

RIG Symposium B5: Family/Community Based Participatory Research RIG: State of the Science in Research of Families and Communities: Innovative Approaches to Study Methods and Data Analyses

Challenges in Web-Based Research

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This session will explore challenges related to web-based research, and aid in understanding logistical issues related to data collection, data transformation and data analysis. Using the Internet for research can pose a number of challenges. Although commercial products are available, customized solutions are frequently required. When surveys are developed, questions must be designed so that data captured is usable in subsequent analyses. Text based data must be differentiated from numeric data. Careful considerations should be given to questions so that if responses are not mutually exclusive, a system is developed to capture all possible information. It is helpful to have an understanding of the back end of a database, and how data from web-based forms is subsequently inserted into the database when a completed survey is submitted via the web. It is also helpful to visualize how data may be subsequently queried, as well as exported to statistical programs such as SPSS/PASW, or imported via online database connectivity (ODBC). If the web forms are set incorrectly, data may be corrupted, and thus the researcher may be unable to complete subsequent steps in data analysis. Forms must be tested several times, sometimes requiring a number of iterations. Other challenges in web-based may arise when the family context is considered. Questions may be developed to elicit information relating to more than one family member, for instance reaction to a parent's illness. From this, challenges may arise related to tracking of multiple family members in the same study. Although family web-based research is not yet in the mainstream, proper application of existing survey methods will assist in ensuring that data is ready for analysis. Examples from research of families will be given to demonstrate key issues.