QuickRef: Should I Read Cited Papers for Understanding This Paper?

Sangjun Park, Chanhee Lee, Uichin Lee

Research Goal

*How can we design the interactive reader
that helps to understand scientific paper without navigating through cited papers?*

Formative Study

1-on-1 semi-structured interview (N = 6):
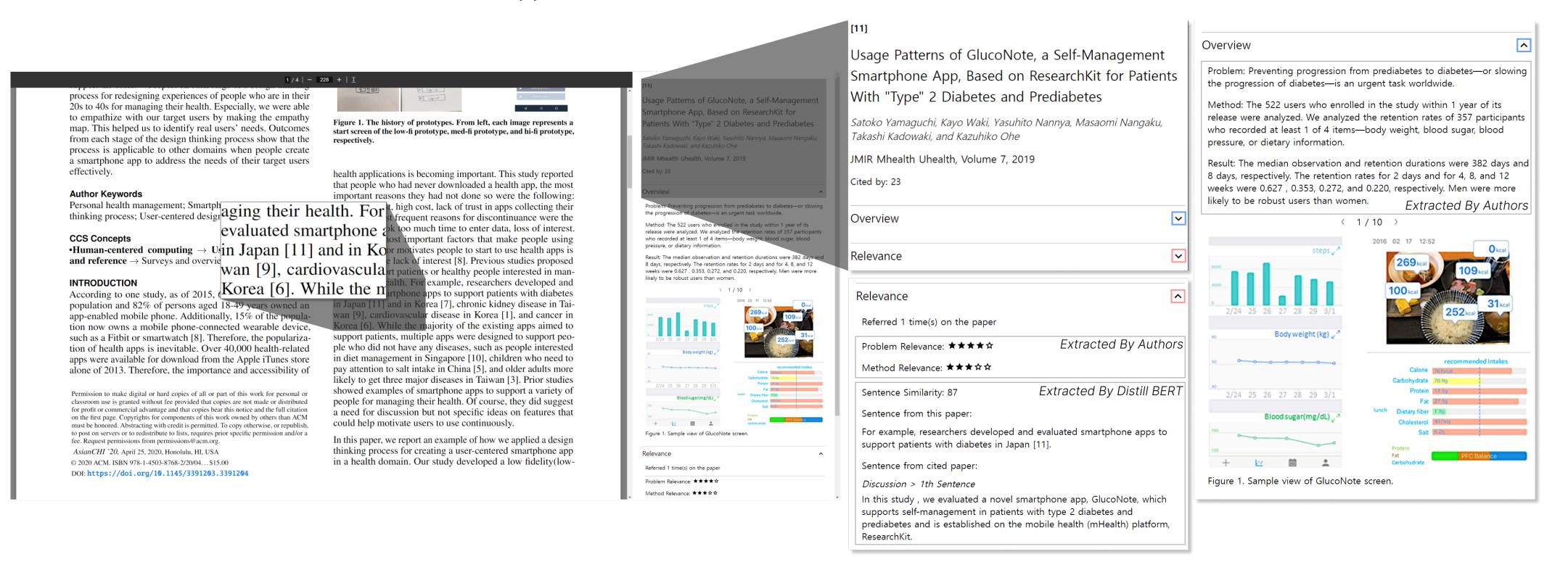
Q1. Under what circumstances do you look for cited papers?

- Lack of explanation for users' interest
- Identifying trends in research topics
- Checking correctness of descriptions

Q2. Are there any inconveniences related to cited papers?

- Require to check reference section
- Need to search for cited paper to access the content
- Consuming time to read and understand cited papers

Q3. What information do you usually look for in cited papers?

- Meta Information: Title, Authors, Venue
- Overview: What is cited paper about?
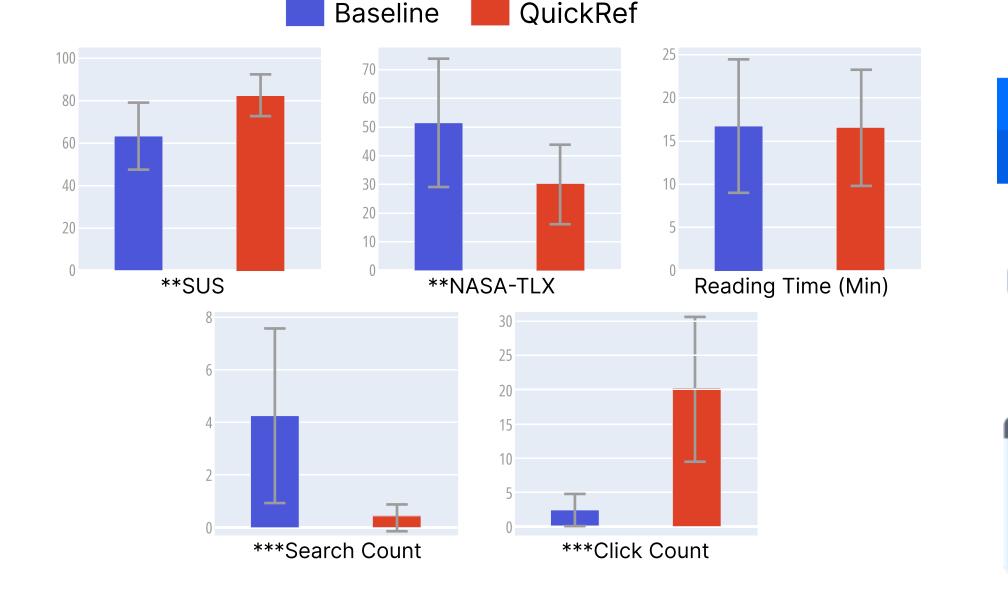- Relevance: How cited papers is related to the current paper?

QuickRef Design

Wizard of oz approach was used to evaluate needs of extracted information

User Evaluation (N = 20)

1. Quantitative Evaluation

Baseline — QuickRef

**SUS, **NASA-TLX, Reading Time (Min), ***Search Count, ***Click Count

2. Qualitative Evaluation Through User Interviews

Users evaluated QuickRef:
- help quickly judge cited papers to read
- assist to reduce interruption by citations.

Users wanted support for:
- more diverse level of information (e.g., keywords ~ detailed parameters)
- explanation of data extraction

User wanted UI to be:
- adaptive depends on granularity and context of info (e.g., hovering text, left side panel)
- aesthetic