102.
- [S44] I. Rodríguez, C. Fuentes, V. Herskovic, M. Campos, Monitoring chronic pain: comparing wearable and mobile interfaces, in: International Conference on Ubiquitous Computing and Ambient Intelligence, Springer, 2016, pp. 234–245.
- [S45] J. D. Rothstein, L. Jennings, A. Moorthy, F. Yang, L. Gee, K. Romano, D. Hutchful, A. B. Labrique, A. E. LeFevre, Qualitative assessment of the feasibility, usability, and acceptability of a mobile client data app for community-based maternal, neonatal, and child care in rural ghana, *International journal of telemedicine and applications* 2016.
- [S46] A. Schuh, M. de Borba Campos, M. Bez, J. B. Mossmann, Usability evaluation of a wheelchair virtual simulator controlled by a brain-computer interface: Lessons learned to the design process, in: International Conference on Universal Access in Human-Computer Interaction, Springer, 2016, pp. 92–101.
- [S47] K. Seaborn, Y. Satoh, D. I. Fels, Usability and safety of a hud during powered chair navigation: A pilot study, in: International Conference on Universal Access in Human-Computer Interaction, Springer, 2016, pp. 628–638.
- [S48] K. Song, S. Lee, S.-B. Pyun, L. Kim, Comparative study of tangible tabletop and computer-based training interfaces for cognitive rehabilitation, in: International Conference on Universal Access in Human-Computer Interaction, Springer, 2016, pp. 414–424.
- [S49] N. Staggers, B. Elias, E. Makar, J. Hunt, G. L. Alexander, Identifying and addressing critical usability issues to strengthen nurses' interactions with health it, in: International Conference on Universal Access in Human-Computer Interaction, Springer, 2016, pp. 204–213.
- [S50] C. Tofthagen, K. E. Kip, D. Passmore, I. Loy, D. L. Berry, Usability and acceptability of a web-based program for chemotherapy-induced peripheral neuropathy, *CIN: Computers, Informatics, Nursing* 34 (7) (2016) 322–329.
- [S51] S. Tokunaga, H. Horiuchi, H. Takatsuka, S. Saiki, S. Matsumoto, M. Nakamura, K. Yasuda, Implementation and evaluation of interactive memory-aid agent service for people with dementia, in: International Conference on Digital Human Modeling and Applications in Health, Safety, Ergonomics and Risk Management, Springer, 2016, pp. 357–368.
- [S52] W.-C. Tsai, C.-L. Chang, C.-M. Tsai, A usability research for developing and deploying chronic pain relief treatment applications for older adults, in: International Conference on Human Aspects of IT for the Aged Population, Springer, 2016, pp. 245–252.
- [S53] B. Tulu, D. Strong, L. Wang, Q. He, E. Agu, P. Pedersen, S. Djamasbi, Design implications of user experience studies: the case of a diabetes wellness app, in: 2016 49th Hawaii International Conference on System Sciences (HICSS), IEEE, 2016, pp. 3473–3482.
- [S54] M. Tyllinen, J. Kaipio, T. Lääveri, M. H. Nieminen, We need numbers! heuristic evaluation during demonstrations (hed) for measuring usability in it system procurement, in: Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems, 2016, pp. 4129–4141.
- [S55] E. van der Meulen, M. A. Cidota, S. G. Lukosch, P. J. Bank, A. J. van der Helm, V. T. Visch, A haptic serious augmented reality game for motor assessment of parkinson's disease patients, in: 2016 IEEE International Symposium on Mixed and Augmented Reality (ISMAR-Adjunct), IEEE, 2016, pp. 102–104.
- [S56] M. M. van Engen-Verheul, L. W. Peute, N. F. de Keizer, N. Peek, M. W. Jaspers, Optimizing the user interface of a data entry module for an electronic patient record for cardiac rehabilitation: A mixed method usability approach, *International journal of medical informatics* 87 (2016) 15–26.
- [S57] C.-H. Wang, Usability assessment of a virtual fitness platform on smart tv for elderly health promotion, in: International Conference on Human Aspects of IT for the Aged Population, Springer, 2016, pp. 123–132.
- [S58] P. Whittington, H. Dogan, A smartdisability framework: enhancing user interaction.
- [S59] T. Wollmann, F. Abtahi, A. Eghdam, F. Seoane, K. Lindecrantz, M. Haag, S. Koch, User-centred design and usability evaluation of a heart rate variability biofeedback game, *IEEE Access* 4 (2016) 5531–5539.
- [S60] S. Wolpin, B. Halpenny, E. Sorrentino, M. Stewart, J. McReynolds, I. Cvitkovic, P. Chang, D. Berry, Usability testing the "personal patient profile–prostate" in a sample of african american and hispanic men, *CIN: Computers, Informatics, Nursing* 34 (7) (2016) 288–296.
- [S61] L. Xu, D. Wen, X. Zhang, J. Lei, Assessing and comparing the usability

- of chinese ehrs used in two peking university hospitals to ehrs used in the us: a method of rua, *International journal of medical informatics* 89 (2016) 32–42.
- [S62] P.-Y. Yen, B. Lara, M. Lopetegui, A. Bharat, S. Ardoin, B. Johnson, P. Mathur, P. J. Embi, J. R. Curtis, Usability and workflow evaluation of “rheumatic disease activity”(ready): a mobile application for rheumatology patients and providers, *Applied clinical informatics* 7 (4) (2016) 1007.
- [S63] S. Yoo, S. Y. Jung, S. Kim, E. Kim, K.-H. Lee, E. Chung, H. Hwang, A personalized mobile patient guide system for a patient-centered smart hospital: Lessons learned from a usability test and satisfaction survey in a tertiary university hospital, *International journal of medical informatics* 91 (2016) 20–30.
- [S64] T. Aljaber, N. Gordon, A hybrid evaluation approach and guidance for mhealth education applications, in: *International Conference on Applied Human Factors and Ergonomics*, Springer, 2017, pp. 282–290.
- [S65] D. S. Alves, V. C. Times, A. S. Campos Filho, M. de Araújo, Usability analysis of archetyped interfaces for the electronic health record: a comparative study.
- [S66] S. B. Andersen, C. K. Rasmussen, E. Frøkjær, Bringing content understanding into usability testing in complex application domains—a case study in ehealth, in: *International Conference of Design, User Experience, and Usability*, Springer, 2017, pp. 327–341.
- [S67] W. Boonchieng, E. Boonchieng, W. Tuanrat, C. Khuntichot, K. Duangchaemkarn, Integrative system of virtual electronic health record with online community-based health determinant data for home care service: Mhealth development and usability test, in: *2017 IEEE Healthcare Innovations and Point of Care Technologies (HI-POCT)*, IEEE, 2017, pp. 5–8.
- [S68] N. Y. Crepaldi, I. B. de Lima, F. B. Vicentine, L. M. L. Rodrigues, V. H. Yamaguti, T. L. M. Sanches, A. Ruffino-Netto, D. Alves, R. P. C. L. Rijo, Satisfaction evaluation of health professionals in the usability of software for monitoring the tuberculosis treatment, *Procedia Computer Science* 121 (2017) 889–896.
- [S69] M. Dascalu, A. Moldoveanu, O. Balan, R. G. Lupu, F. Ungureanu, S. Caraiman, Usability assessment of assistive technology for blind and visually impaired, in: *2017 E-Health and Bioengineering Conference (EHB)*, IEEE, 2017, pp. 523–526.
- [S70] I. de la Torre Díez, B. García-Zapirain, M. López-Coronado, J. J. Rodrigues, C. del Pozo Vegas, A new mhealth app for monitoring and awareness of healthy eating: Development and user evaluation by spanish users, *Journal of medical systems* 41 (7) (2017) 1–7.
- [S71] J. W. Dexheimer, B. G. Kurowski, S. H. Anders, N. McClanahan, S. L. Wade, L. Babcock, Usability evaluation of the smart application for youth with mtbi, *International journal of medical informatics* 97 (2017) 163–170.
- [S72] A. Doggett, D. T. Weiler, J. J. Saleem, Variations in the usability of independent web-based personal health records, *International Journal of Human–Computer Interaction* 33 (4) (2017) 280–286.
- [S73] J. Fontecha, I. González, M. E. Saucedo, M. J. Sánchez, J. Bravo, Usability and acceptance of a mobile and cloud-based platform for supporting diabetes self-management, in: *International Conference on Ubiquitous Computing and Ambient Intelligence*, Springer, 2017, pp. 227–239.
- [S74] A. S. Hundt, J. A. Adams, P. Carayon, A collaborative usability evaluation (cue) model for health it design and implementation, *International Journal of Human–Computer Interaction* 33 (4) (2017) 287–297.
- [S75] J. Ismirle, H. Klautke, S. J. Swierenga, L. O’Connell, Teleconsultation process for physicians working with asd patients: Insights from a usability evaluation, in: *International Conference of Design, User Experience, and Usability*, Springer, 2017, pp. 632–644.
- [S76] A. Kaur, D. Dani, G. Agrawal, Evaluating the accessibility, usability and security of hospitals websites: An exploratory study, in: *2017 7th International Conference on Cloud Computing, Data Science & Engineering Confluence*, IEEE, 2017, pp. 674–680.
- [S77] R. Khajouei, M. Zahiri Esfahani, Y. Jahani, Comparison of heuristic and cognitive walkthrough usability evaluation methods for evaluating health information systems, *Journal of the American Medical Informatics Association* 24 (e1) (2017) e55–e60.
- [S78] R. Khajouei, R. Abbasai, Evaluating nurses’ satisfaction with two nursing information systems, *CIN: Computers, Informatics, Nursing* 35 (6) (2017) 307–314.
- [S79] A. Khan, H. Mukhtar, H. F. Ahmad, M. A. Gondal, Q. M. Ilyas, Improving usability through enhanced visualization in healthcare, in: *2017 IEEE 13th International Symposium on Autonomous Decentralized System (ISADS)*, IEEE, 2017, pp. 39–44.
- [S80] Y. W. Kim, S. H. Yoon, H. Hwangbo, Y. G. Ji, Development of a user experience evaluation framework for wearable devices, in: *International Conference on Human Aspects of IT for the Aged Population*, Springer, 2017, pp. 53–67.
- [S81] L. Kneale, S. Mikles, Y. K. Choi, H. Thompson, G. Demiris, Using scenarios and personas to enhance the effectiveness of heuristic usability evaluations for older adults and their care team, *Journal of biomedical informatics* 73 (2017) 43–50.
- [S82] T. Kowatsch, D. Volland, I. Shih, D. Rüegger, F. Künzler, F. Barata, A. Filler, D. Büchter, B. Brogle, K. Heldt, et al., Design and evaluation of a mobile chat app for the open source behavioral health intervention platform mobilecoach, in: *International Conference on Design Science Research in Information System and Technology*, Springer, 2017, pp. 485–489.
- [S83] R. Kupffer, M. Wutzler, J. F. Krems, G. Jahn, A comparison of a smartphone app and a wrist-worn fitness tracker for self-monitoring of physical activity by older and younger users, in: *International Conference on Smart Objects and Technologies for Social Good*, Springer, 2017, pp. 331–341.
- [S84] M. Lefco, J. Gise, B. Lesnick, R. I. Arriaga, Even when icons are not worth a thousand words they are helpful in designing asthma mhealth tools, in: *IFIP Conference on Human-Computer Interaction*, Springer, 2017, pp. 23–33.
- [S85] H.-C. Lo, S.-T. Tang, W.-L. Wei, C.-C. Chuang, Design and usability evaluation of speech rehabilitation app interface for patients with parkinson’s disease, in: *International Conference on Universal Access in Human-Computer Interaction*, Springer, 2017, pp. 65–75.
- [S86] V. I. Martinez, J. L. Marquard, B. Saver, L. Garber, P. Preusse, Consumer health informatics interventions must support user workflows, be easy-to-use, and improve cognition: applying the seips 2.0 model to evaluate patients’ and clinicians’ experiences with the conduit-hid intervention, *International Journal of Human–Computer Interaction* 33 (4) (2017) 333–343.
- [S87] S. Martinez, B. Smaradottir, T. Vatnøy, M. Bjørnness, Usability evaluation of a geolocation technology: Safemate, in: *2017 IEEE Symposium on Computers and Communications (ISCC)*, IEEE, 2017, pp. 187–192.
- [S88] A. Mathews, D. Marc, Usability evaluation of laboratory information systems, *Journal of pathology informatics* 8.
- [S89] L. G. Militello, J. B. DiJulio, M. R. Borders, C. E. Sushereba, J. J. Saleem, D. Havercamp, T. F. Imperiale, Evaluating a modular decision support application for colorectal cancer screening, *Applied clinical informatics* 8 (1) (2017) 162.
- [S90] A. D. Naik, M. J. Horstman, L. T. Li, M. K. Paasche-Orlow, B. Campbell, W. L. Mills, L. I. Herman, D. A. Anaya, B. W. Trautner, D. H. Berger, User-centered design of discharge warnings tool for colorectal surgery patients, *Journal of the American Medical Informatics Association* 24 (5) (2017) 975–980.
- [S91] L. Nguyen, N. Wickramasinghe, B. Redley, P. Haddad, I. Muhammad, M. Botti, Exploring nurses’ reactions to electronic nursing documentation at the point of care, *Information Technology & People*.
- [S92] A. Pakarinen, H. Parisod, I. Linden, M. E. Aromaa, J. Smed, V. Leppänen, S. Salanterä, Usability of a gamified application to promote family wellbeing in child health clinics, in: *GamiFIN*, 2017, pp. 141–149.
- [S93] I. Rachyla, S. Quero, M. Á. Pérez Ara, M. Molés Amposta, D. Campos, A. Mira, Web-based, self-help intervention for adjustment disorders: acceptance and usability.
- [S94] S. R. Ramos, User-centered design, experience, and usability of an e-consent user interface to facilitate informed decision making in an hiv clinic, *Computers, informatics, nursing: CIN* 35 (11) (2017) 556.
- [S95] S. Richardson, R. Mishuris, A. O’Connell, D. Feldstein, R. Hess, P. Smith, L. McCullagh, T. McGinn, D. Mann, “think aloud” and “near live” usability testing of two complex clinical decision support tools, *International journal of medical informatics* 106 (2017) 1–8.
- [S96] R. F. Rizvi, J. L. Marquard, G. M. Hultman, T. J. Adam, K. A. Harder, G. B. Melton, Usability evaluation of electronic health record system around clinical notes usage—an ethnographic study, *Applied clinical informatics* 8 (4) (2017) 1095.
- [S97] A. S. B. Rosslan, A. S. B. Soetarman, N. B. Ridzuan, Z. Ibrahim, E. Supriyanto, User acceptance analysis of patient data management software, in: *2017 International Conference on Robotics, Automation and*

- Sciences (ICORAS), IEEE, 2017, pp. 1–4.
- [S98] L. Ruzic, J. A. Sanford, Usability of mobile consumer applications for individuals aging with multiple sclerosis, in: International Conference on Universal Access in Human-Computer Interaction, Springer, 2017, pp. 258–276.
- [S99] Z. H. A. Sani, H. Petrie, User evaluation of an app for liquid monitoring by older adults, in: International Conference on Universal Access in Human-Computer Interaction, Springer, 2017, pp. 86–97.
- [S100] A. Savoy, H. Patel, M. E. Flanagan, M. Weiner, A. L. Russ, Systematic heuristic evaluation of computerized consultation order templates: clinicians' and human factors engineers' perspectives, *Journal of medical systems* 41 (8) (2017) 1–9.
- [S101] M. C. Schall Jr., L. Cullen, P. Pennathur, H. Chen, K. Burrell, G. Matthews, Usability evaluation and implementation of a health information technology dashboard of evidence-based quality indicators, *CIN: Computers, Informatics, Nursing* 35 (6) (2017) 281–288.
- [S102] C. Sik-Lányi, V. Szűcs, T. Guzsvinecz, Usability and colour-check of healthcare web-site, in: 2017 IEEE 30th Neumann Colloquium (NC), IEEE, 2017, pp. 000111–000116.
- [S103] J. Silva, P. Brandão, R. Prior, Usability assessment of a health kiosk, in: 2017 IEEE Symposium on Computers and Communications (ISCC), IEEE, 2017, pp. 260–265.
- [S104] P. Srinivas, V. Cornet, R. Holden, Human factors analysis, design, and evaluation of engage, a consumer health it application for geriatric heart failure self-care, *International Journal of Human–Computer Interaction* 33 (4) (2017) 298–312.
- [S105] L. Tieu, D. Schillinger, U. Sarkar, M. Hoskote, K. J. Hahn, N. Ratawongsa, J. D. Ralston, C. R. Lyles, Online patient websites for electronic health record access among vulnerable populations: portals to nowhere?, *Journal of the American Medical Informatics Association* 24 (e1) (2017) e47–e54.
- [S106] J. M. Toribio-Guzmán, A. García-Holgado, F. S. Pérez, F. J. García-Peña, M. F. Martín, Usability evaluation of a private social network on mental health for relatives, *Journal of medical systems* 41 (9) (2017) 1–7.
- [S107] K. Tronerud, M. Vasbotten, J. Kaasb, J. SæB, et al., Usability for novices and experts: A layered design in a case study in malawi, in: 2017 IST-Africa Week Conference (IST-Africa), IEEE, 2017, pp. 1–9.
- [S108] V. Tundjungsari, A. S. M. Sofro, A. Sabiq, A. Kardiana, Investigating clinical decision support systems success factors with usability testing, *International Journal of Advanced Computer Science and Applications (IJACSA)* 8 (11).
- [S109] S. Vainiomäki, A.-M. Aalto, T. Lääveri, T. Sinervo, M. Elovinio, P. Mäntyselkä, H. Hyppönen, Better usability and technical stability could lead to better work-related well-being among physicians, *Applied clinical informatics* 8 (4) (2017) 1057.
- [S110] A. Veldzman, D. van Greunen, Comparative usability evaluation of a mobile health app, in: 2017 IST-Africa Week Conference (IST-Africa), IEEE, 2017, pp. 1–8.
- [S111] B. J. Wakefield, G. Alexander, M. Dohrmann, J. Richardson, Design and evaluation of a web-based symptom monitoring tool for heart failure, *CIN: Computers, Informatics, Nursing* 35 (5) (2017) 248–254.
- [S112] V. Willner, H. Rieser, V. Venek, C. Schneider, Selection and assessment of activity trackers for enthusiastic seniors., in: ICT4AgeingWell, 2017, pp. 25–35.
- [S113] X. Wu, R. Thomas, E. Drobina, T. Mitzner, J. Beer, An evaluation of a telepresence robot: user testing among older adults with mobility impairment, in: Proceedings of the Companion of the 2017 ACM/IEEE International Conference on Human-Robot Interaction, 2017, pp. 325–326.
- [S114] N. A. A. Zaki, T. S. M. T. Wook, K. Ahmad, A usability testing of asahi for children with speech and language delay, in: 2017 6th International Conference on Electrical Engineering and Informatics (ICEEI), IEEE, 2017, pp. 1–6.
- [S115] O. L. Aiyegbusi, D. Kyte, P. Cockwell, T. Marshall, M. Dutton, N. Walmsley-Allen, R. Auti, M. Calvert, Development and usability testing of an electronic patient-reported outcome measure (eprom) system for patients with advanced chronic kidney disease, *Computers in biology and medicine* 101 (2018) 120–127.
- [S116] P. Ajayi, N. Omorogbe, S. Misra, D. Adeloye, Evaluation of a cloud based health information system, in: Innovation and Interdisciplinary Solutions for Underserved Areas, Springer, 2017, pp. 165–176.
- [S117] S. B. Ali, J. Romero, K. Morrison, B. Hafeez, J. S. Ancker, Focus section health it usability: applying a task-technology fit model to adapt an electronic patient portal for patient work, *Applied clinical informatics* 9 (1) (2018) 174.
- [S118] I. Asghar, S. Cang, H. Yu, Usability evaluation of assistive technologies through qualitative research focusing on people with mild dementia, *Computers in Human Behavior* 79 (2018) 192–201.
- [S119] F. Barbabella, A. Poli, E. Hanson, F. Andréasson, B. Salzmann, H. Döhnner, R. Papa, A. Efthymiou, S. Valenza, G. Pelliccioni, et al., Usage and usability of a web-based program for family caregivers of older people in three european countries: a mixed-methods evaluation, *CIN: Computers, Informatics, Nursing* 36 (5) (2018) 232–241.
- [S120] B. Brown, P. Balatsoukas, R. Williams, M. Sperrin, I. Buchan, Multi-method laboratory user evaluation of an actionable clinical performance information system: Implications for usability and patient safety, *Journal of biomedical informatics* 77 (2018) 62–80.
- [S121] H. Cho, P.-Y. Yen, D. Dowding, J. A. Merrill, R. Schnall, A multi-level usability evaluation of mobile health applications: A case study, *Journal of biomedical informatics* 86 (2018) 79–89.
- [S122] H. Cho, T. Porras, D. Baik, M. Beauchemin, R. Schnall, Understanding the predisposing, enabling, and reinforcing factors influencing the use of a mobile-based hiv management app: A real-world usability evaluation, *International journal of medical informatics* 117 (2018) 88–95.
- [S123] B. Couture, E. Lilley, F. Chang, A. D. Smith, J. Cleveland, A. Ergai, Z. Katsulis, J. Benneyan, E. Gershman, D. W. Bates, et al., Applying user-centered design methods to the development of an mhealth application for use in the hospital setting by patients and care partners, *Applied clinical informatics* 9 (2) (2018) 302.
- [S124] K. Denecke, S. L. Hochreutener, A. Pöpel, R. May, Self-anamnesis with a conversational user interface: concept and usability study, *Methods of information in medicine* 57 (05/06) (2018) 243–252.
- [S125] J. A. Garcia, W. L. Raffe, K. F. Navarro, Assessing user engagement with a fall prevention game as an unsupervised exercise program for older people, in: Proceedings of the Australasian Computer Science Week Multiconference, 2018, pp. 1–8.
- [S126] M. A. Hernández, J. Sharit, P. Pirolli, S. J. Czaja, Adapting information search tools for use by health consumers: Challenges and lessons for software designers, *International Journal of Human–Computer Interaction* 34 (5) (2018) 445–456.
- [S127] T. Hodgson, F. Magrabi, E. Coiera, Evaluating the usability of speech recognition to create clinical documentation using a commercial electronic health record, *International journal of medical informatics* 113 (2018) 38–42.
- [S128] C. M. Hughes, A. Hintze, A. Padilla, T. Mariscal, S. Warner, M. Sera, T. Peng, Development of a mhealth system for post-stroke upper limb rehabilitation in medically underserved populations: An iterative usability study, in: 2018 IEEE Global Humanitarian Technology Conference (GHTC), IEEE, 2018, pp. 1–8.
- [S129] V. Jacobson, C. Iglesias, P. Morreale, User interface design and evaluation of a mobile pollen tracking application, in: Proc. of the 12th Intl. Conf. on Interfaces and HCI 2018 (IHCI 2018), IADIS, 2018, pp. 324–328.
- [S130] M. A. Jahn, B. W. Porter, H. Patel, A. J. Zillich, S. R. Simon, A. L. Russ, Usability assessment of secure messaging for clinical document sharing between health care providers and patients, *Applied clinical informatics* 9 (2) (2018) 467.
- [S131] A. S. A. Jiménez, N. A. B. Ramírez, P. C. Santana-Mancilla, J. C. M. Romero, R. Acosta-Díaz, Heuristic evaluation of a gamified application for education in patients with diabetes, in: Proceedings of the 7th Mexican Conference on Human-Computer Interaction, 2018, pp. 1–4.
- [S132] D.-A. Jurca, V. Stoicu-Tivadar, Evaluating the user experience of a web application for managing electronic health records, in: International Workshop Soft Computing Applications, Springer, 2018, pp. 276–289.
- [S133] D. J. Karavite, M. W. Miller, M. J. Ramos, S. L. Rettig, R. K. Ross, R. Xiao, N. Muthu, A. R. Localio, J. S. Gerber, S. E. Coffin, et al., User testing an information foraging tool for ambulatory surgical site infection surveillance, *Applied clinical informatics* 9 (4) (2018) 791.
- [S134] S. Khairat, G. Burke, H. Archambault, T. Schwartz, J. Larson, R. M. Ratwani, Perceived burden of ehrs on physicians at different stages of their career, *Applied clinical informatics* 9 (2) (2018) 336.
- [S135] R. Khajouei, S. H. Gohari, M. Mirzaee, Comparison of two heuristic evaluation methods for evaluating the usability of health information systems, *Journal of biomedical informatics* 80 (2018) 37–42.

