What does a new method mean? It means Awesome Research Collaborations.

Ciabhan Connelly and Julia Dunbar

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A new study elaborates on the Asynchronous Remote Community (ARC) method, an innovative new approach to qualitative research. ARC enables research that can access many different population sets and gather a wealth of data.

The research was sponsored through the NSF and based out of the ProHealth lab at Indiana University Bloomington. They looked at past ARC studies that dealt with populations living with rare diseases and pregnant/new mothers alongside three ongoing projects focusing on individuals living with HIV, miscarriages, and homeless teens, respectively.

Two undergraduate researchers in collaboration with research mentors delved into what the ARC method brought to these studies. "As we were analyzing each study we started to notice common themes emerging between all of the records. From these findings we decided to publish a paper that creates a 'guidebook' of sorts that highlights key findings and tips to help future researchers use the ARC method," said co-author and undergraduate researcher Julia Dunbar.

Key steps the researchers recommend in their guidebook include: **Step 1:** identify population set attributes, such as location, access to tech, and time constraints. **Step 2:** Select/adapt ARC activities. The Diary activity was implemented by the rare diseases study, and from the experiences of the researchers there the guidebook extrapolates its advantages and disadvantages, which will help future researchers decide whether or not it is useful to include (pro: provides more accurate info about participants everyday lives, con: it is time consuming for participants). **Step 3:** ARC produces a lot of varied data, such as survey data, photos, comments, etc. which takes up a lot of time to analyze.

Figure 1 represents an ARC activity called Circles. Participants use physical materials to complete this activity. The researchers are hoping to improve future ARC research by designing/creating an ARC toolkit. This toolkit would

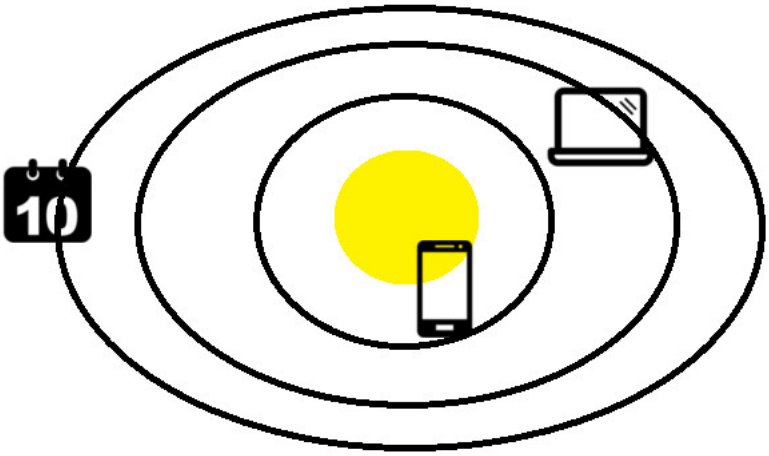

Figure 1: Prototype used for an activity in which participants had to locate different types of technology according to level of importance or relevance.

be digital/interactive/online and easily accessible to researchers who are interested in using the ARC method. It would adapt activities like Circles to have multiple completion methods to cater to the differing needs of individual participants, in addition to providing a framework for researchers to analyze and compile their data. Co-author and Indiana University-Bloomington professor Dr. Shih commented that " "The ARC method is proving to be very useful for HCI research as traditional barriers in recruitment and participation are being torn down: namely, geographic location and lack of participation due to stigma or confidentiality concerns. The next step would be to make this method even more interactive via the design and deployment of an interactive toolkit that would allow participants to provide data in a more engaging and fun way. The REU students Julia Dunbar and Ciabhan Connelly have been working with me and my PhD student Fernando Maestre. They have been tremendously helpful at assisting with the research and getting it off the ground. The REU experience has been a success in facilitating research and promoting STEM education."

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Co-authors Julia Dunbar (Siena College), Ciabhan Connelly (Indiana University-Bloomington), Juan F. Maestre (Indiana University-Bloomington), Katie A. Siek (Indiana University-Bloomington), and Patrick C. Shih (Indiana University-Bloomington).

For more information, contact the researchers at these emails: Julia Dunbar (jc19dunb@siena.edu), Ciabhan Connelly (ciaconne@iu.edu), Juan F. Maestre (jmaestre@indiana.edu), Katie A. Siek (ksiek@indiana.edu), and Patrick C. Shih (patshih@indiana.edu).