

GUIDELINES FOR EVALUATING AND APPLYING RESEARCH IN ADULT PROTECTIVE SERVICES

A Statement by the
National Adult Protective Services Association (NAPSA)
and
National Committee for the Prevention of Elder Abuse (NCPEA)

The NAPSA/NCPEA Research Committee developed this document to increase the understanding and application of research in the continuing development of effective and sound practice in the field of Adult Protective Services (APS). It is the second in a series of statements by the committee to encourage research in elder abuse and improve the link between APS practitioners, administrators, and researchers. The document titled *Guiding Principles for Research in Adult Protective Services* provides a point of reference and practical steps in an area often difficult to navigate due to concerns about outcomes and lack of familiarity with research by practitioners, as well as the complexity of elder abuse topics for researchers. This second document is a primer on research to assist the APS practitioner in reading, analyzing, and applying research studies to practice. It is based on the same statement of belief as the *Guiding Principles*, as well as having its own purpose: to expand the reading and application of relevant and reliable research studies that will benefit the practice of APS.

Believing that knowledge is power and that:

- Advances in APS policy and practice must be guided by reliable data;
- Good research requires the establishment of accurate measures;
- Creating a practice culture of inquiry and evaluation is critical to advancing knowledge;
- Practitioners need to carefully analyze research and apply relevant outcomes; and that
- Application of research can increase the power of advocates for their clients and for the development of needed resources,

NAPSA and NCPEA offer the following guidance for understanding research methodology and evaluating its application to APS practice for the purpose of improving practice and client outcomes.



Challenges and Benefits of Applying Research to APS Practice

Research can inform and improve practice, and vice versa, and examples of the success of this collaboration are critical to encouraging researchers and practitioners to pursue more questions in partnership. The following is a case study in successful research-practice partnership.

The Study

The University of California–Irvine (UCI) Program in Geriatrics conducted a study to evaluate bruising as an abuse indicator, a complex issue in assessing older adults. The following is a synopsis of the study findings.

Geriatric Bruising Study

by the Center of Excellence on Elder Abuse and Neglect,
Program in Geriatrics, University of California–Irvine School of Medicine

The Lifecycle of Bruises in Older Adults

The objective of this study, funded by the National Institute of Justice, was to summarize the occurrence, progression, and resolution of accidentally acquired bruises in a sample of adults aged 65 and older.

The systematic documentation of accidental bruises in older adults could provide a foundation for comparison when considering suspicious bruising in older adults. Between April 2002 and August 2003, a sample of 101 seniors was examined daily at home (for up to six weeks) to document the occurrence, progression, and resolution of accidental bruises that occurred during the observation period. Findings include the following:

- Nearly 90% of the bruises were on the extremities;
- There were no bruises on the neck, ears, genitalia, buttocks, or soles of the feet;
- Only about one fourth of people with bruises remembered how they got at least one bruise;
- Subjects were more likely to know the cause of the bruise if the bruise was on the trunk;
- Contrary to the common perception that yellow coloration indicates an older bruise, 16% of bruises were predominantly yellow within the first 24 hours of onset;
- Those people on medications known to impact coagulation pathways and those with compromised function were more likely to have multiple bruises.

Mosqueda L, Burnight K, Liao S. The lifecycle of bruises in older adults. *Journal of American Geriatrics Society*. 2005;53(8):1339–1343. <http://www3.interscience.wiley.com/journal/118681332/abstract>

Bruising as a Marker of Physical Elder Abuse

Phase II of the study was also funded by the National Institute of Justice. In this study, consenting older adults were examined to document location and size of bruises and to assess whether they were inflicted during physical abuse. An expert panel confirmed physical abuse. Findings were compared with results of the earlier study of accidental bruising in older adults.

Researchers made home visits to 80 adults aged 65 and older reported to APS for suspected physical elder abuse. Occurrence of physical abuse was substantiated for 67 APS clients by a LEAD panel (Longitudinal, Experts, All Data; geriatricians with experience in elder mistreatment considered all evidence of physical abuse). Seventy-two percent (n=48) of older adults who had been physically abused within 30 days prior to examination had bruises.

