Reza Rawassizadeh, Chelsea Dobbins, Manouchehr Nourizadeh, Zahra Ghamchili and Michael Pazzani, "A Natural Language Query Interface for Searching Personal Information on Smartwatches" in the 2017 IEEE International Conference on Pervasive Computing and Communications (PerCom'17) Kona, Big Island, Hawaii, USA, 13th – 17th March, 2017 (Accepted)

*Recognition rather than recall* that receives the average of 4.8 from 5. Based on participants' feedback the high rank of Recognition rather than recall is because of the use of tooltip in the user interface.

Please consider that the implementation of the information retrieval component is not the scope of this work. Here our focus is on understanding queries and constructing a query interface to identify the required elements of a query from a given sentence.

## IV. CONCLUSION & FUTURE WORK

In this work, we have conducted a user study, through MTurk, to collect a dataset of 716 quantified-self queries that users are willing to issue through their personal assistant systems. We have then presented and evaluated a query interface that includes a user interface and an algorithm for parsing textual quantified-self queries. Our users' accuracy and usability evaluations show that our approach is capable to parse most of the identified quantified-self queries from the survey.

In our future work, we plan to optimize the query interface with subtler term recommendations that are based on the k-nearest neighbor words retrieved from the history of queries. Moreover, we will develop a retrieval component that can search and show behavioral patterns [20] of the smartwatch to the user. This work focused only on query and not information retrieval.

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