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

RESOURCES ON EVIDENCE-BASED AND EVIDENCE-INFORMED PRACTICE IN ADULT PROTECTIVE SERVICES

The NAPSA/NCPEA Research Committee has gathered some information on research and evidence-based/evidence-informed practice, which we present on the committee's webpages as resources to Adult Protective Services staff. The information is intended as an orientation and/or reminder of some things to keep in mind as APS staff are planning research projects, looking for research information, or working to apply research findings to their practice. We hope that these resources will help APS staff learn more about how to use research strategies to improve their practice, APS programs and services.

These resources can be accessed through the outline of topics below, each of which link to a resource page.

Contents

A major goal of the NAPSA/NCPEA Research Committee is to promote research relevant to APS practice and encourage the use of research findings to improve APS programs and services. The committee welcomes the interest of APS staff and APS researchers in the committee's work on this topic. For more information about the research committee, visit our webpage at:
http://www.napsa-now.org/about-napsa/napsa-ncpea-research-committee/

What is meant by "Evidence-Based Practice" (EBP) in Adult Protective Services?

Staff in Adult Protective Services (APS) want to provide the best possible programs and services to vulnerable adults. They also need to respond to questions about the impact and quality of APS programs and practices. These questions may come from funders, administrators, program evaluators, the general public, or APS staff interested in looking at the effectiveness of their own practices and services.

In order to answer these questions and improve APS programs, policymakers, staff and researchers in APS frequently engage in work that promotes "evidence-based" and "evidence-informed" practices. These practices are built on a foundation of research that studies the effectiveness of interventions.

Research on the Effectiveness of Interventions

Studies that look at whether a service, practice, or intervention has improved the status or outcomes of clients can help answer questions about APS program effectiveness. When APS staff make use of knowledge gained from these studies to design or modify their programs, they are using an "evidence-based" approach to delivering public services.

Unfortunately, the current body of research on effective interventions in Adult Protective Services (APS) is not extensive. Sometimes we can't find much information on a question we are trying to answer. This is due to gaps in the **quantity and quality** of research that is available about APS interventions. Research quality has partly to do with the **types of research** and **types of data** that are collected. These issues are described briefly below.

Research quality

Research studies that evaluate the effectiveness of interventions are expected to have certain features that ensure a high scientific standard of evidence. The most important requirement is that a study compares outcomes of those who receive an intervention to those who did not. The ideal design (sometimes called "the gold standard") for this kind of study is the randomized controlled trial (RCT), in which study participants are (1) randomly selected and assigned to two groups, one of which receives the intervention while the other does not (the "control" group); and (2) uses strict procedures to "control" for other factors, i.e. to ensure that no other factors transpire which could alter the results and distort what would otherwise appear to be a difference in outcome between the intervention and control groups.

In social sciences research (including research on adult protective services), a RCT design is rarely possible. However, other features of social sciences research designs can promote high quality findings. For example, a "comparison" group receiving traditional interventions, rather than a control group, may be used with other study features designed to make the comparison group as close to a control group as possible.

Research quantity

In order to say that there is strong scientific evidence for a particular conclusion, similar results need to be replicated over multiple studies investigating the same question. As noted above, research that evaluates the effectiveness of APS services and interventions is limited. The available studies may not have research designs with potential to demonstrate similar impacts over multiple studies. This problem is not limited to

the APS field, but it does pose challenges to APS staff, researchers and policy makers working to develop effective APS programs.

Types of Research

Across the human and social sciences, research tends to be categorized in terms of how directly connected it is to practice, versus discovering basic knowledge about the world that does not have immediate practice implications. Terms used to signal this difference are "Basic" and "Applied":

- **Basic research** is concerned with knowledge for the sake of theory and generalized wisdom about the world, such as knowledge about the existence, characteristics, and behaviors of people and social organizations. In a sense, the practical usefulness of findings does not drive the research. However, the focus is on creating knowledge that may ultimately provide a foundation for practical questions about delivering services. For example, basic research relevant to APS may include risk factors for abuse, neglect, and exploitation or the size and location of at-risk populations.
- **Applied research** usually refers to research that focuses on research questions that attempt to directly inform the work of APS organizations and staff. Examples are research that studies whether specific interventions produce desired client outcomes, whether certain policies improve the well-being of the population as a whole, or perhaps what protocols and practices will deliver the desired interventions most effectively and efficiently. Basic research may provide a foundation for applied research, for example, understanding the risk factors of the client population will help in understanding what interventions are needed and judging whether interventions are effective.