- [S136] M. Krel, I. Kožuh, M. Debevc, Heuristic evaluation of a mobile tele-care system for older adults, in: International Conference on Computers Helping People with Special Needs, Springer, 2018, pp. 391–398.
- [S137] F. Lyerla, C. R. Durbin, R. Henderson, Development of a nursing electronic medical record usability protocol, *CIN: Computers, Informatics, Nursing* 36 (8) (2018) 393–397.
- [S138] S. Marien, D. Legrand, R. Ramdoyal, J. Nsenga, G. Ospina, V. Ramon, B. Boland, A. Spinewine, A web application to involve patients in the medication reconciliation process: a user-centered usability and usefulness study, *Journal of the American Medical Informatics Association* 25 (11) (2018) 1488–1500.
- [S139] K. T. Martono, O. D. Nurhayati, A. P. Widodo, The evaluation of child's health monitoring system using the usability testing approach, in: 2018 5th International Conference on Information Technology, Computer, and Electrical Engineering (ICITACEE), IEEE, 2018, pp. 320–324.
- [S140] M. Memedi, G. Tshering, M. Fogelberg, I. Jusufi, E. Kolkowska, G. Klein, An interface for iot: Feeding back health-related data to parkinson's disease patients, *Journal of Sensor and Actuator Networks* 7 (1) (2018) 14.
- [S141] R. Menghi, F. Gullà, M. Germani, Assessment of a smart kitchen to help people with alzheimer's disease, in: International Conference on Smart Homes and Health Telematics, Springer, 2018, pp. 304–309.
- [S142] K. Munck, M. H. Christensen, A. Tahhan, B. I. Dinesen, H. Spindler, J. Hansen, O. W. Nielsen, S. Leth, Evaluation of self-trackers for use in telerehabilitation., *Journal of Usability Studies* 13 (3).
- [S143] J. Pavão, R. Bastardo, L. T. Pereira, P. Oliveira, V. Costa, A. I. Martins, A. Queirós, N. P. Rocha, Considerations on the usability of sclínico, in: International Joint Conference on Biomedical Engineering Systems and Technologies, Springer, 2018, pp. 262–278.
- [S144] A. Pyae, Investigating the usability, user experiences, and usefulness of digital game-based exercises for elderly people: A case study of finland, in: Proceedings of the 2018 Annual Symposium on Computer-Human Interaction in Play Companion Extended Abstracts, 2018, pp. 71–76.
- [S145] R. R. Rao, A. Singh, V. Kamath, Assessment of step accuracy and usability of activity trackers, in: 2018 3rd International Conference on Contemporary Computing and Informatics (IC3I), IEEE, 2018, pp. 38–42.
- [S146] R. M. Ratwani, E. Savage, A. Will, R. Arnold, S. Khairat, K. Miller, R. J. Fairbanks, M. Hodgkins, A. Z. Hettinger, A usability and safety analysis of electronic health records: a multi-center study, *Journal of the American Medical Informatics Association* 25 (9) (2018) 1197–1201.
- [S147] R. Z. U. Rehman, J. Jang, S. Xiong, Usability evaluations of a newly developed wearable inertial sensing system for assessing elderly fall risk, in: International Conference on Applied Human Factors and Ergonomics, Springer, 2018, pp. 423–434.
- [S148] A. L. Russ, M. A. Jahn, H. Patel, B. W. Porter, K. A. Nguyen, A. J. Zillich, A. Linsky, S. R. Simon, Usability evaluation of a medication reconciliation tool: embedding safety probes to assess users' detection of medication discrepancies, *Journal of biomedical informatics* 82 (2018) 178–186.
- [S149] M. Schickler, R. Pryss, W. Schlee, T. Probst, B. Langguth, J. Schobel, M. Reichert, Usability study on mobile processes enabling remote therapeutic interventions, in: 2018 IEEE 31st International Symposium on Computer-Based Medical Systems (CBMS), IEEE, 2018, pp. 146–151.
- [S150] R. Shaheen, S. Kanwal, R. Iftikhar, M. R. Shahid, Evaluating health information apps on real life smart phone use, in: Proceedings of the 2nd International Conference on Future Networks and Distributed Systems, 2018, pp. 1–6.
- [S151] E. A. T. Silva, I. F. L. Gomez, J. F. F. Arango, J. W. Smith, S. U. Ocampo, J. E. Hidalgo, Evaluation of satisfaction and usability of a clinical decision support system (cdss) targeted for early obstetric risk assessment and patient follow-up, *E-HEALTH 2018 ICT, SOCIETY AND HUMAN BEINGS 2018* 3.
- [S152] P. A. Smith, M. Dombrowski, R. Buyssens, P. Barclay, Usability testing games for prosthetic training, in: 2018 IEEE 6th International Conference on Serious Games and Applications for Health (SeGAH), IEEE, 2018, pp. 1–7.
- [S153] D. Steffen, M. Muhm, C. Christmann, G. Bleser, A usability evaluation of a mobile exergame for ankle joint exercises, in: 2018 IEEE 6th International Conference on Serious Games and Applications for Health (SeGAH), IEEE, 2018, pp. 1–8.
- [S154] A. Steinert, M. Haesner, E. Steinhagen-Thiessen, Activity-tracking devices for older adults: comparison and preferences, *Universal Access in the Information Society* 17 (2) (2018) 411–419.
- [S155] S. Stonbraker, H. Cho, G. Hermosi, A. Pichon, R. Schnall, Usability testing of a mhealth app to support self-management of hiv-associated non-aids related symptoms, *Studies in health technology and informatics* 250 (2018) 106.
- [S156] S. Subramaniam, J. S. Dhillon, Assessing the usability of a prediabetes self-care application: A multi-method approach.
- [S157] M. Usman, M. Ashraf, M. Tahir, A comparison of usability aspects between an existing hospital website of pakistan with a template based on usability standards, *International Journal of Advanced Computer Science and Applications* 9 (2) (2018) 42–47.
- [S158] K. Vichova, M. Hromada, The analysis of health information system, in: 2018 International Conference on Control, Artificial Intelligence, Robotics & Optimization (ICCAIRO), IEEE, 2018, pp. 271–276.
- [S159] T. S. Wheeler, T. M. Vallis, N. B. Giacaman, S. R. Abidi, Feasibility and usability of an ontology-based mobile intervention for patients with hypertension, *International journal of medical informatics* 119 (2018) 8–16.
- [S160] P.-Y. Yen, D. M. Walker, J. M. G. Smith, M. P. Zhou, T. L. Menser, A. S. McAlearney, Usability evaluation of a commercial inpatient portal, *International journal of medical informatics* 110 (2018) 10–18.
- [S161] B. C. Zapata, J. L. Fernández-Alemany, A. Toval, A. Idri, Reusable software usability specifications for mhealth applications, *Journal of medical systems* 42 (3) (2018) 1–9.
- [S162] L. Zhang, J. Y. Shair, Y. Wang, R. Li, H. Chen, Usability assessment of a web-based self-directed learning (sdl) system for chinese dementia caregivers, in: International Conference on Human Aspects of IT for the Aged Population, Springer, 2018, pp. 165–176.
- [S163] D. Adiani, M. Schmidt, J. Wade, A. R. Swanson, A. Weitlauf, Z. Warren, N. Sarkar, Usability enhancement and functional extension of a digital tool for rapid assessment of risk for autism spectrum disorders in toddlers based on pilot test and interview data, in: International Conference on Human-Computer Interaction, Springer, 2019, pp. 13–22.
- [S164] J. Ahmad, S. Annamalai, Usability evaluation of diabetes nutriment diary: A mobile app for diabetic patients, *IJATCSE* 8 (1.3) (2019) 230–234.
- [S165] T. Ajisafe, R. Bethi, S. A. King, A. Katangur, Development and usability of a low-cost kinect game to promote movement competence in children with and without intellectual disability, in: International Conference on Human-Computer Interaction, Springer, 2019, pp. 245–264.
- [S166] E. Ballarini, L. Ciabattoni, D. Domenichelli, M. Domenichelli, G. Foresi, A. Monteriù, An automated procedure to evaluate usability of ehealth platforms in the wild, in: 2019 Zooming Innovation in Consumer Technologies Conference (ZINC), IEEE, 2019, pp. 130–131.
- [S167] M. Beauchemin, M. Gradiña, D. Baik, H. Cho, R. Schnall, A multi-step usability evaluation of a self-management app to support medication adherence in persons living with hiv, *International journal of medical informatics* 122 (2019) 37–44.
- [S168] B. Blažica, P. Novak, F. Novak, B. K. Seljak, Design and usability evaluation of interface of mobile application for nutrition tracking for people with parkinson's disease, in: International Conference on Human-Computer Interaction, Springer, 2019, pp. 200–208.
- [S169] A. Borresen, C. Wolfe, C.-K. Lin, Y. Tian, S. Raghuraman, K. Nahrstedt, B. Prabhakaran, T. Annaswamy, Usability of an immersive augmented reality based telerehabilitation system with haptics (artesh) for synchronous remote musculoskeletal examination, *International journal of telerehabilitation* 11 (1) (2019) 23.
- [S170] M. Broekhuis, L. van Velsen, H. Hermens, Assessing usability of ehealth technology: A comparison of usability benchmarking instruments, *International journal of medical informatics* 128 (2019) 24–31.
- [S171] M. Broekhuis, L. van Velsen, S. ter Stal, J. Weldink, M. Tabak, Why my grandfather finds difficulty in using ehealth: Differences in usability evaluations between older age groups., in: ICT4AWE, 2019, pp. 48–57.
- [S172] N. Brown, A. Eghdam, S. Koch, Usability evaluation of visual representation formats for emergency department records, *Applied clinical informatics* 10 (3) (2019) 454.
- [S173] P. Burns, J. Mullan, R. Gillespie, L. Harrison, K. T. Win, A. Baker, V. Traynor, C. Kostovski, R. J. Thomas-Lee, H. Gleeson, et al., Evaluating the managing medicines for people with dementia website version 2, *CIN: Computers, Informatics, Nursing* 37 (1) (2019) 47–54.

- [S174] M. C. Camargo, T. C. Carvalho, R. M. Barros, V. T. Barros, M. Santana, Improving usability of a mobile application for children with autism spectrum disorder using heuristic evaluation, in: International Conference on Human-Computer Interaction, Springer, 2019, pp. 49–63.
- [S175] G. Cameron, D. Cameron, G. Megaw, R. Bond, M. Mulvenna, S. O'Neill, C. Armour, M. McTear, Assessing the usability of a chatbot for mental health care, in: International Conference on Internet Science, Springer, 2019, pp. 121–132.
- [S176] V. C. Cavalcanti, M. I. de Santana Ferreira, V. Teichrieb, R. R. Barioni, W. F. M. Correia, A. E. F. Da Gama, Usability and effects of text, image and audio feedback on exercise correction during augmented reality based motor rehabilitation, *Computers & Graphics* 85 (2019) 100–110.
- [S177] M. Chartomatsidis, C. Goumopoulos, Development and evaluation of a motion-based exercise game for balance improvement, in: International Conference on Information and Communication Technologies for Ageing Well and e-Health, Springer, 2019, pp. 119–141.
- [S178] W.-K. Chiou, S.-C. Lai, D.-H. Huang, Usability testing of a mobile application for alleviating postpartum emotional disorders: a case of we'll, in: International Conference on Human-Computer Interaction, Springer, 2019, pp. 23–40.
- [S179] H. Cho, D. Powell, A. Pichon, L. M. Kuhns, R. Garofalo, R. Schnall, Eye-tracking retrospective think-aloud as a novel approach for a usability evaluation, *International journal of medical informatics* 129 (2019) 366–373.
- [S180] V. Colombo, M. Mondellini, A. Gandolfo, A. Fumagalli, M. Sacco, Usability and acceptability of a virtual reality-based system for endurance training in elderly with chronic respiratory diseases, in: International Conference on Virtual Reality and Augmented Reality, Springer, 2019, pp. 87–96.
- [S181] F. Couto, M. de Lurdes Almeida, M. dos Anjos Dixe, J. Ribeiro, M. Braúna, N. Gomes, J. Caroço, L. Monteiro, R. Martinho, R. Rijo, et al., Digi&mind: Development and validation of a multi-domain digital cognitive stimulation program for older adults with cognitive decline, *Procedia Computer Science* 164 (2019) 732–740.
- [S182] R. Dabliz, S. K. Poon, A. Ritchie, K. Kuan, J. Penm, The digitization of the icu: an evaluation of usability and hospital-wide acceptability, *Studies in health technology and informatics* 264 (2019) 566–570.
- [S183] A. S. Dahri, A. Al-Athwari, A. Hussain, Usability evaluation of mobile health application from ai perspective in rural areas of pakistan.
- [S184] A. Díaz-García, A. González-Robles, J. Fernández-Álvarez, D. Castilla, A. Mira, J. M. Bretón, A. García-Palacios, C. Botella, Usability of a transdiagnostic internet-delivered protocol for anxiety and depression in community patients, in: International Symposium on Pervasive Computing Paradigms for Mental Health, Springer, 2019, pp. 147–156.
- [S185] D. Dowding, J. A. Merrill, Y. Barrón, N. Onorato, K. Jonas, D. Russell, Usability evaluation of a dashboard for home care nurses, *Computers, informatics, nursing: CIN* 37 (1) (2019) 11.
- [S186] I. L. Držanič, V. Mladenović, M. Debevc, V. Dolničar, A. Petrovčič, S. H. Touzery, I. Kožuh, Usability testing of a smartphone telecare application for informal caregivers, in: International Conference on Human Centered Computing, Springer, 2019, pp. 252–265.
- [S187] A. M. Elaklouk, N. A. M. Zin, A rehabilitation gaming system for cognitive deficiencies: Design and usability evaluation, *IJASEIT* 21 (2019) 22.
- [S188] P. Escalada-Hernández, N. S. Ruiz, L. San Martín-Rodríguez, Design and evaluation of a prototype of augmented reality applied to medical devices, *International journal of medical informatics* 128 (2019) 87–92.
- [S189] I. Falcão, D. d. S. Souza, F. P. Araujo, J. G. d. S. Fernandes, Y. P. Pires, D. L. Cardoso, M. C. Seruffo, Usability and cognitive benefits of a serious game to combat aedes aegypti mosquito, in: 2019 IEEE 32nd International Symposium on Computer-Based Medical Systems (CBMS), IEEE, 2019, pp. 720–725.
- [S190] M. Farzandipour, E. Nabovati, M. H. Arani, H. Akbari, R. Sharif, S. Anvari, Enhancing asthma patients' self-management through smartphone-based application: design, usability evaluation, and educational intervention, *Applied clinical informatics* 10 (5) (2019) 870.
- [S191] I. Feroz, N. Ahmad, M. W. Iqbal, Usability based rating scale for mobile health applications, in: 2019 International Conference on Engineering and Emerging Technologies (ICEET), IEEE, 2019, pp. 1–7.
- [S192] A. Ferreira, R. Almeida, C. Jácome, J. Fernandes, J. A. Fonseca, P. Vieira-Marques, How inspiring is your app? a usability take on an app for asthma medication adherence, in: International Conference e-Health 2019, IADIS, 2019, pp. 225–229.
- [S193] L. Ferreira, S. Cavaco, S. B. i. Badia, A usability study with healthcare professionals of a customizable framework for reminiscence and music based cognitive activities for people with dementia, in: Proceedings of the 23rd Pan-Hellenic Conference on Informatics, 2019, pp. 16–23.
- [S194] J. Fontecha, I. González, J. Bravo, A usability study of a mhealth system for diabetes self-management based on framework analysis and usability problem taxonomy methods, *Journal of Ambient Intelligence and Humanized Computing* (2019) 1–11.
- [S195] A. García-Holgado, I. T. Reiris, N. Kearney, C. Martinus, F. J. García-Péñalvo, An app to support yoga teachers to implement a yoga-based approach to promote wellbeing among young people: usability study, in: International Conference on Human-Computer Interaction, Springer, 2019, pp. 38–49.
- [S196] M. Georgsson, N. Staggers, E. Årsand, A. Kushniruk, Employing a user-centered cognitive walkthrough to evaluate a mhealth diabetes self-management application: A case study and beginning method validation, *Journal of biomedical informatics* 91 (2019) 103110.
- [S197] J. Hemmeke, P. Krumholz, A. Janß, K. Radermacher, Development and evaluation of a tablet-control for a surgical workstation in the open integrated operating room, in: International Conference on Human-Computer Interaction, Springer, 2019, pp. 406–419.
- [S198] N. Hernandez, F. Cruciani, J. Favela, I. McChesney, S. Zhang, C. Nugent, I. Cleland, Preliminary evaluation of a self-management health app by people with cognitive impairment, in: 2019 IEEE International Conference on Pervasive Computing and Communications Workshops (PerCom Workshops), IEEE, 2019, pp. 535–540.
- [S199] S. Holmes, A. Moorhead, R. Bond, H. Zheng, V. Coates, M. McTear, Usability testing of a healthcare chatbot: Can we use conventional methods to assess conversational user interfaces?, in: Proceedings of the 31st European Conference on Cognitive Ergonomics, 2019, pp. 207–214.
- [S200] M.-H. Hsieh, Y.-C. Chen, C.-H. Ho, A usability evaluation of diabetes mobile applications, in: International Conference on Human-Computer Interaction, Springer, 2019, pp. 3–15.
- [S201] C. Hughes, T. Mariscal, M. Baye, G. J. Belay, A. Hintze, A. Padilla, S. Warner, M. Sera, C. Gordon-Murer, Development of an upper extremity stroke rehabilitation mhealth application for sub-saharan africa: A usability study, in: 2019 IST-Africa Week Conference (IST-Africa), IEEE, 2019, pp. 1–8.
- [S202] Y. Inal, Heuristic-based user interface evaluation of the mobile centralized doctor appointment system, *The Electronic Library*.
- [S203] R. Janatkhah, R. Tabari-Khomeiran, A. Asadi-Louyeh, E. Kazemnejad, Usability of a disease management mobile application as perceived by patients with diabetes, *CIN: Computers, Informatics, Nursing* 37 (8) (2019) 413–419.
- [S204] M. Janda, C. Horsham, U. Koh, N. Gillespie, D. Vagenas, L. J. Loescher, C. Curiel-Lewandrowski, R. Hofmann-Wellenhof, H. Peter Soyer, Evaluating healthcare practitioners' views on store-and-forward teledermoscopy services for the diagnosis of skin cancer, *Digital health* 5 (2019) 205520761928225.
- [S205] U. T. Jefferson, I. Zachary, W. Majee, Employing a user-centered design to engage mothers in the development of a mhealth breastfeeding application, *CIN: Computers, Informatics, Nursing* 37 (10) (2019) 522–531.
- [S206] T. W. Jensen, B. Sørensen, Testing usability in an ict solution for care cooperatives: A case study., in: ICT4AWE, 2019, pp. 319–324.
- [S207] J. Katusiime, N. Pinkwart, A mobile app for illiterate and semi-illiterate pregnant women-a user centered approach, in: IFIP Conference on Human-Computer Interaction, Springer, 2019, pp. 617–620.
- [S208] S. Khairat, C. Coleman, T. Newlin, V. Rand, P. Ottmar, T. Bice, S. S. Carson, A mixed-methods evaluation framework for electronic health records usability studies, *Journal of biomedical informatics* 94 (2019) 103175.
- [S209] S. J. Kosterink, R. Bulthuis, S. ter Stal, A. Pnevmatikakis, S. Kyriazakos, A. Pomazanskyi, H. op den Akker, Goal: an ehealth application for rewarding healthy behaviour. the first experiences of older adults, in: 5th International Conference on Information and Communication Technologies for Ageing Well and e-Health, ICT4AWE 2019, SCITEPRESS Digital Library, 2019, pp. 58–66.
- [S210] C. Li, M.-y. Zhou, X.-y. Liu, T.-x. Wang, Usability study of electronic sphygmomanometers based on perceived ease of use and affordance, in:

