

## Protocols to make data on kids secure, shareable eventually may help families

September 30 2020, by Matt Swayne

---



Making data on children accessible to child psychologists and other scientists — while ensuring that data is secure — could aid studies that are aimed at better well-being and health for kids and families. Credit: Pixabay

Researchers in developmental psychology face a perplexing challenge: They know that collecting and sharing data about children can lead to real benefits for kids and their families, but they also recognize that some kinds of data like video or audio recordings risk violating the

privacy of these vulnerable populations if not carefully protected.

Now, an international team of developmental psychologists, including two Penn State professors, say that by implementing the correct procedures and controls, researchers can safeguard privacy while still allowing researchers access to valuable [data](#) sources.

"We recognize the challenges of greater openness and sharing, but don't see those challenges as unmeetable; they are challenges that, in many cases, can easily be met, or, could be met with additional efforts from researchers and additional resources," said Rick Gilmore, professor of psychology, Penn State. "Getting this right is important because more detailed and diverse knowledge about the world's children is essential for improving their health and well-being."

In a recently published paper, the researchers suggest that the research community can manage privacy challenges by creating practices that connect research ethics with research openness and transparency. The findings were reported in *Child Development Perspectives*.

The researchers said that restricted sharing can be one tool to safeguard data. This practice aims to keep data in the [research community](#). As an example, Gilmore said that certain U.S. census data can only be analyzed in repositories that strictly limit access to researchers.

"With restricted sharing, we have shown that we can share data for scholarly uses, but not make it public," said Gilmore, who is also an associate of the Institute for Computational and Data Sciences.

Pamela Cole, Liberal Arts Professor of Psychology and Human Development and Family Studies at Penn State and a co-author on the paper, agrees that "the core [challenge](#) is to advance discovery while protecting the privacy of research participants and the confidentiality of

their data."

Another challenge with making open data more secure will be training. Because methods of sharing data securely may be new to some scientists, researchers will need to be trained in the latest technologies and systems.

"If you're going to ask people to share data and materials, they are going to have to learn new skills," said Gilmore.

He added that professional societies can help train researchers in these new practices by offering professional education, for instance.

Gilmore added that funding to achieve these additional levels of security may be a concern to many. So far, major funders in the social and behavioral sciences have committed short-term but not long-term resources to sustain data repositories, he said. However, setting aside a portion of the country's research budget for data archiving and curating might help defray some of these costs.

"Problems in the social and [behavioral sciences](#) are hard nuts to crack, and researchers need places to store and share their data for others to build upon," said Gilmore.

Over time, investments in new safeguards, skills and equipment could offer returns in the form of more efficient and more expansive research.

"The public puts substantial tax dollars into scientific research, and scientists who share data extend those investments and return more results to the public. That is, with data sharing, we all learn more, faster," said Gilmore. "Of course, there are certain types of data that could pose too much risk, but there is plenty of room to share other data and to do so securely."

Gilmore said that the response of researchers to the COVID-19 pandemic underscores the importance of sharing data, as well as its possible benefits.

"I think one lesson our current crisis shows is the virtue of openness in meeting essential social goals," he said.

**More information:** Rick O. Gilmore et al. Advancing Scientific Integrity, Transparency, and Openness in Child Development Research: Challenges and Possible Solutions, *Child Development Perspectives* (2020). [DOI: 10.1111/cdep.12360](https://doi.org/10.1111/cdep.12360)

Provided by Pennsylvania State University

Citation: Protocols to make data on kids secure, shareable eventually may help families (2020, September 30) retrieved 4 May 2024 from <https://medicalxpress.com/news/2020-09-protocols-kids-shareable-eventually-families.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--