Compared to non-abused elders with bruises from Phase I of the study (n=68), the study found the following:

- Physically abused elders had significantly larger bruises;
- More of the physically abused elders knew the cause of their bruises (43, or 89.6%, vs. 16, or 23.5% of the comparison group).
- Physically abused elders were significantly more likely to have bruises on the face, lateral (thumb side) or anterior (palm side) surfaces of the arm, and the posterior torso (back).

Wiglesworth A, Austin R, Corona M, et al. Bruising as a marker of physical elder abuse. *Journal of the American Geriatrics Society*. 2009;57(7):1191–1196. <http://www3.interscience.wiley.com/journal/122475454/issue>

The APS Experience as a Partner in the Geriatric Bruising Study

Source: Report from Orange County, California, July 2009

Conducting the bruising study required the commitment and effort of APS practitioners. The APS agency in Orange County, California, having an established positive working relationship with UCI Geriatrics, recognizes the value of research, which creates a culture that supports consideration for studying APS clients when such study will ultimately improve the work they do with clients.

UCI researchers presented the study proposal to the Orange County APS social workers. They were asked to determine if their clients would consent to an interview by a UCI researcher. For the purpose of removing bias, a script was provided for the social workers to read to their clients over the phone or on their initial home visit. In addition, APS supervisors were asked to identify appropriate cases and attach a form instructing the social workers on how to proceed. Once the social worker gained client consent, he/she gave the form to the

UCI researcher to arrange a home visit. UCI spent two years working with Orange County APS in order to identify the 80 participants for the study sample.

Challenges

APS social workers in Orange County are very protective of their clients, as are APS social workers across the country, and laws regarding confidentiality reinforce that behavior. Some social workers were adamantly opposed to the research and thought it was exploitive and expressed concerns about confidentiality. More than half of the clients refused to participate, either by not consenting to talk with UCI researchers or refusing to talk with researchers at the time of the interview.

Benefits

Despite the challenges, Orange County APS sees the results as having been well worth the effort. APS social workers are often the first responders to elder abuse and neglect and as such, Orange County APS staff recognize the need to gather as much information as possible from the person reporting the abuse and to respond quickly to assess the situation and take pictures of the bruising. The impact of the study can be seen in the partnership of law enforcement, medical practitioners, and APS in Orange County.



Applications to Practice

- After the initial assessment is completed, the social worker contacts law enforcement so that forensic pictures of the bruises can be taken.
- Law enforcement often brings pictures to the Elder Abuse Forensic Center and asks a geriatrician to review them to determine if the allegation of physical abuse matches the injury.
- After hearing cases presented at the Forensic Center, the district attorney may review evidence gathered by law enforcement and consider prosecution.
- Orange County APS modified their existing intake protocol:
 - » Social workers answering the APS Registry are instructed to ask specific questions when physical abuse is alleged.
 - » The social workers now consistently gather detailed information about bruising and specifically note the location and size of the bruising.
 - » Registry social workers were asked to bring these reports to the attention of a supervisor so they can be assigned as an immediate response; the social worker then responds within a few hours to assess the situation.

As a result of the process of engaging in and integrating research into practice, APS workers in Orange County have a greater understanding of the important role they play as first responders. Results from the bruising study increased Registry workers' intake skills, which made for more detailed reports and accurate

prioritization of response times. It also heightened field workers' assessment skills with respect to indicators of physical abuse. Social workers now know the following:

- The initial color of the bruise and color over time are not good indicators of the age of the bruise;
- It is critical to question explanations that do not match an observed injury;
- A client's medical history and any medication he or she may be taking may be considerations in determining whether the client bruises more easily;
- The locations of bruises are significant because bruising on the face, lateral (thumb side) or anterior (palm side) surfaces of the arm, or back is less likely to be accidental.