- International Conference on Human-Computer Interaction, Springer, 2019, pp. 421–430.
- [S211] H.-K. Lu, P.-C. Lin, K.-C. Chu, A. N. Chen, A. Yuan, Development and evaluation of a beacon-based indoor positioning and navigating system for the visually impaired, *Journal of Intelligent & Fuzzy Systems* 37 (4) (2019) 4665–4675.
- [S212] F. Luna-Perejon, S. Malwade, C. Styliadis, J. Civit, D. Cascado-Caballero, E. Konstantinidis, S. S. Abdul, P. D. Bamidis, A. Civit, Y.-C. J. Li, Evaluation of user satisfaction and usability of a mobile app for smoking cessation, *Computer methods and programs in biomedicine* 182 (2019) 105042.
- [S213] S. Macis, D. Loi, A. Ulgheri, D. Pani, G. Solinas, S. La Manna, V. Cestone, D. Guerri, L. Raffo, Design and usability assessment of a multi-device soa-based telecare framework for the elderly, *IEEE journal of biomedical and health informatics* 24 (1) (2019) 268–279.
- [S214] S. Marien, D. Legrand, R. Ramdoyal, J. Nsenga, G. Ospina, V. Ramon, A. Spinewine, A user-centered design and usability testing of a web-based medication reconciliation application integrated in an ehealth network, *International journal of medical informatics* 126 (2019) 138–146.
- [S215] A. I. Martins, A. Queirós, N. P. Rocha, Validation of a usability assessment instrument according to the evaluators' perspective about the users' performance, *Universal Access in the Information Society* (2019) 1–11.
- [S216] J. Mercado, I. Espinosa-Curiel, L. Escobedo, M. Tentori, Developing and evaluating a bci video game for neurofeedback training: the case of autism, *Multimedia Tools and Applications* 78 (10) (2019) 13675–13712.
- [S217] A. G. Mondéjar, G. F. M. Silva-Calpa, A. B. Raposo, D. C. Mograbi, Brapolar: An m-health application for remote monitoring of people with bipolar disorder, in: 2019 IEEE 7th International Conference on Serious Games and Applications for Health (SeGAH), IEEE, 2019, pp. 1–8.
- [S218] A. H. Ng, T. C. Crowe, K. Ball, B. Rasmussen, A mhealth support program for australian young adults with type 1 diabetes: A mixed methods study, *Digital health* 5 (2019) 2055207619882179.
- [S219] J. D. Noleto, V. J. C. Rodrigues, R. C. B. C. Carvalho, F. R. dos Santos Júnior, Interfaces of medication reminder applications: An analysis aimed at the elder age, in: *International Conference on Human-Computer Interaction*, Springer, 2019, pp. 493–512.
- [S220] E. W. Orenstein, J. Boudreaux, M. Rollins, J. Jones, C. Bryant, D. Karavite, N. Muthu, J. Hike, H. Williams, T. Kilgore, et al., Formative usability testing reduces severe blood product ordering errors., *Applied clinical informatics* 10 (5) (2019) 981–990.
- [S221] T. Partala, L. Saar, M. Männikkö, M. Karhula, T. Aschan, Continuous wellness tracking with firstbeat—usability, user experience, and subjective wellness impact, in: *International Conference on Wireless Mobile Communication and Healthcare*, Springer, 2019, pp. 281–293.
- [S222] T. Paulino, S. B. i Badia, M. Cameirão, Usability evaluation of an integrative exergaming system for the senior population, in: 2019 5th Experiment International Conference (exp. at'19), IEEE, 2019, pp. 286–291.
- [S223] R. Peters, E. Oleari, F. Sardu, M. A. Neerincx, Usability of the pal objectives dashboard for children's diabetes self-management education, in: Proceedings of the 2019 the 5th International Conference on e-Society, e-Learning and e-Technologies, 2019, pp. 22–28.
- [S224] H. Pilco, S. Sanchez-Gordon, T. Calle-Jimenez, J. L. Pérez-Medina, Y. Rybarczyk, J. Jadán-Guerrero, C. G. Maldonado, I. L. Nunes, An agile approach to improve the usability of a physical telerehabilitation platform, *Applied Sciences* 9 (3) (2019) 480.
- [S225] M. R. B. Postal, R. Rieder, A usability evaluation experiment of 3d user interfaces for elderly, *Revista Brasileira de Computação Aplicada* 11 (3) (2019) 28–38.
- [S226] B. Reeder, C. Drake, M. Ozkaynak, W. Jones, D. Mack, A. David, R. Starr, B. Trautner, H. L. Wald, Usability inspection of a mobile clinical decision support app and a short form heuristic evaluation checklist, in: *International Conference on Human-Computer Interaction*, Springer, 2019, pp. 331–344.
- [S227] Y. Rybarczyk, J. Luis Pérez Medina, L. Leconte, K. Jimenes, M. González, D. Esparza, Implementation and assessment of an intelligent motor tele-rehabilitation platform, *Electronics* 8 (1) (2019) 58.
- [S228] M. M. Saab, M. Landers, E. Cooke, D. Murphy, J. Hegarty, Feasibility and usability of a virtual reality intervention to enhance men's awareness of testicular disorders (e-mat), *Virtual Reality* 23 (2) (2019) 169–178.
- [S229] M. Sanchez-Doria, J. E. L. Gayo, D. Fernandez-Alvarez, H. Garcia-Gonzalez, Testing the usability of snomed ct terms suggestion in medical report, in: 2019 IEEE 32nd International Symposium on Computer-Based Medical Systems (CBMS), IEEE, 2019, pp. 672–677.
- [S230] A. I. Saroia, S. Gao, Usability evaluation of an online patient portal in sweden from users' perspectives., in: *PACIS*, 2019, p. 140.
- [S231] E. Schertz, H. Watson, A. Krishna, A. Sherrill, H. Evans, R. I. Arriaga, Bridging the gap: Creating a clinician-facing dashboard for ptsd, in: *IFIP Conference on Human-Computer Interaction*, Springer, 2019, pp. 224–233.
- [S232] J. Y. Shin, B. E. Holtz, Towards better transitions for children with diabetes: User experiences on a mobile health app, in: *Proceedings of the 18th ACM International Conference on Interaction Design and Children*, 2019, pp. 623–628.
- [S233] J. Sin, L. A. Woodham, C. Henderson, E. Williams, A. Sese Hernandez, S. Gillard, Usability evaluation of an ehealth intervention for family carers of individuals affected by psychosis: a mixed-method study, *Digital health* 5 (2019) 2055207619871148.
- [S234] M. Sobri, M. T. Ijab, N. M. Nayak, Usability evaluation of heart disease monitoring mobile applications: A comparative study, in: *International Visual Informatics Conference*, Springer, 2019, pp. 653–662.
- [S235] H. Son, E.-S. Nahm, Older adults' experience using patient portals in communities: challenges and opportunities, *CIN: Computers, Informatics, Nursing* 37 (1) (2019) 4–10.
- [S236] S. Stoutz, C.-H. Chen, K.-C. Broscheid, L. Schega, User acceptance and usability of a home based gait analysis system, in: *Smart SysTech 2019; European Conference on Smart Objects, Systems and Technologies*, VDE, 2019, pp. 1–5.
- [S237] T. Stütz, (how) can an app support physiotherapy for frozen shoulder patients?, in: *IFIP Conference on Human-Computer Interaction*, Springer, 2019, pp. 163–183.
- [S238] G. Veale, H. Dogan, J. Murphy, Development and usability evaluation of a nutrition and lifestyle guidance application for people living with and beyond cancer, in: *International Conference on Human-Computer Interaction*, Springer, 2019, pp. 337–347.
- [S239] A. Voinescu, L.-A. Fodor, D. S. Fraser, M. Mejías, D. David, Exploring the usability of nesplora aquarium, a virtual reality system for neuropsychological assessment of attention and executive functioning, in: *2019 IEEE Conference on Virtual Reality and 3D User Interfaces (VR)*, IEEE, 2019, pp. 1207–1208.
- [S240] X. Wang, T. C. Kim, S. Hegde, D. J. Hoffman, N. C. Benda, E. S. Franklin, D. Lavergne, S. J. Perry, R. J. Fairbanks, A. Z. Hettinger, et al., Design and evaluation of an integrated, patient-focused electronic health record display for emergency medicine, *Applied clinical informatics* 10 (4) (2019) 693.
- [S241] G. A. Wildenbos, M. W. Jaspers, M. P. Schijven, L. Dusseljee-Peute, Mobile health for older adult patients: Using an aging barriers framework to classify usability problems, *International journal of medical informatics* 124 (2019) 68–77.
- [S242] D. T. Wu, S. Vennemeyer, K. Brown, J. Revalee, P. Murdock, S. Salomone, A. France, K. Clarke-Myers, S. P. Hanke, Usability testing of an interactive dashboard for surgical quality improvement in a large congenital heart center, *Applied clinical informatics* 10 (5) (2019) 859.
- [S243] R. Alturki, M. J. AlGhamdi, V. Gay, N. Awan, A. ur Rehman, M. Alshehri, Privacy, security and usability for iot-enabled weight loss apps.
- [S244] M. M. Baig, H. GholamHosseini, F. Ahmad, A usability and user-experience analysis of vitalassist: A mhealth application to monitor vital signs in acute care settings, in: 2020 42nd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC), IEEE, 2020, pp. 5132–5135.
- [S245] J. Balsa, I. Félix, A. P. Cláudio, M. B. Carmo, I. C. e Silva, A. Guerreiro, M. Guedes, A. Henriques, M. P. Guerreiro, Usability of an intelligent virtual assistant for promoting behavior change and self-care in older people with type 2 diabetes, *Journal of Medical Systems* 44 (7) (2020) 1–12.
- [S246] S. E. Benton, R. M. Hueckel, B. Taicher, V. C. Muckler, Usability assessment of an electronic handoff tool to facilitate and improve postoperative communication between anesthesia and intensive care unit staff, *CIN: Computers, Informatics, Nursing* 38 (10) (2020) 500–507.
- [S247] K. Bersani, T. E. Fuller, P. Garabedian, J. Espares, E. Mlaver, A. Businger, F. Chang, R. B. Boxer, K. O. Schnock, R. Rozenblum, et al., Use, perceived usability, and barriers to implementation of a patient safety

- dashboard integrated within a vendor ehr, *Applied clinical informatics* 11 (1) (2020) 34.
- [S248] E. Broadbent, R. Montgomery Walsh, N. Martini, K. Loveys, C. Sutherland, Evaluating the usability of new software for medication management on a social robot, in: Companion of the 2020 ACM/IEEE International Conference on Human-Robot Interaction, 2020, pp. 151–153.
- [S249] M. Chan, A. Uribe-Quevedo, B. Kapralos, N. Jaimes, M. Jenkins, K. Kanev, A preliminary usability comparison of augmented and virtual reality user interactions for direct ophthalmoscopy, in: 2020 IEEE 8th International Conference on Serious Games and Applications for Health (SeGAH), IEEE, 2020, pp. 1–8.
- [S250] M. Chaparro, M. Carroll, J. Hook, Improving the usability of a digital neurobehavioral assessment, in: International Conference on Applied Human Factors and Ergonomics, Springer, 2020, pp. 69–76.
- [S251] J. Choi, E. Baker, S. Nalawade, H. Lee, Steps to develop a mobile app for pain assessment of cancer patients: A usability study, *CIN: Computers, Informatics, Nursing* 38 (2) (2020) 80–87.
- [S252] M. A. Clarke, J. L. Belden, M. S. Kim, Identifying persistent usability issues when using an electronic health record to inform ehr instructional redesign, in: International Conference on Applied Human Factors and Ergonomics, Springer, 2020, pp. 274–281.
- [S253] M. A. Clarke, J. L. Belden, M. S. Kim, Usability evaluation of an ehr to improve physician performance, in: International Conference on Applied Human Factors and Ergonomics, Springer, 2020, pp. 239–245.
- [S254] K. Denecke, S. Vaaheesan, A. Arulnathan, A mental health chatbot for regulating emotions (sermo)-concept and usability test, *IEEE Transactions on Emerging Topics in Computing*.
- [S255] H. N. Fu, R. F. Rizvi, J. F. Wyman, T. J. Adam, Usability evaluation of four top-rated commercially available diabetes apps for adults with type 2 diabetes, *Computers, informatics, nursing: CIN* 38 (6) (2020) 274.
- [S256] R. Grimaldi, E. Sciarretta, G. A. Parente, C. M. Medaglia, Designing and testing homecare4all: A ehealth mobile app for elderly, in: International Conference on Human-Computer Interaction, Springer, 2020, pp. 36–48.
- [S257] D. Hoelscher, S. McBride, Usability and the rapid deployable infectious disease decision support system, *CIN: Computers, Informatics, Nursing* 38 (10) (2020) 490–499.
- [S258] D.-H. Huang, S.-C. Lai, L.-M. Lo, T.-H. Hong, W.-K. Chiou, Subjective usability and will of use on mhealth application for postpartum emotional disorder-a case of we'll, in: International Conference on Human-Computer Interaction, Springer, 2020, pp. 696–709.
- [S259] F. R. Jeddi, E. Nabovati, R. Bigham, R. Khajouei, Usability evaluation of a comprehensive national health information system: Relationship of quality components to users' characteristics, *International journal of medical informatics* 133 (2020) 104026.
- [S260] Y. Kunaratana-Angkul, K.-C. Wu, Y. Shin-Renn, Usability in the app interface designing for the elderly with low-vision in taiwan and thailand, in: 2020 IEEE 2nd Eurasia Conference on Biomedical Engineering, Healthcare and Sustainability (ECBIOS), IEEE, 2020, pp. 64–67.
- [S261] J. Lynn Campbell, A mixed-methods approach to evaluating the usability of telemedicine communications, in: Proceedings of the 38th ACM International Conference on Design of Communication, 2020, pp. 1–6.
- [S262] A. Nurhudatiana, J. Y. Seo, An mhealth application redesign based on nielsen's usability heuristics: A case study of halodoc, in: Proceedings of the 2020 The 6th International Conference on E-Business and Applications, 2020, pp. 85–89.
- [S263] V. Penza, D. Soriero, G. Barresi, D. Pertile, S. Scabini, L. S. Mattos, The gps for surgery: A user-centered evaluation of a navigation system for laparoscopic surgery, *The International Journal of Medical Robotics and Computer Assisted Surgery* 16 (5) (2020) 1–13.
- [S264] D. Qin, W. Tiantian, Z. Xinrui, D. Roujing, M. M. Soares, Research on usability evaluation and redesign of treadmill man-machine interface, in: International Conference on Human-Computer Interaction, Springer, 2020, pp. 342–350.
- [S265] J. C. Quiroz, T. Bongolan, K. Ijaz, Alexa depression and anxiety self-tests: a preliminary analysis of user experience and trust, in: Adjunct Proceedings of the 2020 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2020 ACM International Symposium on Wearable Computers, 2020, pp. 494–496.
- [S266] L. Rettinger, L. Zeuner, K. Werner, V. Ritschl, E. Mosor, T. Stamm, E. Haslinger-Baumann, F. Werner, A mixed-methods evaluation of a supporting app for informal caregivers of people with dementia, in: Proceedings of the 13th ACM International Conference on PErvasive Technologies Related to Assistive Environments, 2020, pp. 1–8.
- [S267] M. L. Rodríguez-Almendros, M. J. Rodríguez-Fórtiz, M. J. Hornos, J. Samos-Jiménez, C. Rodríguez-Domínguez, S. Rute-Pérez, Design guide and usability questionnaire to develop and assess virrael, a web-based cognitive training tool for the elderly, *Behaviour & Information Technology* (2020) 1–20.
- [S268] T. Ruel, P.-M. Léger, G. Lodygensky, D. Luck, Y. Ding, B. Demolin, S. Sénécal, The effect of experience on learnability and usability of a neuroimaging platform, in: International Conference on Human-Computer Interaction, Springer, 2020, pp. 780–789.
- [S269] B. S. Capeletti, J. P. B. Ferreira, G. L. Dominguete, M. R. Pereira, A. P. Freire, Heuristic evaluation and user tests of wearable mobile health monitoring applications: what results do different methods yield?, in: Proceedings of the 19th Brazilian Symposium on Human Factors in Computing Systems, 2020, pp. 1–10.
- [S270] M. Ishak, R. Rahman, T. Mahmud, Integrating cloud computing in e-healthcare: System design, implementation and significance in context of developing countries, in: 2021 5th International Conference on Electrical Engineering and Information Communication Technology (ICEEICT), IEEE, 2021, pp. 1–6.
- [S271] T. Kebebaw, E. Alemneh, M. Azage, E. Misgan, D. Nigatu, E. Abate, Development and heuristic-based usability evaluation of an e-partograph, in: 2021 International Conference on Information and Communication Technology for Development for Africa (ICT4DA), IEEE, 2021, pp. 196–201.
- [S272] V. Bhatt, J. Li, B. Maharjan, Docpal: A voice-based ehr assistant for health practitioners, in: 2020 IEEE International Conference on E-health Networking, Application & Services (HEALTHCOM), IEEE, 2021, pp. 1–6.
- [S273] B. Ahmad, S. Beecham, I. Richardson, The case of golden jubilants: using a prototype to support healthcare technology research, in: 2021 IEEE/ACM 3rd International Workshop on Software Engineering for Healthcare (SEH), IEEE, 2021, pp. 68–71.
- [S274] A. Cárcamo, F. Kemper, D. Mauricio, Mondep app: Monitoring patients with depression using sentiment analysis of therapeutic diary entries, in: 2021 IEEE Sciences and Humanities International Research Conference (SHIRCON), IEEE, 2021, pp. 1–4.
- [S275] I. S. Santoso, A. Ferdinandyah, D. I. Sensuse, R. R. Suryono, A. N. Hidayanto, et al., Effectiveness of gamification in mhealth apps designed for mental illness, in: 2021 2nd International Conference on ICT for Rural Development (IC-ICTRuDev), IEEE, 2021, pp. 1–6.
- [S276] E. S. Abd Majid, J. Garcia, H. Alias, A. Nordin, W. Raffe, Heuristic evaluation for virtual reality for paediatric cancer patient: Perceptions of healthcare professionals, in: 2021 IEEE 9th International Conference on Serious Games and Applications for Health (SeGAH), IEEE, 2021, pp. 1–6.
- [S277] H. Zaini, N. H. Ishak, N. F. M. Johari, N. A. M. Rashid, H. Hamzah, Evaluation of a child immunization schedule application using the software usability measurement inventory (sumi) model, in: 2021 IEEE 11th International Conference on System Engineering and Technology (ICSET), IEEE, 2021, pp. 281–285.
- [S278] M. B. Garcia, J. B. Mangaba, C. C. Tanchoco, Acceptability, usability, and quality of a personalized daily meal plan recommender system: The case of virtual dietitian, in: 2021 IEEE 13th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment, and Management (HNICEM), IEEE, 2021, pp. 1–6.
- [S279] M. A. Bochicchio, L. Vaira, A. Mortara, R. De Maria, Which usability assessment for digital therapeutics and patient support programs?, in: 2021 IEEE International Conference on Digital Health (ICDH), IEEE, 2021, pp. 276–282.
- [S280] M. Lubis, D. O. Handayani, A. Rostiawan, Q. J. Adrian, R. Fauzi, I. F. Zamzami, Design approach in electronic health consultation application: User empowerment for internet addiction, in: 2021 International Conference Advancement in Data Science, E-learning and Information Systems (ICADEIS), IEEE, 2021, pp. 1–6.
- [S281] M. S. P. Pratama, V. Effendi, D. Junaedi, Modeling reproductive health educational games for early childhood using goal-directed design, in: 2021 International Conference on Software Engineering & Computer Systems and 4th International Conference on Computational Science and

