

How Scientists Read

Chair:

Jessica Ancker
Cleveland Clinic Foundation
Cleveland, Ohio

Panelists:

Morna Conway
The Conway Group
Taneytown, Maryland

Joseph HorVath
PERQ/HCI
Bloomington, Minnesota

Michael Keller
Stanford University/HighWire Press
Stanford, California

Reporter:

Judith McIntosh White
Texas A&M University
College Station, Texas

At this session, panelists agreed that regardless of the tools used to assess readership, the issues remain the same: who is reading what, how often. The trick is to use the right tools to measure readership trends in target audiences.

Journals remain the number one source for informing physicians about new medical developments and exposing physicians to advertising, said Joseph HorVath, of PERQ/HCI, a marketing research firm.

The panelists discussed the use of readership surveys and focus groups, both of which are based on self-reported behavior. "Use focus groups when there's uncertainty about variables affecting your market segment", advised Morna Conway, president of The Conway Group, a Maryland-based journal consulting firm. Focus-group

feedback helps to uncover trends, and Conway uses them to set parameters with new research clients. She uses readership surveys to build on indicators from focus-group research. Conway cautioned that survey results must be interpreted carefully, especially when one is extrapolating findings to an audience wider than survey respondents, and nonresponse bias should always be measured unless response is very high. Demographic questions permit cross-tabulation analysis and may make results easier to apply to the target universe. Conway recommends conducting frequent studies to spot rapidly changing trends, especially in online publishing.

Twice a year, HorVath surveys 7000 office-based physicians to determine the frequency and depth of readership of selected medical journals. Results are extrapolated to yield estimates of average issue readership and average advertising exposure.

Turning to innovative readership-assessment technology, HorVath said that computers permit researchers to "get closer to the real behavior" of readers by monitoring their online journal-reading habits. He cited data showing that physicians who use the Internet also read journals more frequently than those who do not go online.

Michael Keller, director of academic information resources at Stanford and publisher of HighWire Press, said HighWire's "interrogation machines", developed over the last 15 months, can track the Internet identity of a reader's computer and match it with items accessed and time spent with each. Research shows that online articles have a surprisingly long half-life, with access levels that "never tank entirely".

Keller cautioned online researchers to

guard user confidentiality carefully. HighWire does not reveal readers' individual personal identification data. Rather, data are aggregated and reported as anonymous. Identity is disclosed only when users attempt illegal acts, such as stealing intellectual property.

The panelists agreed that they would like to see both traditional and innovative research methods applied more to general questions about how scientists read, including where they read, what print and online sources they choose, and which online features they use.

HorVath said that as economic contingencies force more publications to generate revenue, readership research can help editors to work more efficiently. Conway agreed that research can help editors and publishers to construct data-driven business models and keep the models "ahead of the curve". But she cautioned that findings must be validated with multiple tests, and editors should be aware that research often lags readership reality.

Online analysis holds the potential to guide development of a discipline's literature by revealing journal readers' interests. For example, research by PERQ/HCI shows that physicians read articles about diseases that they currently see and treat. However, electronic analysis does not permit direct comparisons of print and online reading habits. Inquiries are needed into readers' differing perceptions of electronic and print journals and into the impact on readership of journal features that are available only online, Keller said. 