This case study illustrates how research-practice partnerships can positively impact the assessment and provision of services to APS clients, and that such effort can be conducted with the utmost respect for client confidentiality. For further guidance on ethical considerations in research, see *Guiding Principles for Research in Adult Protective Services*, developed by NAPSA and NCPEA.

Understanding the Research Process

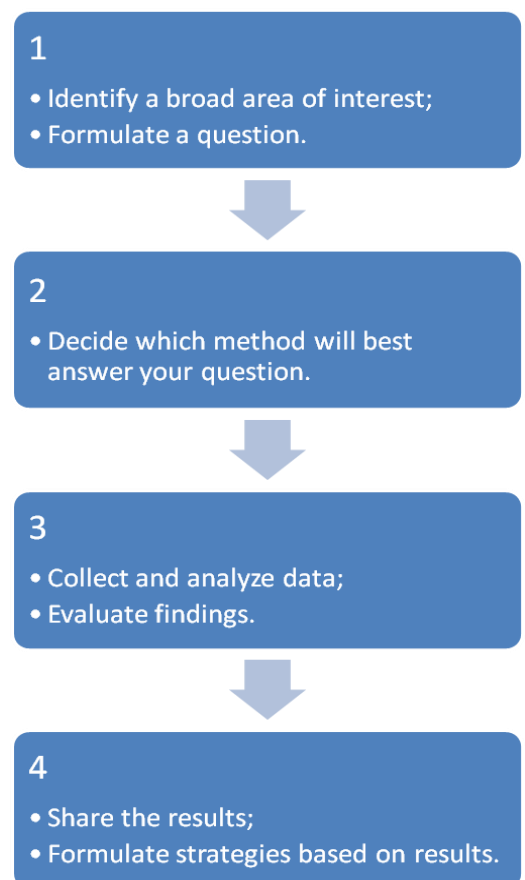
Whether research is initiated by practitioners or researchers, the basic process will follow a similar sequence, beginning with a broad area of interest or perhaps a question that you are interested in answering. In most cases, this question will need to be narrowed down and focused into one that can be answered through research. Once the research question is focused, decide which research method will best answer it. There are many factors to consider when selecting a research method (e.g., appropriateness of the design, cost and time constraints, and the available research knowledge). After deciding on a method and collecting data, next steps will be to analyze the data and determine the results. Two very important last steps are to share the results of the research with stakeholders within the community and discuss strategies to take action based on the results.

The following provides information about the types of research and data useful to answering research questions.

Types of Research

Generally speaking, it is useful to distinguish between **basic** (or theoretical) and **applied** (or practical) research.

- **Basic research** is concerned with knowledge for the sake of theory. Its design is not controlled by the practical usefulness of the findings. The focus is on creating knowledge (for example, risk factors for abuse, neglect, and exploitation).



- **Applied research** is concerned with showing how the findings can be summarized into some type of direct practice methodology and applied to a specific practical APS situation (for example, administering and interpreting APS assessment tools, designing intervention strategies for hoarding, or using collected data to create outreach protocols).

These types of research work together by providing information for research projects. For example, basic research (theory or existing knowledge) can provide ideas for generating research questions related to direct practice. When research is conducted, applied, and tested, it can create standards for practice (applied research). This in turn, can raise additional questions that call for further research.

Types of Data

In general, there are two types of data: **qualitative** and **quantitative**. Quantitative data are numeric and qualitative data are not. Some examples of quantitative and qualitative data you could collect in APS are shown below.

- **Quantitative** data: Numbers of allegations, client ages, length of service delivery, satisfaction ratings, and frequency of resource use
- **Qualitative** data: Case studies, stories, photographs, videos, and sound recordings

Both quantitative and qualitative data can be used together in research. These two types of data collection are strongly related; quantitative data are based on the qualitative judgments of the researchers designing the instruments, and the respondents when interpreting the questions. In turn, some qualitative data can be coded into numeric data that can then be analyzed. Often, qualitative data are useful for forming the questions that can be explored and studied with quantitative data (e.g., interviewing adult victims of abuse about stages and sources of bruising, which prompted the geriatric bruising study).