- Information Management (ICSECS-ICOCSIM), IEEE, 2021, pp. 27–30.
- [S282] F. Lenz, M. Fock, T. Kramer, Y. Petersen, M. Teistler, A virtual reality game to support visuospatial understanding of medical x-ray imaging, in: 2021 IEEE 9th International Conference on Serious Games and Applications for Health (SeGAH), IEEE, 2021, pp. 1–6.
- [S283] M. B. Garcia, J. B. Mangaba, C. C. Tanchoco, Virtual dietitian: A nutrition knowledge-based system using forward chaining algorithm, in: 2021 International Conference on Innovation and Intelligence for Informatics, Computing, and Technologies (3ICT), IEEE, 2021, pp. 309–314.
- [S284] O. Oyebode, M. Alhasani, D. Mulchandani, T. Olagunju, R. Orji, Sleep-fit: a persuasive mobile app for improving sleep habits in young adults, in: 2021 IEEE 9th International Conference on Serious Games and Applications for Health (SeGAH), IEEE, 2021, pp. 1–8.
- [S285] S. Ahmad, D. Sessler, J. Kohlhammer, Towards a comprehensive cohort visualization of patients with inflammatory bowel disease, in: 2021 IEEE Workshop on Visual Analytics in Healthcare (VAHC), IEEE, 2021, pp. 25–29.
- [S286] M. F. L. Wakan, G. S. Niwanputri, Bettereyes: The desirable and convenient way of eye care based on a user-centered design approach with gamification, in: 2021 International Conference on Data and Software Engineering (ICoDSE), IEEE, 2021, pp. 1–6.
- [S287] S. Moreno-Gutierrez, P. Postigo-Martin, M. Damas, H. Pomares, O. Banos, M. Arroyo-Morales, I. Cantarero-Villanueva, Atope+: an mhealth system to support personalized therapeutic exercise interventions in patients with cancer, *IEEE Access* 9 (2021) 16878–16898.
- [S288] O. Oyebode, A. Ganesh, R. Orji, Treecare: Development and evaluation of a persuasive mobile game for promoting physical activity, in: 2021 IEEE Conference on Games (CoG), IEEE, 2021, pp. 1–8.
- [S289] G. Roque, A. Cavalcanti, J. Nascimento, R. Souza, S. Queiroz, Botcovid: development and evaluation of a chatbot to combat misinformation about covid-19 in brazil, in: 2021 IEEE International Conference on Systems, Man, and Cybernetics (SMC), IEEE, 2021, pp. 2506–2511.
- [S290] W. El Hefny, A. El Bolock, C. Herbert, S. Abdennadher, Chase away the virus: a character-based chatbot for covid-19, in: 2021 IEEE 9th International Conference on Serious Games and Applications for Health (SeGAH), IEEE, 2021, pp. 1–8.
- [S291] M. F. Pereira, E. Oliveira, N. F. Rodrigues, M. Bressler, J. Kolbenschlag, C. Prahm, Hand rehabilitation with virtual reality: preliminary learning results, in: 2021 IEEE 9th International Conference on Serious Games and Applications for Health (SeGAH), IEEE, 2021, pp. 1–8.
- [S292] S. Solórzano, K. Jimenes-Vargas, D. Pozo-Espín, J.-L. Pérez-Medina, Tele-rehabilitation platform ephort as serious game: Usability evaluation, in: 2021 Second International Conference on Information Systems and Software Technologies (ICI2ST), IEEE, 2021, pp. 54–61.
- [S293] M. D. M. Melo, J. C. B. Calixto, M. L. C. Acerro, Mobile app to give notice of health and safety emergencies, in: 2021 Congreso Internacional de Innovación y Tendencias en Ingeniería (CONIITI), IEEE, 2021, pp. 1–6.
- [S294] K. G. Sugosha, R. Andresswari, M. Hardiyanti, Design and implementation of user interface and user experience in online sales applications at sugosha pharmacy with user centered design method, in: 2021 International Conference on Advanced Computer Science and Information Systems (ICACSIS), IEEE, 2021, pp. 1–5.
- [S295] B. Chalfant, A. Ridgel, K. Kim, An initial study of virtual button pressing with haptic feedback for the rehabilitation of parkinson's disease, in: 2021 4th International Conference on Bio-Engineering for Smart Technologies (BioSMART), IEEE, 2021, pp. 1–4.
- [S296] J. Pedro Barros, P. Vieira Marques, A. Ferreira, mhealth in end stage renal disease self-management: A usability study, in: Proceedings of the 5th International Conference on Medical and Health Informatics, 2021, pp. 199–204.
- [S297] Y. Salamah, R. D. Asyifa, A. Asfarian, Improving the usability of personal health record in mobile health application for people with autoimmune disease, in: Asian CHI Symposium 2021, 2021, pp. 180–188.
- [S298] C. Crooks, R. Feinberg, T. Ayala-Feliciangeli, K. Dhodapkar, S. Singh, R. Arriaga, Design and evaluation of mobile mental health resources for first responders, in: Proceedings of the 14th EAI International Conference on Pervasive Computing Technologies for Healthcare, 2020, pp. 396–399.
- [S299] H. Petrie, M. Wakefield, Remote moderated and unmoderated evaluation by users with visual disabilities of an online registration and authentication system for health services, in: 9th International Conference on Software Development and Technologies for Enhancing Accessibility and Fighting Info-exclusion, 2020, pp. 38–43.
- [S300] H. Bjering, J. Anupama Ginige, Targeted health information delivery framework: Evaluation and feedback from potential client end-users, in: 2021 Australasian Computer Science Week Multiconference, 2021, pp. 1–9.
- [S301] R. Kocielnik, R. Langevin, J. S. George, S. Akenaga, A. Wang, D. P. Jones, A. Argyle, C. Fockele, L. Anderson, D. T. Hsieh, et al., Can i talk to you about your social needs? understanding preference for conversational user interface in health, in: Proceedings of the 3rd Conference on Conversational User Interfaces, 2021, pp. 1–10.
- [S302] J. O. De Nieva, J. A. Joaquin, C. B. Tan, R. K. Marc Te, E. Ong, Investigating students' use of a mental health chatbot to alleviate academic stress, in: 6th International ACM In-Cooperation HCI and UX Conference, 2020, pp. 1–10.
- [S303] J. Egede, M. J. G. Trigo, A. Hazzard, M. Porcheron, E. Bodaj, J. E. Fischer, C. Greenhalgh, M. Valstar, Designing an adaptive embodied conversational agent for health literacy: a user study, in: Proceedings of the 21st ACM International Conference on Intelligent Virtual Agents, 2021, pp. 112–119.
- [S304] B. S. Capeleti, G. L. Dominguete, M. R. Pereira, A. P. Freire, Interactive emergency telehealth systems in pandemic times: a usability evaluation in the interior of brazil, in: Proceedings of the XX Brazilian Symposium on Human Factors in Computing Systems, 2021, pp. 1–7.
- [S305] B. J. Nievas-Soriano, S. García-Duarte, A. M. Fernández-Alonso, A. Bonillo-Perales, T. Parrón-Carreño, Users evaluation of a spanish ehealth pediatric website, *Computer Methods and Programs in Biomedicine* 212 (2021) 106462.
- [S306] N. Gasteiger, H. S. Ahn, C. Gasteiger, C. Lee, J. Lim, C. Fok, B. A. Macdonald, G. H. Kim, E. Broadbent, Robot-delivered cognitive stimulation games for older adults: Usability and acceptability evaluation, *ACM Transactions on Human-Robot Interaction (THRI)* 10 (4) (2021) 1–18.
- [S307] M. Ghozali, S. Satibi, Z. Ikawati, L. Lazuardi, Asthma self-management app for indonesian asthmatics: a patient-centered design, *Computer Methods and Programs in Biomedicine* 211 (2021) 106392.
- [S308] M. Greenhalgh, C. Fitzpatrick, T. Rodabaugh, E. Madrigal, M. Timmerman, J. Chung, D. Ahuja, Q. Kennedy, O. A. Harris, M. M. Adamson, Assessment of task demand and usability of a virtual reality-based rehabilitation protocol for combat related traumatic brain injury from the perspective of veterans affairs healthcare providers: A pilot study, *Frontiers in Virtual Reality* (2021) 133.
- [S309] C. S. P. d. Medeiros, T. B. F. Pacheco, R. R. Dantas, F. A. d. C. Cavalcanti, Development and validity of a serious game (virtualter) for postural balance rehabilitation in older adults, *Simulation & Gaming* 52 (6) (2021) 735–752.
- [S310] R. Bouça-Machado, F. Pona-Ferreira, M. Leitão, A. Clemente, D. Vila-Viçosa, L. A. Kauppila, R. M. Costa, R. Matias, J. J. Ferreira, Feasibility of a mobile-based system for unsupervised monitoring in parkinson's disease, *Sensors* 21 (15) (2021) 4972.
- [S311] P. Campo-Prieto, G. Rodríguez-Fuentes, J. M. Cancela-Carral, Can immersive virtual reality videogames help parkinson's disease patients? a case study, *Sensors* 21 (14) (2021) 4825.
- [S312] V. L. Tiase, S. E. Wawrzynski, K. A. Sward, G. Del Fiol, C. Staes, C. Weir, M. R. Cummins, Provider preferences for patient-generated health data displays in pediatric asthma: a participatory design approach, *Applied clinical informatics* 12 (03) (2021) 664–674.
- [S313] L. D'orflinger, M. Nissen, K. Jäger, M. Wirth, A. Titzmann, C. Pontones, P. Fasching, M. W. Beckmann, S. Gradl, B. M. Eskofier, Digital maternity records: Motivation, acceptance, requirements, usability and prototype evaluation of an interface for physicians and midwives, in: *Proceedings of Mensch und Computer 2021*, 2021, pp. 204–209.
- [S314] V. De Luca, L. Bozzetto, C. Giglio, G. Tramontano, C. J. Chiatti, F. Gonidis, S. Birov, O. Beyhan, S. Robinson, G. Sanchez-Nanclares, et al., Satisfaction, self-management and usability: Assessment of two novel it solutions for type 2 diabetes patients' empowerment., in: *ICT4AWE*, 2021, pp. 130–136.
- [S315] N. N. A'bas, S. S. Rahim, M. L. Dolhalit, W. S. N. Saifudin, N. Abdul-lasim, S. Parumo, R. N. R. Omar, S. Z. M. Khair, K. Kalaiachelvam, S. I. N. Izhar, Web usability testing on diabetic retinopathy consultation system., *Ingénierie des Systèmes d'Information* 26 (3).
- [S316] R. W. Turer, C. M. DesRoches, L. Salmi, T. Helmer, S. T. Rosenbloom,

- Patient perceptions of receiving covid-19 test results via an online patient portal: an open results survey, *Applied Clinical Informatics* 12 (04) (2021) 954–959.
- [S317] D. J. Schreier, J. K. Lovely, Optimizing clinical monitoring tools to enhance patient review by pharmacists, *Applied Clinical Informatics* 12 (03) (2021) 621–628.
- [S318] L. Harrington, C. Parker, K. Ulanday, C. Harrington, Heuristic evaluation of a top-rated diabetes self-management app, *Applied Clinical Informatics* 12 (05) (2021) 1014–1020.
- [S319] J. A. García-Berná, S. Ouhbi, J. L. Fernández-Alemán, J. M. C. de Gea, J. Nicolás, Investigating the impact of usability on energy efficiency of web-based personal health records, *Journal of Medical Systems* 45 (6) (2021) 65.
- [S320] S. Khan, A. Achenbach, W. Quin Yow, L. Blessing, A case study on the design of touchscreen-based user interfaces for multilingual older adults from southeast asian backgrounds, in: *Asian CHI Symposium 2021*, 2021, pp. 167–173.
- [S321] R. Maharjan, D. A. Rohani, P. Bækgaard, J. Bardram, K. Doherty, Can we talk? design implications for the questionnaire-driven self-report of health and wellbeing via conversational agent, in: *Proceedings of the 3rd Conference on Conversational User Interfaces*, 2021, pp. 1–11.
- [S322] W. Martinez, A. J. Hackstadt, G. B. Hickson, T. Knoerl, S. T. Rosenbloom, K. A. Wallston, T. A. Elasy, The my diabetes care patient portal intervention: usability and pre-post assessment, *Applied Clinical Informatics* 12 (03) (2021) 539–550.
- [S323] D. Anastasiadou, B. Spanlang, M. Slater, J. V.-D. SEBASTIAN, J. A. Ramos-Quiroga, G. P. Puig, A. Ciudin, M. Comas, P. Lusilla-Palacios, A virtual reality tool using embodiment and body swapping techniques for the treatment of obesity: A pilot usability study, *ANNUAL REVIEW OF CYBERTHERAPY AND TELEMEDICINE 2021* (2021) 105.
- [S324] D. Bjelic, T. Keller, Preliminary findings of a virtual reality app for children with special needs, in: *Proceedings of the 18th international conference on cognition and exploratory learning in the digital age (CELDA 2021)*, ERIC, 2021, pp. 350–354.
- [S325] M. Oduor, T. Perⁱⁱ alⁱⁱa, Interactive urban play to encourage active mobility: Usability study of a web-based augmented reality application, *Frontiers in Computer Science* (2021) 67.
- [S326] T. V. Livanidou, A. S. Billis, E. T. Stamkopoulos, G. F. Romero, S. M. Molina, P. D. Bamidis, Towards an accessible e-training platform for the ageing well of people with cerebral palsy and their caregivers: the case of cp-ageing project: Identifying the needs for the accessibility of adults with cerebral palsy (acp) and their supports to online training materials, including assistive technologies (ats) to enhance their ageing well., in: *The 14th PErvasive Technologies Related to Assistive Environments Conference*, 2021, pp. 185–191.
- [S327] P. Campo-Prieto, G. Rodríguez-Fuentes, J. M. Cancela-Carral, Immersive virtual reality exergame promotes the practice of physical activity in older people: An opportunity during covid-19, *Multimodal Technologies and Interaction* 5 (9) (2021) 52.
- [S328] S. K. Tanbeer, E. R. Sykes, Myhealthportal—a web-based e-healthcare web portal for out-of-hospital patient care, *Digital Health* 7 (2021) 2055207621989194.
- [S329] Y. S. Liu, J. Hankey, N. M. Lou, P. Chokka, J. M. Harley, Usability and emotions of mental health assessment tools: comparing mobile app and paper-and-pencil modalities, *Journal of Technology in Human Services* 39 (2) (2021) 193–211.
- [S330] S. Rath, S. Chandna, Leveraging voice assistive technology to enhance health monitoring of older adults.
- [S331] U. N. Hashim, L. Salahuddin, R. R. R. Ikram, U. R. Hashim, H. C. Ngo, M. H. N. Mohayat, The design and implementation of mobile heart monitoring applications using wearable heart rate sensor, *International Journal of Advanced Computer Science and Applications* 12 (1).
- [S332] N. M. Tuah, A. Yoag, F. Ahmedy, Mydiabetes—the gamified application for diabetes self-management and care, *Computers* 10 (4) (2021) 50.
- [S333] H. Zhang, Z. Shen, S. Liu, D. Yuan, C. Miao, Ping pong: An exergame for cognitive inhibition training, *International Journal of Human-Computer Interaction* 37 (12) (2021) 1104–1115.
- [S334] N. N. A'bas, S. S. Rahim, M. L. Dolhalit, W. S. N. Saifudin, N. Abdulasim, S. Parumo, R. N. R. Omar, S. Z. M. Khair, K. Kalaichelvam, S. I. N. Izhar, Development and usability testing of a consultation system for diabetic retinopathy screening, *International Journal of Advanced Computer Science and Applications* 12 (5).
- [S335] F. Tahsin, S. Tracy, E. Chau, S. Harvey, M. Loganathan, B. McKinstry, S. W. Mercer, J. Nie, T. Ramsay, K. Thavorn, et al., Exploring the relationship between the usability of a goal-oriented mobile health application and non-usage attrition in patients with multimorbidity: A blended data analysis approach, *Digital health* 7 (2021) 20552076211045579.
- [S336] A. Jaffar, S. M. Sidik, N. Admodisastro, E. I. Mansor, C. F. Lau, Expert's usability evaluation of the pelvic floor muscle training mhealth app for pregnant women, *International Journal of Advanced Computer Science and Applications* 12 (10).
- [S337] W. Chumkasian, R. Fernandez, K. T. Win, C. Petsoglou, H. Lord, Adaptation of the maug and usability evaluation of a mobile phone-based system to promote eye donation, *International Journal of Medical Informatics* 151 (2021) 104462.
- [S338] J. M. Seo, S.-J. Kim, H. Na, J. H. Kim, H. Lee, The development of the postpartum depression self-management mobile application “happy mother”, *CIN: Computers, Informatics, Nursing* 39 (8) (2021) 439–449.
- [S339] C. E. Standoli, M. Terraroli, M. Scagnoli, F. Spelta, R. Sironi, P. Perego, G. Andreoni, Practicing the test of new system-services for elderly care: how to introduce and measure user experience and related outcomes, in: *Digital Health Technology for Better Aging: A multidisciplinary approach*, Springer, 2021, pp. 229–243.
- [S340] E. W. Baker, C. H. Dodson, Prototype development and usability evaluation of a clinical decision support tool for pharmacogenomic pharmacy in practice, *CIN: Computers, Informatics, Nursing* 39 (7) (2021) 362–366.
- [S341] E. R. Melnick, L. N. Dyrbye, C. A. Sinsky, M. Trockel, C. P. West, L. Nedelec, M. A. Tutty, T. Shanafelt, The association between perceived electronic health record usability and professional burnout among us physicians, in: *Mayo Clinic Proceedings*, Vol. 95, Elsevier, 2020, pp. 476–487.
- [S342] J. G. Thayer, D. F. Ferro, J. M. Miller, D. Karavite, R. W. Grundmeier, L. Utidjian, J. J. Zorc, Human-centered development of an electronic health record-embedded, interactive information visualization in the emergency department using fast healthcare interoperability resources, *Journal of the American Medical Informatics Association* 28 (7) (2021) 1401–1410.
- [S343] S. O. Blacklow, S. Lisker, M. Y. Ng, U. Sarkar, C. Lyles, Usability, inclusivity, and content evaluation of covid-19 contact tracing apps in the united states, *Journal of the American Medical Informatics Association* 28 (9) (2021) 1982–1989.
- [S344] M. W. Seitz, C. Haux, K. P. Smits, O. Kalmus, M. M. Van Der Zande, J. Lutjij, S. Listl, Development and evaluation of a mobile patient application to enhance medical-dental integration for the treatment of periodontitis and diabetes, *International Journal of Medical Informatics* 152 (2021) 104495.
- [S345] L. D. Breeman, M. Keesman, D. E. Atsma, N. H. Chavannes, V. Janssen, L. van Gemert-Pijnen, H. Kemps, W. Kraaij, F. Rauwers, T. Reijnders, et al., A multi-stakeholder approach to ehealth development: Promoting sustained healthy living among cardiovascular patients, *International journal of medical informatics* 147 (2021) 104364.
- [S346] L. B. Sherwin, C. B. Deroche, J. Yevu-Johnson, M. Matteson-Kome, M. Bechtold, I. Jahnke, G. L. Alexander, Usability evaluation of a smartphone medication reminder application in patients treated with short-term antibiotic, *CIN: Computers, Informatics, Nursing* 39 (10) (2021) 547–553.
- [S347] H. M. Lim, A. Abdullah, C. J. Ng, C. H. Teo, I. G. Valliyappan, H. A. Hadi, W. L. Ng, A. M. N. Azhar, T. K. Chiew, C. S. Liew, et al., Utility and usability of an automated covid-19 symptom monitoring system (cosmos) in primary care during covid-19 pandemic: A qualitative feasibility study, *International Journal of Medical Informatics* 155 (2021) 104567.
- [S348] C. E. Song, M. An, The self-management smartphone application for cancer survivors, relive: Development and usability testing, *CIN: Computers, Informatics, Nursing* 39 (6) (2021) 312–320.
- [S349] M. A. E. Rochin, J. O. Gutierrez-Garcia, J.-H. Rosales, L.-F. Rodriguez, Design and evaluation of a dashboard to support the comprehension of the progression of patients with dementia in day centers, *International Journal of Medical Informatics* 156 (2021) 104617.
- [S350] J. Y. Tsang, B. Brown, N. Peek, S. Campbell, T. Blakeman, Mixed methods evaluation of a computerised audit and feedback dashboard to improve patient safety through targeting acute kidney injury (aki) in primary care, *International journal of medical informatics* 145 (2021) 104299.
- [S351] C. Schⁱⁱone, U. Große, A. Wⁱⁱolfel, H. Krⁱⁱomker, Methods of usability testing for users with cognitive impairments, in: *Universal Access in Human-Computer Interaction. Design Methods and User Experience*: 15th

