INTRODUCTION
A key role of digital inclusion and equity research is its ability to deliver knowledge that informs initiatives to bridge the digital divide. Research that maximizes the effectiveness and sustainability of initiatives can benefit from incorporating aspects of a behavioral and social change (BSC) approach within each step of design and execution.

PRESENTATION OBJECTIVES
To illustrate insights, this presentation will use a case study that walks through decision-making in four areas: study content and materials, methodology, implementation, and data analysis and communication. The objective is to show how BSC can inform research by emphasizing storytelling, challenging assumptions, being behavior-focus and context-based, and seeking positive deviance.

CASE STUDY CONTEXT
This case study took place in North Philadelphia—specifically, the neighborhoods of Norris Square, Fairhill, and Kensington. Its objectives were guided by community organization Philly Community Wireless (PCW), who also participated in developing the study materials. The sample was not representative, but included individuals of various ages, races and ethnicities, genders, and incomes.

CONTENT: COSTS
Community organization PCW wanted to have data that showed the total sum of internet access costs. To design for this, we had to unpack the term “cost” and used community engagement to help brainstorm beyond traditional ideas.
- ISP subscription
- Devices
- Maintenance
- Cell data
- But also...
  - Hotspots
  - No autopay
  - Transportation
  - Time & energy

CONTENT: MOTIVATIONS
Another area PCW wanted to explore was the motivations of participant’s internet access behaviors. The Behavioural Drivers Model (below; Petit, 2019) breaks down the complexity of individual behavior, which helped us devise appropriate questions to analysis motivations. Focusing on behavior allows for more effective initiative design.

IMPLEMENTATION
North Philadelphia is diverse, with a variety of income levels, ages, and races and ethnicities, and both English-speaking and Spanish-speaking populations. There is also history of some tension between academia and community in the area. These community and contextual factors led to the following:
- Bilingual materials (flyers, contact cards, survey)
- Bilingual investigator
- Recruitment via door-to-door canvassing, to speak with those without phones and to encourage connection
- Choosing appropriate compensation by researching local businesses and asking community for preferences

ANALYSIS + COMMUNICATION
Often research looks to highlight patterns or trends, but can overlook the importance of those respondents who deviate from the norm. These “deviants” can help inform and participate in initiatives that require learning and behavior change. In data analysis and results communication, we paid attention to those who did not fit in:
- One study participant who was Spanish-speaking, of low-income, and 60+ in age had a high level of digital skills in comparison to other respondents of the same language, income, and age brackets.
- In an Initiative that aims to develop digital skills in older Spanish-speaking adults, for example, this individual could be key in transforming that initiative into a peer-based learning process where participants can be taught by someone from their community that they may better identify with (Singhal et al., 2010).

METHODOLOGY
Using mixed methods, participants responded to either an oral or online delivery of a survey while participating in an unstructured interview, allowing the investigator to ask follow-up questions and collect nuanced data from participants who chose to storytell.

CHALLENGE ASSUMPTIONS

BEHAVIOR-FOCUSED

CONTEXT-BASED

CONCLUSION
Using SBC perspectives, tools, and methods to design and execute studies can allow for research that maximizes the effectiveness and sustainability of initiatives by being community-driven, behavior-focused, and context-aware. These considerations, illustrated by a case study of digital inclusion research in North Philadelphia, can be integrated into study content and materials, methodology, implementation, and data analysis and communication, and are beneficial for nonprofits and governments doing formative research or community organizations considering collaborative research partners.

REFERENCES

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