The term and concept of "applied research" may be confused with the idea of "applying research", which has to do with the process of interpreting research findings, determining what we can learn from them, and identifying ways that we can improve our practice and our programs based on those learnings. For further discussion on interpreting and applying results to practice, see Using Research.

Types of Data

Often, when talking about research plans and results, the information that is collected may be referred to as either "quantitative data" or "qualitative data". Some data can have both quantitative and qualitative characteristics, depending on how data are collected, compiled and analyzed. In general though, the distinction is pretty basic: 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 abuse reports, clients, allegations
    - dates of abuse reports, investigation closure, case closure
    - length in days of investigations, of services, or time between contacts with clients
    - percentages such as the percent of reports which contained a certain allegation, the percent of investigations which validated abuse, or the percent of confirmed victims who later were identified as alleged victim in a new report to APS
    - client dates of birth, ages, or social security numbers
    - a case priority level (such as 1 through 4) or a numerical client risk rating (such as 1 to 10)

- **Qualitative data**:
  - the narrative from a report of abuse, a contact record, or a case conclusion
  - the transcript from an interview or the investigator's summary of a client's testimony
  - a photograph, diagram, video, or an official document like a death certificate
  - a program policy or procedure
  - common categories of things:
    - client risk types, such as aged, physically or cognitively disabled, etc.
    - allegation types, such as physical abuse, physical neglect, emotional abuse, etc.
    - risk of recidivism: high, medium or low

All research studies will contain some quantitative and some qualitative data and the two types of data will interact with each other through the process of research. Qualitative data can be converted to quantitative data, and vice versa, in order to better understand and summarize results. Often, qualitative data are useful for forming the questions that can be explored and studied with quantitative data.

See also: Evidence-Based vs. Evidence-Informed
              How can I use Evidence-Informed Practices in my work?
              Where can I find information on effective programs and interventions?

For definitions of other frequently-used research-related terms that APS staff may encounter, see Glossary of Research Terms.

Evidence-Based vs. Evidence-Informed

While the APS field needs more researchers conducting rigorous studies on practice interventions and more APS policy makers and managers promoting and funding research on APS interventions, APS staff have to work with the evidence they have. In the absence of enough research to support "evidence-based" practice, a useful goal is to seek "evidence-informed" practices and programs.

"Evidence-based" is a term used by the Administration for Community Living to describe interventions, practices, and programs that are consistent with research that uses rigorous research methods to identify the impact and outcome of interventions. "Evidence-based" is also used by the National Center on Elder Abuse to describe APS programs that are based on high quality scientific evidence of effective interventions.

"Evidence-informed" is a term increasingly used in APS and other fields to indicate that a program or practice was designed with full knowledge and application of lessons from research that is available, even if it does not provide strong evidence of effective practices. Some research findings may suggest promising practices that deserve further study to gather evidence on effectiveness, and while that study continues, the practices may be appropriate to incorporate into APS programs as a strategy for improvement.

Resources on Evidence-based and Evidence-informed practice

The following websites provide some definitions of evidence-based practice and describe the process of evidence-based practice.

- The Friends National Center for Community-Based Child Abuse Prevention (CBCAP) provides resources on evidence-based practice in CBCAP for protective services staff, including a discussion of the difference between evidence-based and evidence-informed practice. They offer training modules including EB (Evidence-Based) 101.
- University of Michigan's Evidence-Based Practice for Social Work provides a 5-step process for engaging in evidence-based practice. The five steps are: (1) ask the question; (2) acquire the evidence; (3) appraise the evidence to determine whether it is applicable to your questions; (4) apply the evidence to your practice situation, working collaboratively with your clients; and (5) assess the outcome. The list of study design types links to examples of the different types of studies (e.g., systematic review, randomized controlled clinical trials, case control studies).
- The Laura and John Arnold Foundation's "What Works in Social Policy" provides information on programs (not APS) with credible evidence derived from well-designed and conducted randomized control trials. The programs are organized by policy area.

See also: What is meant by "Evidence-Based Practices" (EBP) in Adult Protective Services?
How can I use Evidence-Informed Practice(s) in my work?

For definitions of other research-related terms that APS staff may encounter in using research, see Glossary of Research Terms.

How can I use Evidence-Informed Practices in my work?

Using "evidence-based" and "evidence-informed" practices involve applying knowledge from research studies. Before doing that, one needs to find and/or do research, and then use research results to improve practice.