- International Conference, UAHCI 2021, Held as Part of the 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part I, Springer, 2021, pp. 99–115.
- [S352] B. Reeder, M. Gallimore, C. Howland, C. Emezue, K. Boles, A. Anbari, J.-A. D. Chase, Stepwise evaluation methodology for smart watch sensor function and usability, in: Augmented Cognition: 15th International Conference, AC 2021, Held as Part of the 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Springer, 2021, pp. 221–233.
- [S353] P. Mahapasuthanon, N. Kalantari, V. G. Motti, Evaluating an mhealth application: Findings on visualizing transportation and air quality, in: Diversity, Divergence, Dialogue: 16th International Conference, iConference 2021, Beijing, China, March 17–31, 2021, Proceedings, Part I 16, Springer, 2021, pp. 301–312.
- [S354] K. J. Blankenhagel, J. Werner, G. Mayer, J.-H. Schultz, R. Zarnekow, Understanding e-mental health for people with depression: An evaluation study, in: Wireless Mobile Communication and Healthcare: 9th EA International Conference, MobiHealth 2020, Virtual Event, November 19, 2020, Proceedings 9, Springer, 2021, pp. 34–51.
- [S355] Q. An, M. M. Kelley, P.-Y. Yen, Using experience-based co-design to develop mhealth app for digital pulmonary rehabilitation management of patients with chronic obstructive pulmonary disease (copd), in: HCI International 2021-Late Breaking Posters: 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part II, Springer, 2021, pp. 125–133.
- [S356] M. Hai, A. Lacle, Y. Zhou, Y. Patel, A. Roncal, P. Morreale, Usability evaluation of music applications for stress reduction, in: Design, User Experience, and Usability: Design for Diversity, Well-being, and Social Development: 10th International Conference, DUXU 2021, Held as Part of the 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part II, Springer, 2021, pp. 467–476.
- [S357] G. Bernardelli, V. Flori, L. Greci, A. Scaglione, A. Zangiacomi, A virtual reality based application for children with adhd: Design and usability evaluation, in: Augmented Reality, Virtual Reality, and Computer Graphics: 8th International Conference, AVR 2021, Virtual Event, September 7–10, 2021, Proceedings 8, Springer, 2021, pp. 363–375.
- [S358] R. Faria Gomes, M. d. F. Costa de Souza, Reprojecting a fitness app regarding retention and usability using nielsen's heuristics, in: Design, User Experience, and Usability: Design for Diversity, Well-being, and Social Development: 10th International Conference, DUXU 2021, Held as Part of the 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part II, Springer, 2021, pp. 434–449.
- [S359] S. J. Swierenga, J. Ismirle, C. Edwards, F. Abujarad, Usability of a digital elder mistreatment screening tool for older adults with visual and hearing disabilities, in: Design, User Experience, and Usability: Design for Diversity, Well-being, and Social Development: 10th International Conference, DUXU 2021, Held as Part of the 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part II, Springer, 2021, pp. 343–360.
- [S360] C. Torres, M. M. Soares, Ergonomic and usability analysis of platform for communication of people with limited talk, in: Design, User Experience, and Usability: Design for Diversity, Well-being, and Social Development: 10th International Conference, DUXU 2021, Held as Part of the 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part II, Springer, 2021, pp. 361–372.
- [S361] R. Meiklem, K. Stevenson, S. Richartz, D. B. Kingsmore, M.-M. Bouamra, M. Dunlop, P. Thomson, Advanced kidney disease patient portal: implementation and evaluation with haemodialysis patients, in: Human-Computer Interaction–INTERACT 2021: 18th IFIP TC 13 International Conference, Bari, Italy, August 30–September 3, 2021, Proceedings, Part II, Springer, 2021, pp. 175–196.
- [S362] M. Burghart, J. L. O'Sullivan, R. Spang, J.-N. Voigt-Antons, Demself, a mobile app for self-administered touch-based cognitive screening: Participatory design with stakeholders, in: Human Aspects of IT for the Aged Population. Supporting Everyday Life Activities: 7th International Conference, ITAP 2021, Held as Part of the 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part II, Springer, 2021, pp. 193–209.
- [S363] A. Vázquez-Ingelmo, J. Alonso, A. García-Holgado, F. J. García-Peña, J. Sampedro-Gómez, A. Sánchez-Puente, V. Vicente-Palacios, P. I. Dorado-Díaz, P. L. Sánchez, Usability study of cartier-ia: a platform for medical data and imaging management, in: Learning and Collaboration Technologies: New Challenges and Learning Experiences: 8th International Conference, LCT 2021, Held as Part of the 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part I, Springer, 2021, pp. 374–384.
- [S364] X.-Y. Jia, C.-H. Chen, A study on the usability of different age groups to the interface of smart bands, in: Human-Computer Interaction. Interaction Techniques and Novel Applications: Thematic Area, HCI 2021, Held as Part of the 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part II 23, Springer, 2021, pp. 402–414.
- [S365] S. Staab, J. Luderschmidt, L. Martin, Measuring and evaluation of the results of ui-re-engineering in the nursing field, in: Mobile Web and Intelligent Information Systems: 17th International Conference, MobiWIS 2021, Virtual Event, August 23–25, 2021, Proceedings 17, Springer, 2021, pp. 47–61.
- [S366] J. Xie, A usability testing of covid-19 vaccine appointment websites, in: HCI International 2021-Late Breaking Posters: 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part II, Springer, 2021, pp. 224–230.
- [S367] J. M. Templeton, C. Poellabauer, S. Schneider, Design of a mobile-based neurological assessment tool for aging populations, in: International Conference on Wireless Mobile Communication and Healthcare, Springer, 2021, pp. 166–185.
- [S368] S. Diamond, A. Hussain, R. Scott, R. Basu, S. Cao, M. Laroia, V. Adnani, Visualizing wellness: The myant skin system connected life app, in: Human Aspects of IT for the Aged Population. Supporting Everyday Life Activities: 7th International Conference, ITAP 2021, Held as Part of the 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part II, Springer, 2021, pp. 234–250.
- [S369] S. M. Coppola, A. P. Gurses, Remote usability testing of a pediatric trauma dashboard, in: Proceedings of the 21st Congress of the International Ergonomics Association (IEA 2021) Volume IV: Healthcare and Healthy Work, Springer, 2021, pp. 267–273.
- [S370] J. De la Torre Costa, B. R. Ballester, P. F. Verschure, A rehabilitation wearable device to overcome post-stroke learned non-use. methodology, design and usability, in: International Conference on ICT for Health, Accessibility and Wellbeing, Springer, 2021, pp. 198–205.
- [S371] A. AlMuaybid, L. AlSuwaidan, Investigating the usability of government applications for elderly in the kingdom of saudi arabia, in: Mobile Web and Intelligent Information Systems: 17th International Conference, MobiWIS 2021, Virtual Event, August 23–25, 2021, Proceedings 17, Springer, 2021, pp. 62–73.
- [S372] X. Wang, Q. Gao, Development of smartphone based personal health tracking system for older people, in: Human Aspects of IT for the Aged Population. Supporting Everyday Life Activities: 7th International Conference, ITAP 2021, Held as Part of the 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part II, Springer, 2021, pp. 322–334.
- [S373] S. Hühn, K. Bongard-Blanchy, Heuristic evaluation of covid-19 chatbots, in: International Workshop on Chatbot Research and Design, Springer, 2020, pp. 131–144.
- [S374] A. Pchelkin, N. Gusarova, N. Dobrenko, A. Vatyan, Mobile healthcare service for self-organization in older populations during a pandemic, in: Futuristic Trends in Network and Communication Technologies: Third International Conference, FTNCT 2020, Taganrog, Russia, October 14–16, 2020, Revised Selected Papers, Part I 3, Springer, 2021, pp. 379–390.
- [S375] F. Abujarad, S.-Y. Wang, D. Ulrich, S. S. Moughalian, B. K. Killelea, L. Fraenkel, C. P. Gross, S. B. Evans, Building a digital health risk calculator for older women with early-stage breast cancer, in: Design, User Experience, and Usability: Design for Diversity, Well-being, and Social Development: 10th International Conference, DUXU 2021, Held as Part of the 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part II, Springer, 2021, pp. 389–402.
- [S376] S. S. Anvari, G. M. Hancock, N. B. Mok, A. Ayvazyan, C. L. Machado, R. M. Chompff, K. M. McCoy, M. T. Nare, Y. Shiraiwa, Y. Mizushima, et al., Interface design for users with spinal cord injuries and disorders: An interdisciplinary research program with the us department of veterans affairs, in: Proceedings of the 21st Congress of the International Ergonomics Association (IEA 2021) Volume IV: Healthcare and Healthy Work, Springer, 2021, pp. 232–238.
- [S377] S. S. Rodrigues, D. M. B. Paiva, R. P. de Mattos Fortes, Considering the

- older adults' perceptions of iot for designing iot technologies, in: Human-Computer Interaction: 7th Iberoamerican Workshop, HCI-COLLAB 2021, Sao Paulo, Brazil, September 8–10, 2021, Proceedings 7, Springer, 2021, pp. 17–31.
- [S378] A. Mota, P. Amorim, A. Gabriel-Marques, H. Serra, M. Koc-Januchta, H. Zagalo, B. Sousa Santos, Cogrehab: A personalized digital approach to cognitive rehabilitation, in: HCI International 2021-Posters: 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part I 23, Springer, 2021, pp. 298–308.
- [S379] X. Li, T. Han, E. Zhang, W. Shao, L. Li, C. Wu, Memordie: An exergame combined with working memory training to motivate elderly with mild cognitive impairment to actively participate in rehabilitation, in: Human Aspects of IT for the Aged Population. Supporting Everyday Life Activities: 7th International Conference, ITAP 2021, Held as Part of the 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part II, Springer, 2021, pp. 90–105.
- [S380] T. Fergencs, F. Meier, Engagement and usability of conversational search—a study of a medical resource center chatbot, in: Diversity, Divergence, Dialogue: 16th International Conference, iConference 2021, Beijing, China, March 17–31, 2021, Proceedings, Part I 16, Springer, 2021, pp. 328–345.
- [S381] M. Hébert-Lavoie, K. Ung, L. Boudreault, C. Mahmoudi, Q. Vu, P. Jovet, P. Doyon-Poulin, Remote design of a pediatric intensive care unit dashboard in time of pandemics, in: Proceedings of the 21st Congress of the International Ergonomics Association (IEA 2021) Volume IV: Healthcare and Healthy Work, Springer, 2021, pp. 328–335.
- [S382] L.-H. Chen, M.-C. Zheng, Usability optimization of national health insurance express app, in: HCI International 2021-Late Breaking Posters: 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part II, Springer, 2021, pp. 147–154.
- [S383] L. Rojas, K. Sorbello, P. Contreras, J. F. Calderon, Design, implementation and evaluation of a technical platform that supports spanish speaking children with intellectual disabilities learn english as a second language, in: Social Computing and Social Media: Applications in Marketing, Learning, and Health: 13th International Conference, SCSCM 2021, Held as Part of the 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part II, Springer, 2021, pp. 257–269.
- [S384] G. Skikos, C. Goumopoulos, A tablet-based game tool for cognition training of seniors with mild cognitive impairment, in: Database Systems for Advanced Applications. DASFAA 2021 International Workshops: BDQM, GDMA, MLDDSA, MobiSocial, and MUST, Taipei, Taiwan, April 11–14, 2021, Proceedings 26, Springer, 2021, pp. 355–364.
- [S385] K. Harrington, M. P. Craven, M. L. Wilson, A. Landowska, Exploring user opinion on the benefits of cognitive games through an online walk-through and interview, in: Human Aspects of IT for the Aged Population. Technology Design and Acceptance: 7th International Conference, ITAP 2021, Held as Part of the 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part I, Springer, 2021, pp. 21–32.
- [S386] M. C. Fritz, S. J. Swierenga, P. P. Freddolino, C. K. Coursaris, A. T. Woodward, M. J. Reeves, Lessons learned in developing a patient-centered website to support stroke patients and caregivers during transitions of care, in: Design, User Experience, and Usability: Design for Diversity, Well-being, and Social Development: 10th International Conference, DUXU 2021, Held as Part of the 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part II, Springer, 2021, pp. 450–466.
- [S387] M. Migovich, R. Ghosh, N. Khan, J. A. Tate, L. C. Mion, N. Sarkar, System architecture and user interface design for a human-machine interaction system for dementia intervention, in: Human Aspects of IT for the Aged Population. Supporting Everyday Life Activities: 7th International Conference, ITAP 2021, Held as Part of the 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part II, Springer, 2021, pp. 277–292.
- [S388] M. Kraus, P. Seldschopf, W. Minker, Towards the development of a trustworthy chatbot for mental health applications, in: MultiMedia Modeling: 27th International Conference, MMM 2021, Prague, Czech Republic, June 22–24, 2021, Proceedings, Part II 27, Springer, 2021, pp. 354–366.
- [S389] S. Pourroostaei Ardakani, X. Wu, S. Pan, X. Gao, Arm: A real-time health monitoring mobile application, in: Computer Science and Engineering in Health Services: 5th EAI International Conference, COMPSE 2021, Virtual Event, July 29, 2021, Proceedings 5, Springer, 2021, pp. 45–59.
- [S390] E. Kaisar, R. B. Ding, T. Han, S. Qiu, Neoneo balance ball: designing an intergenerational interaction exergame for in-home balance training, in: Human Aspects of IT for the Aged Population. Supporting Everyday Life Activities: 7th International Conference, ITAP 2021, Held as Part of the 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part II, Springer, 2021, pp. 78–89.
- [S391] L. Albright, H. Le, S. Meller, A. Ofori Atta, D. A. Attah, S. M. Asafo, P. Y. Collins, D. Ben Zeev, J. Snyder, Co-designing m-healer: Supporting lay practitioner mental health workers in ghana, in: HCI International 2021-Late Breaking Posters: 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part II, Springer, 2021, pp. 115–124.
- [S392] C.-H. Chang, K.-H. Liu, H. Kajihara, W.-C. Lien, P.-T. Chen, A. Hiyama, Y.-C. Lin, C.-H. Chen, M. Inami, Designing a somatosensory interactive game of lower extremity muscle rehabilitation for the elderly, in: Human Aspects of IT for the Aged Population. Supporting Everyday Life Activities: 7th International Conference, ITAP 2021, Held as Part of the 23rd HCI International Conference, HCII 2021, Virtual Event, July 24–29, 2021, Proceedings, Part II, Springer, 2021, pp. 23–37.
- [S393] V. Oikawa, C. A. de la Higuera Amato, V. F. M. Amato, Proposal for a serious game to assist in the daily care of children with asd before covid-19, in: Iberoamerican Workshop on Human-Computer Interaction, Springer, 2021, pp. 164–177.
- [S394] J. W. J. R. van't Klooster, P. J. H. Slijkhuis, J. van Gend, B. Bente, L. van Gemert-Pijnen, First eyetracking results of dutch coronamelder contact tracing and notification app, in: Intelligent Human Computer Interaction: 12th International Conference, IHCI 2020, Daegu, South Korea, November 24–26, 2020, Proceedings, Part II 12, Springer, 2021, pp. 199–207.
- [S395] A. García-Holgado, A. Vázquez-Ingelmo, J. Alonso-Sánchez, F. J. García-Péñalvo, R. Therón, J. Sampedro-Gómez, A. Sánchez-Puente, V. Vicente-Palacios, P. I. Dorado-Díaz, P. L. Sánchez, User-centered design approach for a machine learning platform for medical purpose, in: Iberoamerican Workshop on Human-Computer Interaction, Springer, 2021, pp. 237–249.
- [S396] R. Francesc, M. Risi, G. Tortora, F. Di Salle, Thea: empowering the therapeutic alliance of children with asd by multimedia interaction, Multimedia Tools and Applications 80 (2021) 34875–34907.
- [S397] G. Borrego, A. L. Morán, V. Meza, F. Orihuela-Espina, L. E. Sucar, Key factors that influence the ux of a dual-player game for the cognitive stimulation and motor rehabilitation of older adults, Universal Access in the Information Society 20 (2021) 767–783.
- [S398] K. Weir, F. Loizides, V. Nahar, A. Aggoun, A. Pollard, I see therefore i read: improving the reading capabilities of individuals with visual disabilities through immersive virtual reality, Universal Access in the Information Society (2021) 1–27.
- [S399] M. D. Rodríguez, J. Beltrán, M. Valenzuela-Beltrán, D. Cruz-Sandoval, J. Favela, Assisting older adults with medication reminders through an audio-based activity recognition system, Personal and Ubiquitous Computing 25 (2021) 337–351.
- [S400] C. Harvey, E. Selmanović, J. O'Connor, M. Chahin, A comparison between expert and beginner learning for motor skill development in a virtual reality serious game, The Visual Computer 37 (1) (2021) 3–17.
- [S401] L. Cao, C. Peng, Y. Dong, Ellic's exercise class: promoting physical activities during exergaming with immersive virtual reality, Virtual reality 25 (2021) 597–612.
- [S402] N. E. Youngblood, M. F. Capanoglu, R. Sesek, The accessibility of state occupational safety and health consultation websites, Universal Access in the Information Society 20 (2021) 85–92.
- [S403] C.-J. Liang, C. Start, H. Boley, V. R. Kamat, C. C. Menassa, M. Aebersold, Enhancing stroke assessment simulation experience in clinical training using augmented reality, Virtual Reality 25 (2021) 575–584.
- [S404] S. S. E. Alwi, M. A. A. Murad, S. Abdullah, A. Kamaruddin, A prototype development and usability evaluation of an e-health system, in: 2022 Applied Informatics International Conference (AiIC), IEEE, 2022, pp. 34–39.
- [S405] I. E. Ismail, D. Y. Liliana, A. R. Zain, Evaluation of emehealth application using use questionnaire, in: 2022 5th International Conference of Computer and Informatics Engineering (IC2IE), IEEE, 2022, pp. 247–252.
- [S406] S.-L. Wang, I.-E. C. Honours, A. Kuo, J.-Y. Lin, Mobile emotion health-

