

1. Was the time sufficient to carry out the plan?

The one-year time for the project is sufficient. We obtained the grant approval in March 2024 and subsequently obtained the IRB approval in April 2024. We then contacted the survey company, YouGov, to iron out the remaining issues and details of data collection process. In late May 2024, the online questionnaire was distributed by YouGov. The data collection was concluded at the end of June 2024.

We started working on the collected data in late July 2024 and submitted an abstract to SCC MLA 2024. The abstract was accepted, and preliminary data analysis results of the study were presented at SCC MLA 2024 in late October. We then finalized data analysis results in November and started writing the manuscript for journal submission in January 2025. Currently, we are in the process of finishing off the manuscript. We will take some time to polish the manuscript afterwards. We are planning to submit the manuscript to Health Information and Libraries Journal soon.

Due to the academic paper writing and reviewing procedure, we could not have the study published during the one-year project period. But overall, the time was sufficient for us to finish the majority of the work.

2. Were expected outcomes met?

The end goals of the project are to present a completed information study in a conference and publish a journal article. The conference presentation goal has been met during SCC MLA 2024 in October 2024. Two investigators presented the study and collected feedback from conference attendees.

Specifically, the study aims to examine the relationship between online information seeking, eHealth literacy, health literacy, self-efficacy and diabetes-related health behaviors, including changing decisions and diabetes self-management, among diabetic patients in the U.S. We conducted various statistical analyses including multiple linear regression and partial least squares structural equation modeling (PLS-SEM) to identify possible relationships within the data. Results suggested that intentional health information seeking and incidental health information seeking had different impacts on various diabetes self-management behaviors. For instance, results from multiple linear regression indicated that intentional health information seeking is negatively related to health-care use, while incidental health information seeking is positively related to health-care use. Additionally, during the pathway from two types of online information seeking and various health-related literacies to different diabetes self-management behaviors, different factors play the mediator role. Results from PLS-SEM indicated that changing decisions fully mediated effects from intentional online health information seeking, eHealth literacy, and functional health literacy to health-care use. Diabetes self-efficacy fully mediated impacts from intentional online health information seeking, eHealth literacy, communicative health literacy, and critical health literacy to physical activity.

The insights garnered from the data will inform the current and future work of health sciences professionals in their health literacy efforts in diabetes intervention and education.

3. What worked well?

The communication with YouGov was smooth and SCAMel was very helpful to provide financial support of data collection.

The quality of the data was good and collected data was well-organized and timely delivered by YouGov.

The statistical analyses went smoothly, and results supported a significant portion of our hypothesized statistical models.

SCC MLA 2024 welcomed our abstract and gave us the opportunity to present the study.

SCC MLA 2024 attendees provided valuable feedback for future research directions that could expand the scale of the current study.

4. Would you have done anything differently?

Ideally, we want half of the sample to have type 1 diabetes and half of the sample to have type 2 diabetes, so that it could provide additional insights on difference of information behavior between these two types of diabetes patients. The survey company's quote exceeds our budget and prohibits our exploration of this research angle. If we have additional funding sources, we would like to collect our data like that.

This study collected data through a third-party survey company. It was convenient but the cost was expensive. If we could find proper connections, we would like to collect data directly from a hospital setting and expand the sample size. We would also like to collect longitudinal data if we could collaborate with a hospital setting to further examine the potential causation effects from diabetic patients' information behaviors.

We would also like to extend the study to focus on specific populations such as marginalized groups, for instance, Native Americans.