Doing Research

For a brief guide to understanding the research process and tips for doing research in APS, see:

Doing Research.

Finding research

For tips on locating evidence of effective and promising APS interventions and practices, see:

Where can I find information on effective programs and interventions?

Using research

For tips on interpreting and applying findings from research, be it existing evidence of effective and promising APS interventions and practices, or the results of one's own APS research project, see:

Using Research.

Doing Research

Whether research is initiated by those who primarily deliver services or by those who primarily do research, doing research involves certain fundamental steps that tend to be universal across many of the physical and human sciences. The steps are usually taken one after the other, each providing a necessary foundation for the next. The picture at right illustrates these basic steps:

(1) Define the research question
(2) Plan the research
(3) Carry out the research
(4) Share findings and take action

1
• Identify a broad area of interest;
• Formulate a question.

2
• Decide which methodology will best answer your question.

3
• Collect and analyze data;
• Evaluate findings.

4
• Share the results;
• Formulate strategies based on results.

(1) Define the Research Question

The first step in a research project involves defining the issue or problem that the research is intended to inform. An essential part of this is to define the specific question (or in some cases, a few questions) that the research will seek to answer.

Identify the issue

In order to be prepared to proceed with a research plan, we as APS staff and researchers have to clearly understand the policy or practice issue driving our research, the reasons that we need information at this time, and the decisions or actions that will be informed by the research. In addition, we need a clear idea of what questions can be answered by doing a research project, given the time and resources available. Finally, we need to evaluate how important getting those answers is, in light of other information needs or issues that also need attention.

Clarify the question

The process of defining the "research question" can take some time, and often a lot of consultation with those who will use the information to be generated by the research. The most important research users will be those APS staff who are making decisions that need to be informed by the research. We will also want to consult with others who have done similar research. Some examples of how an APS practice issue can be developed into a workable research question are provided at Developing a Research Question and Methodology -- Examples.

Not all research questions should be pursued. Research is one strategy to address a problem; it is rarely the only strategy available. Often, the process of developing the research question(s) most relevant to address an issue reveals other actions that could be taken instead of, before, or alongside research activity. Upon close evaluation, even an important and useful research question may be found to be not as critical to decision making as other actions, or not timely, or not feasible to answer at the current time with resources and timeframes available. This may not be discovered until after having begun planning the research.

(2) Plan the Research

Once an important, clear research question has been identified, we have to decide on an approach that will work reasonably well to answer the question. Essential to this decision is determining the types of information (data) that are needed to answer the research question, the methods needed to collect and analyze that information, and the plan for carrying out the data collection and analysis. Consultation with stakeholders, including APS staff and those with expertise in research, is needed at this stage.

Select the methodology

There are many factors to consider when we select a research methodology. One is our expectations for quality and comprehensiveness of information, the types of answers we want to be able to attain, and the types of decisions we want to be able to make. Certain types of data and methodologies can answer certain questions, but not others.

Another consideration is what is already known about the issue and what research methods have been used in the past. Doing new research that will add to and take advantage of what is already known not only strengthens the new research but also strengthens knowledge in the field as a whole.

Some examples of how research methodology might be developed to answer a research question relevant to APS practice are provided at Developing a Research Question and Methodology -- Examples.

Determine scope

To conduct an effective research project, the expertise, other resources and time available to do the research have to be adequate to carry out the planned methodology. Thus, project scope definition and high level resource planning and budgeting are needed at this stage.

Sometimes initial expectations for quality and comprehensiveness of information and the kinds of findings and decisions desired from the research do not balance with resources available. In such situations, either more resources/time must be obtained, or the scope of expectations and the methodologies under consideration have to be scaled back.

(3) Carry out the Research

Collect and analyze data

After deciding on the scope of the research including methodologies to be used, resources, budget and a solid work plan, the research plan can be carried out. Data collection may be a short or a long-term process, depending on complexity of the research, the amount of data to be collected, the number of data collection components, the difficulty of data analysis, and so on.

Once data is collected, it typically has to be organized and prepared for analysis. The length of the data analysis stage in research projects will vary a great deal, and are influenced by the scope of the project, the quantity and complexity of data, research methodologies to be used, and resources to be provided.

Multiple research tools, data sources and staff are typically needed to successfully complete a research project. There is something of an art to organizing and energizing the people and resources that are needed

to keep the project on track and ensure all the objectives of the project are met. In other words, good project management skills and practices are critical!