- care system applying sentiment analysis, in: 2022 IEEE International Conference on Big Data (Big Data), IEEE, 2022, pp. 2814–2820.
- [S407] A. A. Widodo, A. T. W. Almais, M. Alamsyah, R. Hariyanto, Usability analysis to measure the effectiveness of implementing the mapping system for covid-19 patients, in: 2022 2nd International Conference on Information Technology and Education (ICIT&E), IEEE, 2022, pp. 92–96.
- [S408] H.-P. Tsai, C.-C. Chen, C.-W. Peng, Usability evaluation of a muscle strength training system for older adults, in: 2022 International Conference on Computer and Applications (ICCA), IEEE, 2022, pp. 1–5.
- [S409] Y. Park, D. Kim, S. Park, J. Na, Y. Choi, S. H. Ho, M. Lee, J. H. Kim, J. H. Kim, J. Lee, Development and usability test of iot-based mobile applications for persons with mild physical disabilities and their caregivers, in: 2022 19th International Conference on Ubiquitous Robots (UR), IEEE, 2022, pp. 243–247.
- [S410] S. Rinaldi, A. Gandhi, N. Selviandro, Usability evaluation and recommendation of user interface design for e-hac application by using user-centered design method, in: 2022 24th International Conference on Advanced Communication Technology (ICACT), IEEE, 2022, pp. 483–490.
- [S411] M. Flaucher, M. Nissen, K. M. Jaeger, A. Titzmann, C. Pontones, H. Huebner, P. A. Fasching, M. W. Beckmann, S. Gradl, B. M. Eskofier, Smartphone-based colorimetric analysis of urine test strips for at-home prenatal care, *IEEE Journal of Translational Engineering in Health and Medicine* 10 (2022) 1–9.
- [S412] M. Faizzati, F. Arifiansyah, Interaction design of fertility tracking application using user-centered design, in: 2022 International Conference on Data and Software Engineering (ICoDSE), IEEE, 2022, pp. 95–100.
- [S413] Q. Ali, A. Dæhlen, I. Heldal, C. G. Helgesen, Development of vision screening tool in virtual reality: A usability assessment study, in: 2022 E-Health and Bioengineering Conference (EHB), IEEE, 2022, pp. 1–5.
- [S414] H. S. Jaladara, R. R. Pahlevi, H. H. Nuha, System usability scale analysis of infusion fluid level monitoring and notification system using iot, in: 2022 IEEE International Conference on Communication, Networks and Satellite (COMNETSAT), IEEE, 2022, pp. 112–117.
- [S415] Y. S. Bae, Y. Park, S. M. Lee, H. H. Seo, H. Lee, T. Ko, E. Lee, S. M. Park, H.-J. Yoon, Development of blockchain-based health information exchange platform using hl7 fhir standards: Usability test, *IEEE Access* 10 (2022) 79264–79271.
- [S416] Z. Mohammadmazdeh, A. M. Nickfarjam, A. Babajani, F. R. Jeddi, Iranian national covid-19 electronic screening system: A mixed-method usability evaluation, in: 2022 8th International Conference on Web Research (ICWR), IEEE, 2022, pp. 147–151.
- [S417] O. Ebere, V. Ramsurrun, P. Seeam, P. Katsina, S. Anantwar, M. Sharma, A. Seeam, Nfc tag-based mhealth patient healthcare tracking system, in: 2022 3rd International Conference on Next Generation Computing Applications (NextComp), IEEE, 2022, pp. 1–6.
- [S418] M. Ghozali, Implementation of user centered design to develop attractive educational content in the asthma-self management app, in: 2022 2nd International Conference on Emerging Smart Technologies and Applications (eSmarTA), IEEE, 2022, pp. 1–6.
- [S419] C. Goumopoulos, E. Drakakis, D. Gklavakis, Augmented and virtual reality based exergames in game2awe for elderly fall prevention, in: 2022 18th International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob), IEEE, 2022, pp. 100–105.
- [S420] N. E. Anton, G. Zhou, T. M. Hornbeck, D. Yu, Nurse perceptions of the usability of augmented reality to support clinical decision making: Results of a pilot study, in: 2022 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (VRW), IEEE, 2022, pp. 517–520.
- [S421] J. Juhl, K. F. Rudolf, L. Kohout, M. B. Schroth, F. Gauger, C. Zimmermann, W. Stork, Using augmented reality and artificial intelligence for an efficient and safe preparation of individual drug assortments in nursing homes, in: 2022 International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME), IEEE, 2022, pp. 1–6.
- [S422] S. H. Afrizal, N. Hakiem, A. E. Permanasari, H. S. Albab, G. Y. Sanjaya, L. Lazuardi, A user-centered design of natural language processing for maternal monitoring chatbot system, in: 2022 International Conference on Informatics, Multimedia, Cyber and Information System (ICIMCIS), IEEE, 2022, pp. 244–248.
- [S423] B. X. Chia, W. J. Teo, J. X. Swa, S. Yean, B. S. Lee, H. L. Oh, Y.-L. Theng, Design principles and considerations for a localisation app for caregivers of people with dementia, in: 2022 International Conference on Platform Technology and Service (PlatCon), IEEE, 2022, pp. 19–24.
- [S424] R. Schwartz, A. Ramanan, D. Patel, A. Lynch, S. Baee, L. Barnes, Dara: Development of a chatbot support system for an anxiety reduction digital intervention, in: 2022 Systems and Information Engineering Design Symposium (SIEDS), IEEE, 2022, pp. 139–144.
- [S425] A. Chatzimparmpas, V. Park, A. Kerren, Evaluating stackgenvis with a comparative user study, in: 2022 IEEE 15th Pacific Visualization Symposium (PacificVis), IEEE, 2022, pp. 161–165.
- [S426] K. Nome, M. V. Olsen, H. Soleim, A. Geitung, T. Johnsgaard, K. Karlsgren, Usability of a vr simulation training concept with intentional simulation errors, in: 2022 1st IEEE International Conference on Cognitive Aspects of Virtual Reality (CVR), IEEE, 2022, pp. 000037–000042.
- [S427] M. Rafiq, V. Effendi, A. Gandhi, User interface design for blood donor information media using user-centered design method (case study utd pmi pontianak), in: 2022 1st International Conference on Software Engineering and Information Technology (ICoSEIT), IEEE, 2022, pp. 156–161.
- [S428] F. Egle, F. Kluge, D. Schoene, L. Becker, A. D. Koolewijn, Development of an inertial sensor-based exergame for combined cognitive and physical training, in: 2022 IEEE-EMBS International Conference on Wearable and Implantable Body Sensor Networks (BSN), IEEE, 2022, pp. 1–4.
- [S429] M. C. Samaniego, R. Acerado, A. J. Sulit, R. Morco, Development of virtual support application for sexual and gender-based violence victims, in: 2022 International Conference on ICT for Smart Society (ICISS), IEEE, 2022, pp. 01–06.
- [S430] S. I. M. Said, R. Aminuddin, N. A. Z. Abidin, S. D. N. M. Nasir, A. Z. M. Ibrahim, Visualizing covid-19 vaccination rate and vaccination centre in malaysia using dbscan clustering model, in: 2022 IEEE International Power and Renewable Energy Conference (IPRECON), IEEE, 2022, pp. 1–6.
- [S431] O. Haggag, Better identifying and addressing diverse issues in mhealth and emerging apps using user reviews, in: Proceedings of the International Conference on Evaluation and Assessment in Software Engineering 2022, 2022, pp. 329–335.
- [S432] K. Boyd, C. Potts, R. Bond, M. Mulvenna, T. Broderick, C. Burns, A. Bickerdike, M. McTear, C. Kostenius, A. Vakaloudis, et al., Usability testing and trust analysis of a mental health and wellbeing chatbot, in: Proceedings of the 33rd European Conference on Cognitive Ergonomics, 2022, pp. 1–8.
- [S433] M. R. Haque, S. Rubya, "" for an app supposed to make its users feel better, it sure is a joke""—an analysis of user reviews of mobile mental health applications, *Proceedings of the ACM on Human-Computer Interaction* 6 (CSCW2) (2022) 1–29.
- [S434] A. Hamid, R. Arshad, S. Shahid, What are you thinking?: Using cbt and storytelling to improve mental health among college students, in: Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems, 2022, pp. 1–16.
- [S435] N. Gasteiger, H. S. Ahn, C. Lee, J. Lim, B. A. MacDonald, G. H. Kim, E. Broadbent, Participatory design, development, and testing of assistive health robots with older adults: An international four-year project, *ACM Transactions on Human-Robot Interaction (THRI)* 11 (4) (2022) 1–19.
- [S436] J. Moilanen, A. Visuri, S. A. Suryanarayana, A. Alorwu, K. Yatani, S. Hosio, Measuring the effect of mental health chatbot personality on user engagement, in: Proceedings of the 21st International Conference on Mobile and Ubiquitous Multimedia, 2022, pp. 138–150.
- [S437] L. Scheuer, J. Torous, Usable data visualization for digital biomarkers: An analysis of usability, data sharing, and clinician contact, *Digital Biomarkers* 6 (3) (2022) 98–106.
- [S438] A. Islam, B. M. Chaudhry, Early usability evaluation of a relational agent for the covid-19 pandemic, in: Adjunct Proceedings of the 35th Annual ACM Symposium on User Interface Software and Technology, 2022, pp. 1–3.
- [S439] R. Te Kampe, A. Boonen, T. L. Jansen, J. M. Elling, M. Flendrie, Y. van Eijk-Hustings, M. Janssen, C. van Durme, H. de Vries, Development and usability of a web-based patient-tailored tool to support adherence to urate-lowering therapy in gout, *BMC Medical Informatics and Decision Making* 22 (1) (2022) 1–11.
- [S440] K. Ashish, S. Y. J. Kong, O. Basnet, S. H. Haaland, P. Bhattacharai, Ø. Gomo, R. Gurung, F. Ahlsson, Ø. Meinich-Bache, A. Axelin, et al., Usability, acceptability and feasibility of a novel technology with visual guidance with video and audio recording during newborn resuscitation: a

- pilot study, *BMJ Health & Care Informatics* 29 (1).
- [S441] M. Farzandipour, E. Nabovati, M. Sadeqi Jabali, Comparison of usability evaluation methods for a health information system: heuristic evaluation versus cognitive walkthrough method, *BMC Medical Informatics and Decision Making* 22 (1) (2022) 1–11.
- [S442] M. Langarizadeh, S. A. Fatemi Aghda, A. Nadjarzadeh, Design and evaluation of a mobile-based nutrition education application for infertile women in iran, *BMC Medical Informatics and Decision Making* 22 (1) (2022) 58.
- [S443] C. Kongjit, A. Nimmolrat, A. Khamaksorn, Mobile health application for thai women: investigation and model, *BMC Medical Informatics and Decision Making* 22 (1) (2022) 1–20.
- [S444] S. Aalaei, M. Amini, M. R. Mazaheri Habibi, H. Shahraki, S. Eslami, A telemonitoring system to support cpap therapy in patients with obstructive sleep apnea: a participatory approach in analysis, design, and evaluation, *BMC Medical Informatics and Decision Making* 22 (1) (2022) 1–16.
- [S445] M. Mehrabi, B. Zamani, A. Hamou-Lhadj, Healma: a model-driven framework for automatic generation of iot-based android health monitoring applications, *Automated Software Engineering* 29 (2) (2022) 56.
- [S446] S. B. Bhanvadia, M. S. Brar, A. Delavar, K. Tavakoli, B. Radha Saseendrakumar, R. N. Weinreb, L. M. Zangwill, S. L. Baxter, Assessing usability of smartwatch digital health devices for home blood pressure monitoring among glaucoma patients, in: *Informatics*, Vol. 9, MDPI, 2022, p. 79.
- [S447] J. Lehmann, I. Schreyer, D. Riedl, M. Tschuggnall, J. M. Giesinger, M. Ninkovic, M. Huth, I. Kronberger, G. Rumpold, B. Holzner, Usability evaluation of the computer-based health evaluation system (ches) diary for patients with faecal incontinence: a pilot study, *BMC Medical Informatics and Decision Making* 22 (1) (2022) 81.
- [S448] S. Balderas-Díaz, M. J. Rodríguez-Fortiz, J. L. Garrido, M. Bellido-González, G. Guerrero-Contreras, A psycho-educational intervention programme for parents with sga foetuses supported by an adaptive mhealth system: design, proof of concept and usability assessment, *BMC Medical Informatics and Decision Making* 22 (4) (2022) 1–20.
- [S449] S. Khan, D. King, S. Osmani, O. Harte, J. Solomon, K. Nirajan, D. J. Rosenberg, Provider response to a venous thromboembolism risk assessment and prophylaxis ordering tool: Observational study, *Applied Clinical Informatics* 13 (05) (2022) 1214–1222.
- [S450] Y. Ke, I. Cheng, G. S. H. Tan, R. W. Y. Fok, J. J. Chan, K. W.-J. Loh, A. Chan, Development and pilot testing of a decision aid for navigating breast cancer survivorship care, *BMC Medical Informatics and Decision Making* 22 (1) (2022) 330.
- [S451] A. Pillai, M. S. H. Sunny, M. T. Shahria, N. Banik, M. H. Rahman, Gamification of upper limb rehabilitation in mixed-reality environment, *Applied Sciences* 12 (23) (2022) 12260.
- [S452] Y. X. Ho, R. S. Morse, K. Lambden, B. P. Mushi, M. Ngoma, H. Mahuna, T. Ngoma, S. Miesfeldt, How a digital case management platform affects community-based palliative care of sub-saharan african cancer patients: Clinician-users' perspectives, *Applied Clinical Informatics* 13 (05) (2022) 1092–1099.
- [S453] H. Freier, L. M. Gerhards, D. Sondern, S. Schwenke, M. Thielsch, Usability and user experience of medical devices—insights from laypersons and healthcare professionals, in: *Proceedings of Mensch und Computer 2022*, 2022, pp. 328–332.
- [S454] B. Wang, X. Hao, X. Yan, J. Lai, F. Jin, X. Liao, H. Xie, C. Yao, Evaluation of the clinical application effect of esource record tools for clinical research, *BMC Medical Informatics and Decision Making* 22 (1) (2022) 98.
- [S455] M. Kim, Y. Kim, M. Choi, Mobile health platform based on user-centered design to promote exercise for patients with peripheral artery disease, *BMC Medical Informatics and Decision Making* 22 (1) (2022) 206.
- [S456] G. Mittmann, A. Barnard, I. Krammer, D. Martins, J. Dias, Lina—a social augmented reality game around mental health, supporting real-world connection and sense of belonging for early adolescents, arXiv preprint arXiv:2204.12917.
- [S457] S. Jiménez, R. Juárez-Ramírez, A. Ramírez-Noriega, F. Murillo-Muñoz, A. Molina, V. Castillo, C. Navarro-Cota, A usability and persuasion evaluation of mobile apps for diabetes type 2, *Programming and Computer Software* 48 (8) (2022) 552–565.
- [S458] R. Maué, R. Flechtnner, “hopohopo”: a virtual reality awareness application about social anxiety disorder, in: *Proceedings of Mensch und Computer 2022*, 2022, pp. 420–424.
- [S459] K. Kubota, E. S”ateri, T. N. Joelsson, T. M”akil”a, S. Salanter”a, A. Pakarinen, Pilot study and gamification analysis of a theory-based exergame, *International Journal of Serious Games* 9 (3) (2022) 63–79.
- [S460] S. Cervera-Torres, F. J. Núñez-Benjumea, A. de Arriba Muñoz, I. A. Chicchi Giglioli, L. Fernández-Luque, Digital health for emotional and self-management support of caregivers of children receiving growth hormone treatment: a feasibility study protocol, *BMC Medical Informatics and Decision Making* 22 (1) (2022) 215.
- [S461] M. R. Lindsay, K. Lytle, Implementing best practices to redesign workflow and optimize nursing documentation in the electronic health record, *Applied Clinical Informatics* 13 (03) (2022) 711–719.
- [S462] A. Asadov, A. Boiko, M. Gaiduk, W. D. Scherz, R. Seepold, N. M. Madrid, Evaluation of a prototype for early active patient mobilization, *Procedia computer science* 207 (2022) 2223–2231.
- [S463] R. Maskeliūnas, R. Damaševičius, A. Kulikajevas, J. Marley, C. Larsson, Evaluation of myrelief serious game for better self-management of health behaviour strategies on chronic low-back pain, in: *Informatics*, Vol. 9, MDPI, 2022, p. 40.
- [S464] V. Wiemker, A. Bunova, M. Neufeld, B. Gornyi, E. Yurasova, S. Konigorski, A. Kalinina, A. Kontsevaya, C. Ferreira-Borges, C. Probst, Pilot study to evaluate usability and acceptability of the ‘animated alcohol assessment tool’ in russian primary healthcare, *Digital Health* 8 (2022) 20552076211074491.
- [S465] C. M. Legaspi Jr, T. R. Pacana, K. Loja, C. Sing, E. Ong, User perception of wysa as a mental well-being support tool during the covid-19 pandemic, in: *Asian HCI Symposium’22*, 2022, pp. 52–57.
- [S466] J. W. Kim, S. J. Kim, W. C. Cha, T. Kim, A blockchain-applied personal health record application: Development and user experience, *Applied Sciences* 12 (4) (2022) 1847.
- [S467] P. Zikas, S. Kateros, N. Lydatakis, M. Kentros, E. Geronikolakis, M. Kamaranakis, G. Evangelou, I. Kartsonaki, A. Apostolou, T. Birrenbach, et al., Virtual reality medical training for covid-19 swab testing and proper handling of personal protective equipment: Development and usability, *Frontiers in virtual reality* 2 (2022) 175.
- [S468] E. R. Oliveira, A. C. Branco, D. Carvalho, E. R. Sacramento, O. Tyshochuk, L. Pedro, M. J. Antunes, A. M. Almeida, F. Ramos, An iterative process for the evaluation of a mobile application prototype, *SN Computer Science* 3 (4) (2022) 262.
- [S469] S. J. Lee, M. J. Choi, S. H. Yu, H. Kim, S. J. Park, I. Y. Choi, Development and evaluation of smartphone usage management system for preventing problematic smartphone use, *Digital health* 8 (2022) 20552076221089095.
- [S470] B. Schooley, S. S. Feldman, User perceptions about sharing exposure notification information for communicable diseases, *Frontiers in Digital Health* 4.
- [S471] R. M. F. d. Moura Júnior, L. R. G. Alves, C. S. G. González, Colaborativa: A platform based on gamified collaborative practices to prevent pressure injuries for wheelchair users, *Sensors* 22 (5) (2022) 1738.
- [S472] A. Donawa, C. Powell, R. Wang, M.-Y. Chih, E. Aronoff-Spencer, C. E. Baker, Note: Assessing cancer patient usability of a mobile distress screening app, in: *ACM SIGCAS/SIGCHI Conference on Computing and Sustainable Societies (COMPASS)*, 2022, pp. 643–649.
- [S473] A. Sluijters, M. Ousmer, P. Roselli, J. Vanderdonckt, Quantumleap, a framework for engineering gestural user interfaces based on the leap motion controller, *Proceedings of the ACM on Human-Computer Interaction* 6 (EICS) (2022) 1–47.
- [S474] L. Escobedo, R. I. Arriaga, Understanding the challenges of deploying a milestone-tracking application in a cross-cultural context, *International Journal of Human-Computer Studies* 162 (2022) 102801.
- [S475] S. J. Yan, G. Wadley, T. Vo, Y. Xiao, H. Truong, Design and evaluation of a prototype ‘hibaby’for pregnancy assistance, in: *Proceedings of the 2022 International Conference on Human Machine Interaction*, 2022, pp. 53–59.
- [S476] R. Buivydaite, G. Reen, T. Kovalevica, H. Dodd, I. Hicks, C. Vincent, D. Maughan, Improving usability of electronic health records in a uk mental health setting: a feasibility study, *Journal of Medical Systems* 46 (7) (2022) 50.
- [S477] C. L. Cifra, C. R. Tigges, S. L. Miller, N. Curl, C. D. Monson, K. C. Dukes, H. S. Reisinger, P. R. Pennathur, D. F. Sittig, H. Singh, Reporting outcomes of pediatric intensive care unit patients to referring physicians

