

An Examination of Mixed-Methods Research

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Article 1

The first article, *Deaf Adults' Health Literacy and Access to Health Information: Protocol for a Multicenter Mixed Methods Study* by McKee et al. (2019), seeks to examine potential barriers for Deaf individuals that use American Sign Language (ASL) in terms of health literacy as well as better understand how they access and understand health information they find online. Research findings could help improve future interventions that aim to improve health literacy for Deaf individuals, with long-term ramifications for the health of a marginalized population due to the recognized impact of health literacy and positive associations that lead to improved quality of life and health behaviors. The study itself aims to evaluate the differences between Deaf individuals that use sign and hearing English speakers, as well as identify the potential effect of hearing on their health literacy, and further explore the impact of health information accessibility. However, the study is not complete at the time of publication but preliminary results are available in another article, *Using Gaze Tracking as a Research Tool in the Deaf Health Literacy and Access to Health Information Project: Protocol for a Multisite Mixed Methods Study and Preliminary Results* by Champlin et. al (2021).

The study first begins with the collection of quantitative data, then uses the quantitative data to help determine ideal participants that would return for the qualitative portion of the study. The quantitative portion of the study focuses on the assessment of study participants to identify predictors and moderators of health literacy, focusing on attitude, skills, and knowledge

pertaining to health literacy, through the usage of multiple tools and relevant measures. A limited number of participants were identified and asked to return for the next phase, in which they were observed on how they search and acquire health information online to help assess their searching ability. Afterwards, the qualitative phase came in the form of interviews with each of the returning participants to explain their performance and thought process during the observation period: data collected from the observations formed the basis of the interviews.

The design of the study, explanatory sequential mixed methods, allows the researchers to help identify potential predictors for health literacy across hearing and Deaf individuals through the quantitative portion of the study as well as select ideal participants for further study, then explore specific aspects of health literacy further in the qualitative portion through interviews formed from the data gathered. In doing so, the study design can effectively help the researchers achieve the established aims of the study. Conducting interviews on a large scale from the initial 450 Deaf and 450 hearing participants could prove burdensome due to the nature of the observation period, which includes video recordings and gaze-tracking. However, a limited interview may prove educational for participants that were not selected to return, even only a portion, to help elucidate further on their attitude, skills, and knowledge of health literacy.

Article 2

The second article, *Assessing the Impact of an Information Literacy Course on Students' Academic Achievement: A Mixed-Methods Study* by Jones and Mastorilli (2022), aims to determine the impact of a stand-alone, credit-bearing information literacy course on student retention and GPA. Librarians in higher education traditionally teach information literacy through “one-shots” or instruction sessions conducted at the request of the instructor which can

be limited due to time constraints and assignment requirements. A formal stand-alone, credit-bearing, semester-long information literacy course may result in a larger benefit to the student. The study authors intend to focus on the academic outcomes of students enrolled in the course versus those who did not, looking at their GPA and performance in an introductory English course as well as overall persistence one year after taking the information literacy course.

The study design began with the quantitative aspect, with the collection of data pertaining to the demographics, enrollment, GPA and academic performance in the information literacy courses as well as the introductory English courses. In addition, data relating to the retention and graduation rates was gathered one year after participation in the information literacy course. Afterwards, the developed questionnaire based on the learning outcomes of the information literacy course as well as knowledge applied to subsequent academic courses was given to students who had been enrolled in the information literacy course as well as a comparison group of students. The questionnaire also included qualitative, open-ended questions that elicited evaluative statements about the course such as benefits from taking the course and providing additional comments or feedback.

While the study is technically mixed-method, it may have not done enough with the qualitative aspect of the study. Further investigation into the information-seeking behaviors of the students taking the information literacy course may warrant close observation and in-depth interviews to shed light on their research process in comparison to those who did not. Furthermore, the study itself indicates that they did not control for potential information literacy instruction given outside of the course such as a “one-shot” given during another course or workshop attendance, etc. If possible, a comparison should be done to students taking the

information literacy course versus students attending a “one-shot” instruction session versus a comparison group that received no information literacy instruction at all.

Lessons Learned

Mixed-method studies can prove interesting to design and enact, since data doesn't provide the whole story especially when focusing on the human experience. Data can serve as a bridge to new knowledge as well as open the door to the exploration of human behavior through qualitative analysis.

References

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