# **Appendix 2: The list of excluded articles**

List of articles excluded after the full-text review, for not meeting inclusion criteria regarding the population, intervention, outcome, study design or personalization. Within the excluded studies, some major themes included counselling, aged-care, education, and behavior change.

## **Population:**

- 1. Green, D. and R. Cornish. *DISPLAYTRAN a graphic oriented conversational system*. in *Proceedings of the SHARE design automation project*. 1966. ACM.
- 2. Griol, D., J. Carbo, and J.M. Molina, *Bringing context-aware access to the web through spoken interaction*. Applied intelligence, 2013. **38**(4): p. 620-640.
- 3. Griol, D., et al., *A Two-Stage Combining Classifier Model for the Development of Adaptive Dialog Systems*. International journal of neural systems, 2016. **26**(01): p. 1650002.
- 4. Heylen, D., et al., *On the nature of engineering social artificial companions*. Applied Artificial Intelligence, 2011. **25**(6): p. 549-574.
- 5. Higuchi, S., R. Rzepka, and K. Araki. *A casual conversation system using modality and word associations retrieved from the web.* in *Proceedings of the Conference on Empirical Methods in Natural Language Processing.* 2008. Association for Computational Linguistics.
- 6. Hochberg, J., N. Kambhatla, and S. Roukos. *A flexible framework for developing mixedinitiative dialog systems.* in *Proceedings of the 3rd SIGdial workshop on Discourse and dialogue-Volume 2.* 2002. Association for Computational Linguistics.
- 7. Hoque, M.E., et al. *Mach: My automated conversation coach.* in *Proceedings of the 2013 ACM international joint conference on Pervasive and ubiquitous computing.* 2013. ACM.
- 8. L'Abbate, M. and U. Thiel. *Helping conversational agents to find informative responses: query expansion methods for chatterbots.* in *Proceedings of the first international joint conference on Autonomous agents and multiagent systems: part 2.* 2002. ACM.
- 9. Li, J., et al. Confiding in and Listening to Virtual Agents: The Effect of Personality. in Proceedings of the 22nd International Conference on Intelligent User Interfaces. 2017. ACM.
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- 13. Miner, A., et al. Conversational Agents and Mental Health: Theory-Informed Assessment of Language and Affect. in Proceedings of the Fourth International Conference on Human Agent Interaction. 2016. ACM.
- 14. Nederhof, M.-J., et al. *Grammatical analysis in the OVIS spoken-dialogue system*. in *Interactive Spoken Dialog Systems on Bringing Speech and NLP Together in Real Applications*. 1997. Association for Computational Linguistics.

- 15. O'Neill, I.M. and M.F. McTear. An object-oriented model for the design of cross-domain dialogue systems. in Interactive Spoken Dialog Systems on Bringing Speech and NLP Together in Real Applications. 1997. Association for Computational Linguistics.
- 16. Filichia, L., Halan, S., Blackwelder, E., Rossen, B., Lok, B., Korndorffer, J., & Cendan, J. *Description of web-enhanced virtual character simulation system to standardize patient hand-offs.* Journal of Surgical Research. 2011. 176-181.

## Intervention:

- 17. Auriacombe M, Moriceau S, Serre F, et al. *Development and validation of a virtual agent to screen tobacco and alcohol use disorders*. Drug and alcohol dependence 2018;193:1-6.
- Baker, S., D. Richards, and P. Caldwell. Putting a New Intelligent Virtual Face on a Medical Treatment Advice System to Improve Adherence. in Proceedings of the 2014 Conference on Interactive Entertainment. 2014. ACM.
- Barker, D.J., et al., *Evaluating a spoken dialogue system for recording clinical observations during an endoscopic examination*. Med Inform Internet Med, 2003. 28(2): p. 85-97.
- 20. Berry, D.C., L.T. Butler, and F. De Rosis, *Evaluating a realistic agent in an advicegiving task.* International Journal of Human-Computer Studies, 2005. **63**(3): p. 304-327.
- 21. Bickmore, T. and T. Giorgino, *Health dialog systems for patients and consumers*. Journal of biomedical informatics, 2006. **39**(5): p. 556-571.
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- 26. Bickmore, T.W., et al., '*It's just like you talk to a friend'relational agents for older adults*. Interacting with Computers, 2005. **17**(6): p. 711-735.
- 27. Bickmore, T.W., et al., *Response to a relational agent by hospital patients with depressive symptoms*. Interacting with computers, 2010. **22**(4): p. 289-298.
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- Soller, R.W., P. Chan, and A. Higa, *Performance of a new speech translation device in translating verbal recommendations of medication action plans for patients with diabetes.* Journal of diabetes science and technology, 2012. 6(4): p. 927-937.

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#### **Outcome:**

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