- via an electronic health record-based feedback system, *Applied clinical informatics* 13 (02) (2022) 495–503.
- [S478] S. Haycocks, R. Cameron, M. Edge, J. Budd, P. Chadwick, Implementation of a novel mhealth application for the management of people with diabetes and recently healed foot ulceration: A feasibility study, *Digital Health* 8 (2022) 20552076221142103.
- [S479] B. Simoski, M. Klein, A. Van Halteren, H. Bal, User preferences in occupational sedentary behaviour digital interventions: Design and evaluation of a low-intrusive software tool, in: Proceedings of the 15th International Conference on PErvasive Technologies Related to Assistive Environments, 2022, pp. 7–16.
- [S480] A. Rojo, J. Á. Santos-Paz, Á. Sánchez-Picot, R. Raya, R. García-Carmona, Farmday: A gamified virtual reality neurorehabilitation application for upper limb based on activities of daily living, *Applied Sciences* 12 (14) (2022) 7068.
- [S481] J. J. Dietrich, L. Tsotsetsi, T. Dubazane, G. Tshabalala, B. Maimela, M. Weiss, M. Mulaudzi, A qualitative study to explore strategies to improve the road to health application for maternal and child health outcomes in south africa, *Frontiers in Digital Health* 4 (2023) 1094754.
- [S482] T. Batool, Y. Vanrompay, A. Neven, M. Scherrenberg, V. Ross, P. Dendale, D. Janssens, Design process and design evaluation of web-based visualization dashboard to monitor and support the decision-making of travel-related physical activity, in: Proceedings of the 15th International Conference on PErvasive Technologies Related to Assistive Environments, 2022, pp. 55–62.
- [S483] J. D. Sinnatwah Jr, H. Kenneh, A. A. Coker, W.-M. Harmon-Gray, J. Zankah, L. Day, E. Hubbell, M. J. Murphy, M. Izzo, D. Kong, et al., Participatory design and process testing to optimize utility, usability, and acceptability of a mobile game for promoting evidence-driven public health decision-making in resource-constrained settings, *Frontiers in Digital Health* (2022) 197.
- [S484] F. Mandracchia, L. Tarro, E. Llaurdó, R. M. Valls, R. Solà, The “healthy meals” web app for the assessment of nutritional content and food allergens in restaurant meals: Development, evaluation and validation, *Digital Health* 8 (2022) 20552076221081690.
- [S485] U. H. Mohamad, I. N. Abdul Hakim, M. Ali-Akbari, Usability of a gamified antibiotic resistance awareness mobile application: A qualitative evaluation, *IET Networks*.
- [S486] P. Arpaia, E. De Benedetto, L. De Paolis, G. D’Errico, N. Donato, L. Duraccio, Performance and usability evaluation of an extended reality platform to monitor patient’s health during surgical procedures, *Sensors* 22 (10) (2022) 3908.
- [S487] A. Minutolo, E. Damiano, G. De Pietro, H. Fujita, M. Esposito, A conversational agent for querying italian patient information leaflets and improving health literacy, *Computers in Biology and Medicine* 141 (2022) 105004.
- [S488] P. Morillo, J. J. Navarro-Pérez, J. M. Orduña, M. Fernández, Evaluation of an intervention program based on mobile apps to learn sexism prevention in teenagers, *ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM)* 18 (2) (2022) 1–20.
- [S489] M. A. Ali, et al., Usage and usability of health mobile applications during covid-19 in saudi arabia-a case of tawakkalna and sehaty application, *International Journal of eBusiness and eGovernment Studies* 14 (2) (2022) 411–431.
- [S490] H. Ryu, M. Piao, H. Kim, W. Yang, K. H. Kim, Development of a mobile application for smart clinical trial subject data collection and management, *Applied Sciences* 12 (7) (2022) 3343.
- [S491] F. Borgnis, F. Baglio, L. Uccellatore, G. Riva, P. Cipresso, et al., Usability and users’ experience of executive-functions innovative tool (exit 360°), *Annual Review of Cybertherapy and Telemedicine* 2022 (2022) 47.
- [S492] N. M. Ali, M. H. B. M. Salim, D. F. Qurniawan, D. Vanoh, S. Shahar, Initial design and evaluation of wesihat 3.0 for older adults, *Journal of Theoretical and Applied Information Technology* 100 (9).
- [S493] C. Yang, M. Kessler, N. Taebi, P. Moorthy, C. Reissfelder, M. Otto, G. Vassilev, Smartphone application-based follow-up care of patients after bariatric surgery: A mixed-method study of usability, *Digital Health* 8 (2022) 20552076221129072.
- [S494] K. Gupta, S. Roy, R. C. Poonia, R. Kumar, S. R. Nayak, A. Altameem, A. K. J. Saudagar, Multi-criteria usability evaluation of mhealth applications on type 2 diabetes mellitus using two hybrid mcdm models: Codas-fahp and moora-fahp, *Applied Sciences* 12 (9) (2022) 4156.
- [S495] N. Martini, E. Broadbent, J. Koo, L. Lam, D. Verches, S. Zeng, R. Montgomery-Walsh, C. Sutherland, Investigating the usability, efficacy and accuracy of a medication entering software system for a healthcare robot, *Frontiers in Robotics and AI* 9 (2022) 814268.
- [S496] L. Saric, S. E. Knobel, M. Pastore-Wapp, T. Nef, F. W. Mast, T. Vannellingen, Usability of two new interactive game sensor-based hand training devices in parkinson’s disease, *Sensors* 22 (16) (2022) 6278.
- [S497] U. e. M. Shah, T. K. Chiew, Y. Mehmood, A usability evaluation instrument for pain management mobile applications: An elderly’s perspective, *International Journal of Human–Computer Interaction* (2022) 1–17.
- [S498] A. J. Hartstein, M. Verkuyl, K. Zimney, J. Yockey, P. Berg-Poppe, Virtual reality instructional design in orthopedic physical therapy education: a mixed-methods usability test, *Simulation & Gaming* 53 (2) (2022) 111–134.
- [S499] G. Maphundoong, L. Kaewkitipong, E. M. Chiu, Usability evaluation of a mobile health application by older adults in thailand.
- [S500] T. Wahyuningrum, G. F. Fitriana, D. Wahyuningsih, The combination of user experience evaluation method in assessing the application of suicide risk idea identification, *Indonesian journal of electrical engineering and computer science* 27 (2) (2022) 1025–1033.
- [S501] C. Gonzalez, M. Mera-Gaona, H. Tobar, A. Pabón, N. Muñoz, Tsuiunas: a videogame for preventing gender-based violence, *Games for health journal* 11 (2) (2022) 117–131.
- [S502] J. K. Greenberg, A. Otun, P. T. Kyaw, C. R. Carpenter, R. C. Brownson, N. Kuppermann, D. D. Limbrick Jr, R. E. Foraker, P.-Y. Yen, Usability and acceptability of clinical decision support based on the kids-tbi tool for children with mild traumatic brain injuries and intracranial injuries, *Applied clinical informatics* 13 (02) (2022) 456–467.
- [S503] H.-J. Tan, A. E. Chung, D. Gotz, A. M. Deal, H. M. Heiling, R. Teal, M. B. Vu, W. D. Meeks, R. Fang, A. V. Bennett, et al., Electronic health record use and perceptions among urologic surgeons, *Applied Clinical Informatics* 14 (02) (2023) 279–289.
- [S504] R. Kirkscey, Development and patient user experience evaluation of an mhealth informational app for osteoporosis, *International Journal of Human–Computer Interaction* 38 (8) (2022) 707–718.
- [S505] I. Nicolaïdou, L. Aristeidis, L. Lambrios, A gamified app for supporting undergraduate students’ mental health: A feasibility and usability study, *Digital Health* 8 (2022) 20552076221109059.
- [S506] A. M. James-Palmer, J.-F. Daneault, Tele-yoga for the management of parkinson disease: A safety and feasibility trial, *Digital Health* 8 (2022) 20552076221119327.
- [S507] G. Pires, A. Lopes, P. Correia, L. Almeida, L. Oliveira, R. Panda, D. Jorge, D. Mendes, P. Dias, N. Gomes, et al., Usability of a telehealth solution based on tv interaction for the elderly: The vitasenior-mt case study, *Universal Access in the Information Society* (2022) 1–12.
- [S508] N. Margono, C. Cassandra, Acceptance analysis on online health application during covid-19 pandemic in jakarta using tam, in: 2022 International Conference on Information Management and Technology (ICIMTech), IEEE, 2022, pp. 237–240.
- [S509] K. Nguyen Du, W. K. Bong, A universally designed dietary mobile application for healthier lifestyles, in: Proceedings of the 8th International Conference on Information and Communication Technologies for Ageing Well and e-Health, Science and Technology Publications, 2022.
- [S510] J. Hearn, S. Wali, P. Birungi, J. A. Cafazzo, I. Ssinabulya, A. R. Akiteng, H. J. Ross, E. Seto, J. I. Schwartz, A digital self-care intervention for ugandan patients with heart failure and their clinicians: User-centred design and usability study, *Digital Health* 8 (2022) 20552076221129064.
- [S511] S. Pahlevanynejad, N. Danaei, R. Safdari, Design, implementation, and evaluation of an innovative intelligence information management system for premature infants, *Digital Health* 8 (2022) 20552076221127776.
- [S512] K.-S. Choi, S.-H. Chan, C.-L. Ho, M. Matejak, Development of a healthcare information system for community care of older adults and evaluation of its acceptance and usability, *Digital Health* 8 (2022) 20552076221109083.
- [S513] K. A. Haider, O. Gulam, R. Adamjee, B. Balouch, Z. Hoodbhoy, Health workers’ experience of a digital health intervention implemented in peri-urban communities in karachi, pakistan, *Digital health* 8 (2022) 20552076221129076.
- [S514] H. L. Tong, J. C. Quiroz, A. B. Kocaballi, K. Ijaz, E. Coiera, C. K. Chow, L. Laranjo, A personalized mobile app for physical activity: An experimental mixed-methods study, *Digital Health* 8 (2022) 2055207622115017.

- [S515] S. He, S. Shyamsundar, P. Chong, J. Kannikal, J. Calvano, N. Balapal, N. Kallenberg, A. Balaji, A. Ankem, A. Martin, Analyzing opioid-use disorder websites in the united states: An optimized website usability study, *Digital Health* 8 (2022) 20552076221121529.
- [S516] M. Le Berre, J. Filiautault, B. Reichetzer, C. Dumoulin, Feasibility, acceptability and effects of a group pelvic floor muscle telerehabilitation program to treat urinary incontinence in older women, *Digital Health* 8 (2022) 20552076221123720.
- [S517] X. Hu, K. Jonzén, M. Karlsson, O. A. Lindahl, Assessments of a novel digital follow-up tool rehabkompassen® to identify rehabilitation needs among stroke patients in an outpatient setting, *Digital Health* 8 (2022) 20552076221104662.
- [S518] R. Arshad, A. Hamid, S. Shahid, The design of persuasive prompts to induce behavioural change through an mhealth application for people with depression, *Behaviour & Information Technology* 41 (12) (2022) 2497–2513.
- [S519] N. A. Ismail, N. A. M. Fuad, M. S. Zulkifli, F. Embarak, N. Z. A. Husni, E. M. Su, P. S. K. M. M. Zainon, Design and usability study of hypertension management guideline mobile application with hypertension and non-hypertension patients, *International Journal of Advanced Computer Science and Applications* 13 (4).
- [S520] P. A. S. Mohamad Jamil, K. Karuppiyah, N. A. D. Mohammad Yusof, D. H. Mohd Suadi Nata, N. Abdul Aziz, V. How, S. B. Mohd Tamrin, H. S. Naeni, Usability testing of a wireless individual indicator system application: Monitoring exposure to outdoor air pollution among malaysian traffic police, *Digital Health* 8 (2022) 2055207622110336.
- [S521] N. Garcia-Hernandez, I. Muñoz-Pepi, F. Villafranca-Martinez, V. Parra-Vega, Usability and effectiveness evaluation of a game-based biofeedback system to strengthen respiratory muscles, *International Journal of Human-Computer Interaction* (2022) 1–12.
- [S522] A. Khalil, S. Glal, S. Abdallah, Patient user interfaces for determining pain level through everyday smartphone tasks and wearable physiological signal sensors.
- [S523] K. P. Loh, J. Liu, S. Ganzhorn, G. Sanabria, R. Schnall, Establishing a usability cut-point for the health information technology usability evaluation scale (health-itues), *International Journal of Medical Informatics* 160 (2022) 104713.
- [S524] H. BITAR, A. ALFAHID, M. ALRIGE, W. ABOGAZAH, N. ALSANBI, Ana alsukary: an android mobile application to support diabetic children and parents in saudi arabia, *Romanian Journal of Information Technology and Automatic Control* 32 (1) (2022) 73–86.
- [S525] J. Lee, M. A. Lee, Validation and usability study of the framework for a user needs-centered mhealth app selection, *International Journal of Medical Informatics* 167 (2022) 104877.
- [S526] U. Backonja, S. Park, A. Kurre, H. Yudelman, S. Heindel, M. Schultz, G. Whitman, A. M. Turner, N. T. Marchak, B. Bekemeier, Supporting rural public health practice to address local-level social determinants of health across northwest states: Development of an interactive visualization dashboard, *Journal of Biomedical Informatics* 129 (2022) 104051.
- [S527] A. Savoldelli, A. Vitali, A. Remuzzi, V. Giudici, Improving the user experience of televisits and telemonitoring for heart failure patients in less than 6 months: a methodological approach, *International Journal of Medical Informatics* 161 (2022) 104717.
- [S528] D. van der Horst, C. van Uden-Kraan, E. Parent, J. Bart, G. Waverijn, I. Verberk-Jonkers, M. van den Dorpel, A. Pieterse, W. Bos, Optimizing the use of patients' individual outcome information—development and usability tests of a chronic kidney disease dashboard, *International Journal of Medical Informatics* 166 (2022) 104838.
- [S529] M. E. Salwei, P. Carayon, D. Wiegmann, M. S. Pulia, B. W. Patterson, P. L. Hoonakker, Usability barriers and facilitators of a human factors engineering-based clinical decision support technology for diagnosing pulmonary embolism, *International Journal of Medical Informatics* 158 (2022) 104657.
- [S530] M. Schmidt, N. Glaser, T. Riedy, C. Rietta, H. Huszti, J. Wagner, G. Smith, A. M. Gutierrez-Colina, S. E. Wetter, S. M. Guilfoyle, et al., Learning experience design of an mhealth intervention for parents of children with epilepsy, *International journal of medical informatics* 160 (2022) 104671.
- [S531] F. Alqahtani, A. Alslaity, R. Orji, Usability testing of a gratitude application for promoting mental well-being, in: *Human-Computer Interaction. User Experience and Behavior: Thematic Area, HCI 2022*, Held as Part of the 24th HCI International Conference, HCII 2022, Virtual Event, June 26–July 1, 2022, Proceedings, Part III, Springer, 2022, pp. 296–312.
- [S532] E. Manikath, W.-C. Li, Usability evaluation of a web interface for passengers' health monitoring system on detecting critical medical conditions, in: *Engineering Psychology and Cognitive Ergonomics: 19th International Conference, EPCE 2022, Held as Part of the 24th HCI International Conference, HCII 2022, Virtual Event, June 26–July 1, 2022, Proceedings*, Springer, 2022, pp. 74–84.
- [S533] H. Oladapo, J. Chakraborty, Blood pressure concerns: Findings from a usability study of culturally infused mhealth design, in: *Universal Access in Human-Computer Interaction. Novel Design Approaches and Technologies: 16th International Conference, UAHCI 2022, Held as Part of the 24th HCI International Conference, HCII 2022, Virtual Event, June 26–July 1, 2022, Proceedings, Part I*, Springer, 2022, pp. 296–305.
- [S534] B. Tabares Hidalgo, M. Quintero Hernandez, J. M. Rojas Tovar, M. L. Villegas Ramirez, Analysis of the user experience for an application proposal oriented to the general medical consultation service, in: *Colombian Conference on Computing*, Springer, 2022, pp. 151–163.
- [S535] V. Bauer, T. Bouchara, O. Duris, C. Labossière, M.-N. Clément, P. Bourdot, Evaluating the acceptability and usability of a head-mounted augmented reality approach for autistic children with high support needs, in: *Virtual Reality and Mixed Reality: 19th EuroXR International Conference, EuroXR 2022, Stuttgart, Germany, September 14–16, 2022, Proceedings*, Springer, 2022, pp. 53–72.
- [S536] P. Pangsrisonboon, A. Pyae, N. Thawitsri, S. Liulak, Design and development of an nlp-based mental health pre-screening tool for undergraduate students in thailand: A usability study, in: *Well-Being in the Information Society: When the Mind Breaks: 9th International Conference, WIS 2022, Turku, Finland, August 25–26, 2022, Proceedings*, Springer, 2022, pp. 46–60.
- [S537] A. Kaur, W. Chen, The usability of training apps for older adults—a heuristic evaluation, in: *HCI International 2022—Late Breaking Papers: HCI for Health, Well-being, Universal Access and Healthy Aging: 24th International Conference on Human-Computer Interaction, HCII 2022, Virtual Event, June 26–July 1, 2022, Proceedings*, Springer, 2022, pp. 423–439.
- [S538] R. Bray, L. MacDougall, C. Blankenship, K. Mitchell, F. Yuan, S. Cerel-Suhl, X. Zhao, Development and assessment of a friendly robot to ease dementia, in: *International Conference on Social Robotics*, Springer, 2022, pp. 381–391.
- [S539] P. Perego, R. Sironi, M. Scagnoli, M. Terraroli, C. E. Standoli, G. Andreoni, Multimodal wearable system for motor rehabilitation: Usability and acceptability, in: *Computers Helping People with Special Needs: 18th International Conference, ICCHP-AAATE 2022, Lecco, Italy, July 11–15, 2022, Proceedings, Part II*, Springer, 2022, pp. 428–436.
- [S540] K. Coziah, L. Stanley, A. Perez-Litwin, C. Lundberg, A. Litwin, Designing a digital mental health app for opioid use disorder using the ux design thinking framework, in: *Design, User Experience, and Usability: Design for Emotion, Well-being and Health, Learning, and Culture: 11th International Conference, DUXU 2022, Held as Part of the 24th HCI International Conference, HCII 2022, Virtual Event, June 26–July 1, 2022, Proceedings, Part II*, Springer, 2022, pp. 107–129.
- [S541] M. Ebinali, L. R. Kennedy-Metz, H. M. Conboy, L. A. Clarke, L. J. Osterweil, G. Avrunin, C. Miccile, M. Arshanskiy, A. Phillips, M. A. Zenati, et al., A coding framework for usability evaluation of digital health technologies, in: *Human-Computer Interaction. Theoretical Approaches and Design Methods: Thematic Area, HCI 2022, Held as Part of the 24th HCI International Conference, HCII 2022, Virtual Event, June 26–July 1, 2022, Proceedings, Part I*, Springer, 2022, pp. 185–196.
- [S542] A. Cole, A. Khasawneh, K. Adapa, L. Mazur, D. R. Richardson, Development of an electronic healthcare tool to elicit patient preferences in older adults diagnosed with hematologic malignancies, in: *Human Aspects of IT for the Aged Population. Technology in Everyday Living: 8th International Conference, ITAP 2022, Held as Part of the 24th HCI International Conference, HCII 2022, Virtual Event, June 26–July 1, 2022, Proceedings, Part II*, Springer, 2022, pp. 210–228.
- [S543] H. R. Boddukururu, D. Cetinkaya, Analysis and design of an information system for blood component donations, in: *HCI International 2022—Late Breaking Papers: HCI for Health, Well-being, Universal Access and Healthy Aging: 24th International Conference on Human-Computer Interaction, HCII 2022, Virtual Event, June 26–July 1, 2022, Proceedings*, Springer, 2022, pp. 296–305.

