SUPPLEMENTAL MATERIAL

to

Inside Pandora’s Box: A Systematic Review of the Assessment of the Perceived Quality of Chatbots for People with Disabilities or Special Needs

by

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**PRISMA checklist**

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| **The focus** | Peer-review articles and conference papers that include empirical assessment of the quality of interactions between people with disabilities or special needs and chatbots. |
| **The goal** | To integrate and generalise previous findings and discuss how key factors of interaction with chatbots are assessed. |
| **Perspective** | The language of the literature review will be neutral. |
| **Coverage** | The review will cover central or pivotal literature only. |
| **Organisation** | The review will be organised around the proposition of exploring, mapping and defining how interaction is measured to ensure quality interactions for users with disabilities or special needs. |
| **Audience** | *Primary* – experts in the development and assessment of chatbots. |
| **Methodology** | This literature review is qualitative and will follow the phenomenological method of literature review. |
| **Inclusion criteria** | * Studies that mention chatbots or conversational interfaces/agents for people with disabilities or special needs in their title, abstract, keywords or main text.
* Studies that include findings and theories or frameworks about factors that might potentially contribute to the perceived quality of interaction with chatbots, with a particular focus on people with various types of disability; or studies that at least discuss topics relating to universal access and the accessibility and usability of information.
* Studies from 2010 to 2020.
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| **Exclusion criteria** | * Studies that talk only about technical aspects of the chatbots or virtual AI conversational assistants, with no or minimal insights into key factors of quality.
* Studies that inform not about interaction characteristics but about ethical or social concerns.
* Studies that focus mainly on chatbots as tools for investigating other aspects, such as eye movements or emotion recognition.
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| **Search Inquiry—Scopus** | chatbot OR chatbots OR “conversational agent” OR “conversational agents” AND disability OR “special needs” AND (LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2018) OR LIMIT-TO ( PUBYEAR, 2017 ) OR LIMIT-TO (PUBYEAR , 2016) OR LIMIT-TO (PUBYEAR, 2015) OR LIMIT-TO (PUBYEAR, 2014 ) OR LIMIT-TO (PUBYEAR, 2013) OR LIMIT-TO (PUBYEAR, 2012 ) OR LIMIT-TO  PUBYEAR , 2011) OR LIMIT-TO (PUBYEAR, 2010 ) ) AND ( LIMIT-TO (LANGUAGE , “English”) ) AND (LIMIT-TO (DOCTYPE, “ch”) OR LIMIT-TO (DOCTYPE, “re” ) OR LIMIT-TO (DOCTYPE, “bk”) OR LIMIT-TO (DOCTYPE, “cr” ) OR LIMIT-TO  DOCTYPE, “ed”) OR LIMIT-TO (DOCTYPE, “Undefined”) )  |
| **Search Inquiry—the Web of Science** | (TS=(chatbot\* AND disability) OR TS=(chatbot\* AND special needs) OR TS=(conversational agent\* AND disability) OR TS=(conversational agent\* AND special needs)) AND LANGUAGE: (English) AND DOCUMENT TYPES: (Article)Timespan: 2010-2020. Indexes: SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI |
| **Tools**  | Prisma Flow diagram, PRISMA 2009 Checklist (<http://prisma-statement.org/>) |