Assignment 2: Analysis of Mixed Methods Research

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Title of Post

Stanifer, Rademacher, Beckett, Simpson, Rayens, Thaxton-Wiggins, & Hahn. (2024). Public library lending programs increase radon testing in rural communities.

Citation

Stanifer, S. R., Rademacher, K., Beckett, W., Simpson, K., Rayens, M. K., Thaxton-Wiggins, A., & Hahn, E. J. (2024). Public library lending programs increase radon testing in rural communities. *Library & Information Science Research, 46*(1), 101283. https://doi.org/10.1016/j.lisr.2024.101283

Article review

This study examined whether lending radon (the second leading cause of cancer) This study examined whether lending radon detectors through public libraries increased radon testing in rural communities and how the program was received (Stanifer, et al., 2024). The purpose was to create a radon detection kit to lend in libraries, and to evaluate this lending program's usability, feasibility, acceptability, and potential to mitigate radon. It was also done with the goal of providing support for radon lending programs in libraries and preventing lung cancer through an increase in awareness and testing. It's an important research topic because it has the potential impact of saving lives and improving community health through a library lending program.

The researchers used a convenience sampling method. The researchers partnered with public libraries across four Kentucky counties that already promoted health, most of which were

already familiar with checking out things like instruments or hotspots. Two of these counties had one main library, one had 3 libraries, and another had a main branch and 4 other branches. Participants were not randomly selected, but library users who both checked out the radon kits and volunteered to complete a survey. This sampling type did create limitations that may have impacted the results of the study. Specifically, the study is prone to self-selection bias, and the citizen scientist promotion approach (done by white people with higher education and income), may have skewed the results. Thus, the results aren't generalizable, and may not even have represented the communities studied.

This was a mixed study with integrated qualitative and quantitative research. I believe this was the best approach, because it was a broad study evaluating the impact of the radon kit lending program as well as the actual program itself. Moreover, the feedback they gathered informed them of the study's strengths and limitations.

Quantitative components included data like patron checkout numbers, survey participation numbers, and various demographic data like what percent of homes in the county tested for radon. It also included the numerical results of surveys to patrons, surveys to citizen scientists, and surveys to library staff. It also included the actual radon testing data, although that data wasn't detailed in the results.

Qualitative aspects included community engagement and participation. For example, local citizen scientists were used to promote the lending program as well as give feedback. Moreover, the lending program was designed with iterative and informed feedback with partners to improve the design of the program. Another aspect was the use of surveys on feasibility, usability, and acceptability to gain insights on users' subjective experience with the program.

Lastly, there were observations made on the ways staff and users communicated about the program, and on the way the community was reached.

Overall, the study was well executed. Although its results may not be fully generalizable, it provides strong support for radon testing library lending programs and lays a foundation for future research.

References

Stanifer, S. R., Rademacher, K., Beckett, W., Simpson, K., Rayens, M. K., Thaxton-Wiggins, A., & Hahn, E. J. (2024). Public library lending programs increase radon testing in rural communities. *Library & Information Science Research, 46*(1), 101283. https://doi.org/10.1016/j.lisr.2024.101283