- Springer, 2022, pp. 26–45.
- [S544] J. Striegl, M. Gotthardt, C. Loitsch, G. Weber, Investigating the usability of voice assistant-based cbt for age-related depression, in: Computers Helping People with Special Needs: 18th International Conference, ICCHP-AAATE 2022, Lecco, Italy, July 11–15, 2022, Proceedings, Part I, Springer, 2022, pp. 432–441.
- [S545] S. Pan, X. Ren, A. Brombacher, S. Vos, Eat@ work: Designing an mhealth app for promoting healthy eating routines among dutch office workers, in: International Conference on Pervasive Computing Technologies for Healthcare, Springer, 2022, pp. 533–549.
- [S546] J. Orji, A. Hernandez, B. Selema, R. Orji, Tidyhome: A persuasive app for supporting victims and survivors of domestic violence, in: Human-Computer Interaction. User Experience and Behavior: Thematic Area, HCI 2022, Held as Part of the 24th HCI International Conference, HCII 2022, Virtual Event, June 26–July 1, 2022, Proceedings, Part III, Springer, 2022, pp. 400–415.
- [S547] Y. Liu, R. Heimgärtner, Keep fit worldwide: cultural adaptations of the user interface of mobile fitness apps in different language versions, in: Culture and Computing: 10th International Conference, C&C 2022, Held as Part of the 24th HCI International Conference, HCII 2022, Virtual Event, June 26–July 1, 2022, Proceedings, Springer, 2022, pp. 84–104.
- [S548] M. Gotthardt, J. Striegl, C. Loitsch, G. Weber, Voice assistant-based cbt for depression in students: effects of empathy-driven dialog management, in: Computers Helping People with Special Needs: 18th International Conference, ICCHP-AAATE 2022, Lecco, Italy, July 11–15, 2022, Proceedings, Part I, Springer, 2022, pp. 451–461.
- [S549] Y. Zhang, T. Han, Y. Ding, S. Zhao, Design of somatosensory interactive balance training exergame for the elderly based on tai chi, in: Human Aspects of IT for the Aged Population. Technology in Everyday Living: 8th International Conference, ITAP 2022, Held as Part of the 24th HCI International Conference, HCII 2022, Virtual Event, June 26–July 1, 2022, Proceedings, Part II, Springer, 2022, pp. 305–319.
- [S550] S. Abdo, T. H. Nahouli, K. Daye, Consumer satisfaction using fitness technology innovation, in: Digital Economy. Emerging Technologies and Business Innovation: 7th International Conference on Digital Economy, ICDEc 2022, Bucharest, Romania, May 9–11, 2022, Proceedings, Springer, 2022, pp. 170–181.
- [S551] R. Yoshizaki, S. Kang, H. Kogami, K. Ito, D. Yoshioka, K. Nakano, Y. Sakurai, T. Miura, M. Fujisaki-Sueda-Sakai, K.-i. Yabu, et al., Design and verification of a smart home management system for making a smart home composable and adjustable by the elderly, in: Human Aspects of IT for the Aged Population. Technology in Everyday Living: 8th International Conference, ITAP 2022, Held as Part of the 24th HCI International Conference, HCII 2022, Virtual Event, June 26–July 1, 2022, Proceedings, Part II, Springer, 2022, pp. 134–153.
- [S552] P. Cedillo, C. Sánchez-Zhunio, E. Arteaga, J. Arias, M. Orellana, A method to build serious games for older adults ade2: Evaluation of user perceptions and threats of validity, in: Advances in Information Systems Development: Crossing Boundaries Between Development and Operations in Information Systems, Springer, 2022, pp. 19–35.
- [S553] M. Elshahawy, S. Mostafa, N. Sharaf, A serious game for a serious situation: Encouraging healthy behaviors for children with asd during covid-19 pandemic, in: Serious Games: Joint International Conference, JCSG 2022, Weimar, Germany, September 22–23, 2022, Proceedings, Springer, 2022, pp. 140–154.
- [S554] Á. H. da Silva Melo, A. C. Oran, J. Silva dos Santos, S. C. Tamayo, D. Viana, L. Rivero, R. da Silva Barreto, From requirements to prototyping: Proposal and evaluation of an artifact to support interface design in the context of autism, in: HCI International 2022–Late Breaking Papers: HCI for Health, Well-being, Universal Access and Healthy Aging: 24th International Conference on Human-Computer Interaction, HCII 2022, Virtual Event, June 26–July 1, 2022, Proceedings, Springer, 2022, pp. 307–321.
- [S555] B. Spelter, S. Corsten, L. Diehlmann, A. Plath, J. Leinweber, The user-centred design in the development of a platform for teletherapy for people with aphasia, in: Universal Access in Human-Computer Interaction. Novel Design Approaches and Technologies: 16th International Conference, UAHCI 2022, Held as Part of the 24th HCI International Conference, HCII 2022, Virtual Event, June 26–July 1, 2022, Proceedings, Part I, Springer, 2022, pp. 342–359.
- [S556] A. Kumar, G. Haider, M. Khan, R. Z. Khan, S. S. Raza, Saathi: An urdu virtual assistant for elderly aging in place, in: Participative Urban Health and Healthy Aging in the Age of AI: 19th International Conference, ICOST 2022, Paris, France, June 27–30, 2022, Proceedings, Springer, 2022, pp. 73–85.
- [S557] E. Broneder, C. Weiß, E. Sandner, S. Puck, M. Puck, G. F. Domínguez, B. Unger-Hrdlicka, Tactile—a mixed reality solution for staying active and socially included, in: HCI International 2022–Late Breaking Papers: HCI for Health, Well-being, Universal Access and Healthy Aging: 24th International Conference on Human-Computer Interaction, HCII 2022, Virtual Event, June 26–July 1, 2022, Proceedings, Springer, 2022, pp. 277–291.
- [S558] W. El Hefny, M. Elshimy, A. El Bolock, S. Abdennadher, Vaxera: An empathetic chatbot for covid-19 vaccination, in: Highlights in Practical Applications of Agents, Multi-Agent Systems, and Complex Systems Simulation. The PAAMS Collection: International Workshops of PAAMS 2022, L'Aquila, Italy, July 13–15, 2022, Proceedings, Springer, 2022, pp. 157–168.
- [S559] X. Lu, J. Li, K. Zhu, Y. Liu, Research on the gamification design of family early intervention products for children with autism based on the peak-end rule, in: Cross-Cultural Design. Applications in Business, Communication, Health, Well-being, and Inclusiveness: 14th International Conference, CCD 2022, Held as Part of the 24th HCI International Conference, HCII 2022, Virtual Event, June 26–July 1, 2022, Proceedings, Part III, Springer, 2022, pp. 376–392.
- [S560] R. C. Dsouza, S. Chandna, E. von Gunten, Ihr therapeut: A smartphone based user interface for people with sensorimotor injuries, in: HCI International 2022 Posters: 24th International Conference on Human-Computer Interaction, HCII 2022, Virtual Event, June 26–July 1, 2022, Proceedings, Part I, Springer, 2022, pp. 494–501.
- [S561] R. Che Mat, S. Cham Long, Interactive art therapy for mental health using microsoft kinect, in: International Conference on Intelligent Technologies for Interactive Entertainment, Springer, 2021, pp. 161–170.
- [S562] J. Dugstad Wake, F. Rabbi, Y. Inal, T. Nordgreen, User-centred design of clinical dashboards for guided icbt, Innovations in Systems and Software Engineering (2022) 1–17.
- [S563] M. Takahashi, R. Koike, K. Nagasawa, Y. Manabe, H. Hirana, M. Takamura, T. Hongawa, I. Kimoto, K. Ogawa-Ochiai, N. Tsumura, Development of telemedicine tools with an emphasis on visual observation, Artificial life and robotics 27 (1) (2022) 38–47.
- [S564] Ş. S. Macakoğlu, S. Peker, Accessibility evaluation of university hospital websites in turkey, Universal Access in the Information Society (2022) 1–9.
- [S565] C.-H. Tai, Y.-E. Fang, Y.-S. Chang, Sos-dr: a social warning system for detecting users at high risk of depression, Personal and Ubiquitous Computing (2017) 1–12.
- [S566] S. H. H. Shah, A. S. T. Karlsen, M. Solberg, I. A. Hameed, A social vr-based collaborative exergame for rehabilitation: codesign, development and user study, Virtual Reality (2022) 1–18.
- [S567] S. J. Chung, G. Ghinea, Towards developing digital interventions supporting empathic ability for children with autism spectrum disorder, Universal Access in the Information Society 21 (1) (2022) 275–294.
- [S568] N. Alajarmeh, Evaluating the accessibility of public health websites: an exploratory cross-country study, Universal access in the information society 21 (3) (2022) 771–789.
- [S569] S.-B. Lim, J. H. Park, Development of an eye-tracking and voice command interface to facilitate gui operation for people with disabled upper limbs, Universal Access in the Information Society (2022) 1–15.
- [S570] M. M. Luna, H. A. Nascimento, A. Quigley, F. Soares, Text entry for the blind on smartwatches: A study of braille code input methods for a novel device, Universal Access in the Information Society (2022) 1–19.
- [S571] R. Tennant, M. Tetui, K. Grindrod, C. M. Burns, Multi-disciplinary design and implementation of a mass vaccination clinic mobile application to support decision-making, IEEE Journal of Translational Engineering in Health and Medicine 11 (2022) 60–69.
- [S572] P. Colmegna, A. Bisio, R. McFadden, C. Wakeman, M. C. Oliveri, R. Nass, M. Breton, Evaluation of a web-based simulation tool for self-management support in type 1 diabetes: A pilot study, IEEE Journal of Biomedical and Health Informatics.
- [S573] L. Boudreault, M. Hébert-Lavoie, K. Ung, C. Mahmoudhi, Q. P. Vu, P. Jouvet, P. Doyon-Poulin, Situation awareness-oriented dashboard in icus in support of resource management in time of pandemics, IEEE Journal of

- Translational Engineering in Health and Medicine 11 (2023) 151–160.
- [S574] J. E. Bardram, C. Cramer-Petersen, A. Maxhuni, M. V. Christensen, P. Bækgaard, D. R. Persson, N. Lind, M. B. Christensen, K. Nørgaard, J. Khakurel, et al., Diafocus: A personal health technology for adaptive assessment in long-term management of type 2 diabetes, *ACM Transactions on Computing for Healthcare* 4 (2) (2023) 1–43.
- [S575] K. Shear, H. Rice, P. M. Garabedian, R. Bjarnadottir, N. Latham, A. L. Hargas, C. A. Harle, P. C. Dykes, R. Lucero, Usability testing of an interoperable computerized clinical decision support tool for fall risk management in primary care, *Applied Clinical Informatics* 14 (02) (2023) 212–226.
- [S576] F. Bagheri, F. Abbasi, M. Sadeghi, R. Khajouei, Evaluating the usability of a cancer registry system using cognitive walkthrough, and assessing user agreement with its problems, *BMC Medical Informatics and Decision Making* 23 (1) (2023) 1–13.
- [S577] E. A. McGonagle, D. J. Karavite, R. W. Grundmeier, S. K. Schmidt, L. S. May, D. M. Cohen, A. T. Cruz, S.-P. Tu, L. Bajaj, P. S. Dayan, et al., Evaluation of an antimicrobial stewardship decision support for pediatric infections, *Applied Clinical Informatics* 14 (01) (2023) 108–118.
- [S578] V. Blanes-Selva, S. Asensio-Cuesta, A. Doñate-Martínez, F. Pereira Mesquita, J. M. García-Gómez, User-centred design of a clinical decision support system for palliative care: Insights from healthcare professionals, *Digital Health* 9 (2023) 20552076221150735.
- [S579] C. Gardner, D. Wake, D. Brodie, A. Silverstein, S. Young, S. Cunningham, C. Sainsbury, M. Ilia, A. Lucas, T. Willis, et al., Evaluation of prototype risk prediction tools for clinicians and people living with type 2 diabetes in north west london using the think aloud method, *Digital Health* 9 (2023) 20552076221128677.
- [S580] C. Draper, J. E. Cheung, B. Wuensche, P. J. Sanders, Development of a virtual reality treatment for tinnitus—a user study, in: Proceedings of the 2023 Australasian Computer Science Week, 2023, pp. 160–169.
- [S581] F. Infarinato, P. Romano, F. Adinolfi, M. Franceschini, R. Ginocchi, M. Goffredo, M. Ottaviani, M. Valente, S. Pournejaf, A novel telerehabilitation approach for cognitive-language therapy in chronic stroke subjects with aphasia: Neurocognitive intervention through neurorehabilitation exercises and assessments, *IEEE Robotics & Automation Magazine*.
- [S582] M. Matsangidou, F. Frangoudes, E. Schiza, K. C. Neokleous, E. Paayianni, K. Xenari, M. Avraamides, C. S. Pattichis, Participatory design and evaluation of virtual reality physical rehabilitation for people living with dementia, *Virtual Reality* 27 (1) (2023) 421–438.
- [S583] I. G. P. S. Wijaya, H. Mulyana, H. Kadriyan, R. Y. Fa'rifah, The design of convolutional neural networks model for classification of ear diseases on android mobile devices, *JOIV: International Journal on Informatics Visualization* 7 (1) (2023) 84–91.
- [S584] L. Lorusso, M. Mosmondorff, A. Grguric, L. Toccafondi, G. D'Onofrio, S. Russo, J. Lampe, T. Pihl, N. Mayer, G. Vignani, et al., Design and evaluation of personalized services to foster active aging: The experience of technology pre-validation in italian pilots, *Sensors* 23 (2) (2023) 797.
- [S585] F. F. Kazi, J. Sandbulte, Examining a social-based system with personalized recommendations to promote mental health for college students, *Smart Health* 28 (2023) 100385.
- [S586] H. Wilczewski, H. Soni, J. Ivanova, T. Ong, J. F. Barrera, B. E. Bunnell, B. M. Welch, Older adults' experience with virtual conversational agents for health data collection, *Frontiers in Digital Health* 5 (2023) 1125926.
- [S587] T. L. Morgan, J. Pletch, E. Faught, M. S. Fortier, M. K. Gazendam, K. Howse, R. Jain, K. N. Lane, K. Maclarens, T. McFadden, et al., Developing and testing the usability, acceptability, and future implementation of the whole day matters tool and user guide for primary care providers using think-aloud, near-live, and interview procedures, *BMC Medical Informatics and Decision Making* 23 (1) (2023) 57.
- [S588] O. Brazier, J. Sandbulte, Ourhealth: a social technology concept to promote healthy behaviors in northwestern minnesota, in: The 2023 ACM International Conference on Supporting Group Work (GROUP'23) Companion, 2023, pp. 33–35.
- [S589] L. C. Mendes, A. A. R. de Sá, I. A. Marques, Y. Morère, A. de Oliveira Andrade, Rehabelitation: the architecture and organization of a serious game to evaluate motor signs in parkinson's disease, *PeerJ Computer Science* 9 (2023) e1267.
- [S590] L. Neira-Tovar, I. C. Rodríguez, F. G. Salazar, A method to improve the design of virtual reality games in healthcare applied to increase physical activity in patients with type 2 diabetes mellitus, *Applied Sciences* 13 (1) (2022) 50.
- [S591] R. K. Bajaj, R. M. Meiring, F. Beltran, Co-design, development, and evaluation of a health monitoring tool using smartwatch data: A proof-of-concept study, *Future Internet* 15 (3) (2023) 111.
- [S592] F. Kerwagen, K. F. Fuchs, M. Ullrich, A. Schulze, S. Straka, P. Krop, M. E. Latoschik, F. Gilbert, A. Kunz, G. Fette, et al., Usability of a mhealth solution using speech recognition for point-of-care diagnostic management, *Journal of Medical Systems* 47 (1) (2023) 18.
- [S593] N. Fareed, C. Swoboda, P. Singh, E. Boettcher, Y. Wang, K. Venkatesh, R. Strouse, Developing and testing an integrated patient mhealth and provider dashboard application system for type 2 diabetes management among medicaid-enrolled pregnant individuals based on a user-centered approach: Mixed-methods study, *Digital Health* 9 (2023) 20552076221144181.
- [S594] N. A. Kong, F. M. Moy, S. H. Ong, G. A. Tahir, C. K. Loo, Mydietcam: Development and usability study of a food recognition integrated dietary monitoring smartphone application, *Digital Health* 9 (2023) 20552076221149320.
- [S595] M. Parati, M. Gallotta, B. De Maria, A. Pirola, M. Morini, L. Longoni, E. Ambrosini, G. Ferriero, S. Ferrante, Video-based goniometer applications for measuring knee joint angles during walking in neurological patients: A validity, reliability and usability study, *Sensors* 23 (4) (2023) 2232.
- [S596] M. van Doorn, A. Monsanto, C. M. Boeschoten, T. van Amelsvoort, A. Popma, F. G. "Ory, M. Alvarez-Jimenez, J. Gleeson, M. W. Jaspers, D. H. Nieman, Moderated digital social therapy for young people with emerging mental health problems: A user-centered mixed-method design and usability study, *Frontiers in digital health* 4 (2023) 1020753.
- [S597] C. Ryniak, S. Frommer, D. Junger, S. Lohmann, M. Stadelmaier, P. Schmutz, A. Stenzl, B. Hirt, O. Burgert, A high-fidelity prototype of a sterile information system for the perioperative area: Or-pad, *International journal of computer assisted radiology and surgery* 18 (3) (2023) 575–585.
- [S598] R. Alnanih, A. Balabid, L. Bahmdean, Senior-centered design for mobile medication adherence applications based on cognitive and technology attributes, *Universal Access in the Information Society* (2023) 1–18.
- [S599] R. Jauregui-Velarde, L. Andrade-Arenas, G. Bernnet Alfaro Peña, R. S. Bellido-García, M. Cabanillas-Carbonell, Mobile app prototype: Telemedicine for mental health care during pandemic.
- [S600] B. Chaudary, S. Pohjolainen, S. Aziz, L. Arhipainen, P. Pulli, Teleguidance-based remote navigation assistance for visually impaired and blind people—usability and user experience, *Virtual Reality* 27 (1) (2023) 141–158.
- [S601] A. Voinescu, K. Petrini, D. Stanton Fraser, R.-A. Lazarovicz, I. Papava, L. A. Fodor, D. David, The effectiveness of a virtual reality attention task to predict depression and anxiety in comparison with current clinical measures, *Virtual reality* 27 (1) (2023) 119–140.
- [S602] A. Stamenkovic, M. Underation, L. J. Cloud, P. E. Pidcoe, M. S. Baron, R. Hand, C. R. France, S. M. van der Veen, J. S. Thomas, Assessing perceptions to a virtual reality intervention to improve trunk control in parkinson's disease: a preliminary study, *Virtual Reality* 27 (1) (2023) 465–479.
- [S603] L. van der Lubbe, C. Gerritsen, M. Klein, R. Rodgers, K. Hindriks, Experiences of users with an online self-guided mental health training program using gamification, *Journal of Healthcare Informatics Research* (2023) 1–28.
- [S604] I. Phelan, P. J. Furness, M. Matsangidou, A. Carrion-Plaza, H. Dunn, P. Dimitri, S. A. Lindley, Playing your pain away: designing a virtual reality physical therapy for children with upper limb motor impairment, *Virtual Reality* 27 (1) (2023) 173–185.
- [S605] I. Phelan, A. Carrion-Plaza, P. J. Furness, P. Dimitri, Home-based immersive virtual reality physical rehabilitation in paediatric patients for upper limb motor impairment: a feasibility study, *Virtual Reality* (2023) 1–16.
- [S606] A. S. García, P. Fernández-Sotos, M. A. Vicente-Querol, R. Sánchez-Reolid, R. Rodriguez-Jimenez, A. Fernández-Caballero, Co-design of avatars to embody auditory hallucinations of patients with schizophrenia: A study on patients' feeling of satisfaction and psychiatrists' intention to adopt the technology, *Virtual Reality* (2021) 1–16.
- [S607] R. V. Aranha, M. L. Chaim, C. B. Monteiro, T. D. Silva, F. A. Guerreiro, W. S. Silva, F. L. Nunes, Easyaffecta: A framework to develop serious

- games for virtual rehabilitation with affective adaptation, *Multimedia Tools and Applications* 82 (2) (2023) 2303–2328.
- [S608] P. A. Silva, R. Santos, An opinion mining methodology to analyse games for health, *Multimedia Tools and Applications* 82 (9) (2023) 12957–12976.
- [S609] M. Hun Lee, D. P. Siewiorek, A. Smailagic, A. Bernardino, S. Bermudez i Badia, Design, development, and evaluation of an interactive personalized social robot to monitor and coach post-stroke rehabilitation exercises, *User Modeling and User-Adapted Interaction* 33 (2) (2023) 545–569.
- [S610] A. O. Rothbaum, L. R. Tannenbaum, E. Zimand, B. O. Rothbaum, A pilot randomized controlled trial of virtual reality delivered relaxation for chronic low back pain, *Virtual Reality* (2023) 1–11.