Evaluate and interpret findings

The overall goal of interpreting the research results is to answer the research questions that were originally posed. Much like an APS investigation, we might identify what several different research results say, compare and contrast those results, consider what can be learned from all of the information as a whole, and draw overall conclusions. That conclusion may identify what we believe is true based on adequate information that supports the conclusion, (2) what could be true but can't be confirmed due to unclear results, and/or (3) what the results cannot allow one to conclude. So in the end, the research may or may not be able to answer the original research questions effectively.

Interpretation of research results generally occurs after data analysis is complete but may begin during the data analysis phase. Often, interpretation of results can lead to further data analysis or data collection. A thorough interpretation of results should occur before action is taken, in order to ensure decisions for action are based on accurate understanding of the results of the research.

(4) Take Action

After the research is completed, it is important to share the results with those who need the information, and then take appropriate actions. The results may uncover client needs or point out practices that should be changed. Sharing the results with others helps build evidence-based knowledge to use for practice.

The audience for sharing research results will differ depending upon the reason(s) for doing the research. APS staff as well as researchers should always consider ways of sharing results that will help reach those who can benefit from the information, including publications and conference presentations.

Sharing results and determining what actions should be taken requires both researchers and APS staff to be proactive. For some suggestions on how to approach this, see: Applying Research to Practice.

NAPSA/NCPEA Research Committee Statement on Stages of APS Research

For additional insights on the research process and guidance on standards for research done in collaboration between APS researchers and APS staff, please review the joint statement by the NAPSA and NCPEA Research Committee, Stages of Research Collaboration with Adult Protective Services (APS) Organizations. The document suggests certain considerations and steps that should be taken during different components of the research process.

For definitions of other research-related terms that APS staff may encounter in planning and using research, see Glossary of Research Terms.

Developing a Research Question and a Methodology - Examples

As in any project, the conceptualization and planning phase of research is most important in the sense that without a sound plan, the research that is subsequently conducted may be misdirected or unproductive. As discussed in Doing Research, APS staff and researchers need to effectively define their research questions to create valid, reliable and useful research. The following discusses some examples of how one can define a research question and some methods to answer the question, where the interest is specific interventions with clients. This type of focus is very common in research done by APS organizations and their research partners.

In defining a research question, it is important to remember that research and practice inform each other. Research that examines the impact of practice interventions on clients and the outcomes of protective services can inform APS staff of effective practices and allow them to make better case planning and triage decisions. At the same time, knowledge of APS practices, interventions, policies, resources and client populations is necessary to inform APS research that can ultimately build our knowledge and understanding about effective APS practices.

In the two examples that follow, the practice issue, research question and methods to answer the question are developed by researchers and APS staff working as a team. The first step in the process is to frame a practice issue or dilemma into a research question that can inform how to intervene in a complex crisis report of maltreatment. The second step is determining what data exists or could be created to answer the research question.

Example 1

One common practice problem in APS is the difficulty in gaining access to clients who refuse entry and claim that all is well and there is no need for help, contradicting the report being investigated.   A research question that would help with this could be: "Which of three approaches is most effective in completing the investigation?"

The research would compare data on: (1) those clients that are visited multiple times to create a level of engagement, (2) those clients who receive a letter from the agency attorney clarifying the purpose of the visit, and (3) those who are not approached again unless collateral contacts indicate significant harm is occurring and/or mental status is declining and a court order to gain access is needed. In addition to tracking success in completing the investigation across these three choices, you could also track repeat referrals on cases where access does not happen versus those where it does. Data could also be collected to examine if any of the findings are *significantly different* due to different allegations. For example, is entry refused more often in physical abuse/domestic violence cases?

Example 2

Another example of creating a research question from a practice problem involves the victim's refusal to cooperate with a plan of protection from harm that is criminal because the perpetrator is a family member. The research question is "Which intervention leads to greater safety for the victim?"

The study would compare two groups with contrasting practice responses: (1) a criminal prosecution over the objections of the victim and (2) assessing the perpetrator for mental health, substance abuse or other issues and referring that person to services. Balancing characteristics between the two groups would be important

(e.g., spouses, versus adult children, versus others). Establishing guidelines about which cases to exclude for the study would be critical based on the level of violence in relation to the victim and the APS staff.

See also:	What is meant by "Evidence-Based" (EBP) in Adult Protective Services?
How can I use Evidence-Informed Practices in my work?