Basic Questions When Reviewing Research

Culling through published research and reports can be overwhelming and at times, confusing. It is often challenging to determine if what you are reading represents sound research. The following are some basic questions to consider.

- What is the relevance of the research to the question that you are asking or the problem you are studying?
- Has the program/intervention been operational for a sufficient period of time prior to evaluation/study?
- Are program limitations identified and discussed?
- Is there documentation about procedures used in implementations of the practice?
- What quantitative or qualitative evidence is there as a result of the practice?
- Were the specific outcomes defined prior to evaluation and do results address each outcome?
- Is the sample size of the evaluation/study adequate?

- Are the sample characteristics and outcomes relevant to the population to which you are applying this research?
- How generalizable are the findings?
- Does the evaluation/study include implications for future research?
- Has the evaluation/study been published in a peer-reviewed journal?

Glossary of Research Terms

Case studies: In-depth studies of specific situations. When paired with quantitative research methods, they can yield information that may uncover unexpected findings, leading the research in new and different directions. They are also useful in testing how theories or models play out in the “real world.” Alone, findings from case studies cannot be generalized to an entire population. Information resulting from case studies may inform ideas for more quantitative approaches to looking at the situation.

Empirical research: Research where data are gathered firsthand and/or through observation.

Meta-analyses: Studies that look at research findings empirically across several similar studies and are re-analyzed to draw conclusions. This is particularly useful in looking at multiple studies that may have used very small sample sizes. Meta-analyses enable researchers to draw upon a large body of existing research to create more meaningful applications of the data to current questions.

Observational study: Research in which the assignment of subjects into experimental or control groups is outside the researcher’s control, usually due to ethical considerations. In APS, for example:

- *Cross-sectional:* These are observational studies that look at a specific population at a certain point in time (example: studying forensic indicators of elder maltreatment at the time of hospital admission).
- *Longitudinal:* These are observational studies that observe a group over a period of time (example: following a group of individuals investigated for elder abuse to study factors).

Randomized control trial (RCT): A type of quantitative research design in which subjects are assigned randomly into experimental or control groups. This allows the effect of the intervention/service to be studied in groups of people who are (1) the same at the outset and (2) treated the same way except for the intervention(s) being studied. Any differences seen in the groups at the end can be attributed to the difference in intervention/service alone, and not to bias or chance. This is considered in the medical field to be the “gold standard” of research design, but has significant challenges when applied to the study of the social sciences.

Reliability: The extent to which the same result will be achieved when repeating the same measure or study again. For example, someone completing the same assessment tool twice within a short period of time should get roughly the same result if the tool is reliable (<http://www.cachildwelfareclearinghouse.org/glossary>).

Quasi-experimental design: A study design used frequently in research within the social sciences because the requirements of RCT are often not possible when studying social variables. Because RCT is often regarded in the medical field as being the “gold standard,” some researchers state that quasi-experimental designs are less useful. However, this type of design can yield very valuable information, and results can be tested for reliability and some types of validity when the limitations of the study are clearly stated and accounted for. In this type of design, control groups are used, but subjects are not randomly assigned.

Surveys: A method useful for gathering information about people’s opinions and for identifying trends. Surveys are generally cost-effective and can reach a large number of people. Even with these benefits, great care should go into how surveys are designed in order to reduce bias and ensure that you reach your target audience.

Systematic reviews: Studies that catalogue various study findings and draw some useful conclusions. In comparison to meta-analyses, systematic reviews do not re-code data regarding findings or empirically analyze effects across several studies. Rather, they are a process of identifying an existing body of research conducted on a particular topic, critically evaluating that research, and then combining and publishing the results.

Validity: The degree to which a result is likely to be true. There are two types of validity that are commonly referred to (note that this is not an all-inclusive list of types of validity):

- *External validity:* External validity is the extent to which the results of a study can apply to people other than the ones who were in the study. This is a measure of how generalizable the results are to others outside of the study.
- *Internal validity:* Internal validity is the extent to which a study properly measures what it is meant to (<http://www.cachildwelfareclearinghouse.org/glossary>).