For definitions of other research-related terms that APS staff may encounter, see Glossary of Research Terms.

Using Research

Using knowledge generated from research is the ultimate goal of doing research. The context for research -- practice issues, the need for knowledge, the need for decisions and actions -- are both the beginning and the end of the research process. Once research has been completed, both APS staff and APS researchers must be proactive to ensure that research results are used for action. These critical steps are:

1. ensuring an understanding of the research's goals, methods and results
2. identifying what insights the research findings provide for a practice issue or problem
3. identifying actions that should be taken based on what has been learned

Interpreting Research

Interpreting the findings of a particular research study or a body of research studies on a similar topic requires a good understanding of the research goals and context, as well as some general knowledge of how research is done. For an overview of the basic process and considerations in designing and carrying out research, see Doing Research, Developing a Research Question and Methodology -- Examples, and Stages of Research Collaboration with Adult Protective Services (APS) Organizations.

Basic Questions when Reviewing Research

Culling through published research and reports in order to locate information of interest and identify its relevance to practice can sometimes be challenging. This could be due to the difficulty of determining whether a study represents sound research. The following are some basic questions to consider when reviewing a report or article about a research study, perhaps an evaluation study on an APS intervention or practice. These are not the only important questions to consider, but they are a good start:

- • What is the relevance of the evaluation/study to the question and the problem you are studying?
- • Has the program/intervention been operational for long enough prior to doing the evaluation/study?
- • Are the limitations of the study identified and discussed?
- • Is there documentation about procedures used in implementations of the intervention/practice?
- • What quantitative or qualitative evidence is there as a result of the practice?
- • Were the specific outcomes defined prior to evaluation/study 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 you will apply this research to?
- • 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?

What if research results show a negative or inconclusive impact of practice?

We can learn from both what **is** shown to work and **is not** shown to work in APS. A study on an intervention may have negative results or it may have used a weak research design that that won't demonstrate the impact of the intervention.

Negative or inconclusive results can provide information useful for improving APS practice. For example, a study might find that the percentage of validated allegations is significantly lower for staff with larger caseloads than other staff. This difference could indicate that some cases were not properly investigated because investigators had to reduce thoroughness of investigation in order to deal with increased caseload. Perhaps increased caseloads led to investigations taking longer and evidence necessary to validate became more difficult to obtain.

However, if the study found no statistically significant difference in the validation rate between APS staff with large caseloads and those with small caseloads, this could suggest that the larger caseloads are manageable enough to maintain an average validation rate seen among staff with smaller caseloads.

A finding of no difference could also mean that the study could not detect actual differences due to some shortcoming in the sample, the design of the study, or some unforeseen circumstance. Those designing new studies on the same topic should examine previous studies with negative findings to identify any such shortcomings that can be avoided in the new study. These lessons are particularly important for researchers who conduct multiple studies on certain topics over a period of time.

Applying Research to Practice

Practice wisdom and clinical judgment are central to the work of APS staff. The application of research findings is relevant when the findings reflect outcomes in a similar setting, interventions that could be done in that setting, for a similar problem experienced by a similar population. Applying research to practice involves combining research-based information with information about the client and their circumstances. Research findings cannot be applied in a one-size-fits-all approach.

The stage of research in which researchers and APS staff share research results and identify the relevance of findings to their own practice sometimes does not get sufficient attention. We have all probably heard at some point in time criticisms about lack of use of research results. Some complaints we might hear are "No one knows what came out of that research project." "The results weren't shared with us." "There was a meeting, but so-and-so wasn't invited." "We did all that work, and then nothing happened!"

To avoid these outcomes, some organized process of sharing and discussing research results is needed, often on more than one occasion and with different people or groups. Ideas for how to report research results and facilitate decision making in light of results can be found elsewhere.

For definitions of other research-related terms that APS staff may encounter in interpreting research, see Glossary of Research Terms.

Where can I find information on effective APS programs and practices?

Information on effective programs and interventions is often not easily accessible to APS staff. Staff may also not know what to look for, or where to look. Some research does exist on effectiveness of APS programs, as well as on specific interventions and practices that are used in APS. Information on the effectiveness of interventions that can be relevant for APS includes research on programs in areas of social services other than APS.

APS staff can develop knowledge and skills in locating research information relevant to APS programs from the following locations:

- Literature Reviews
- Organization Websites

See also: What is meant by "Evidence Based Practice" (EBP) in Adult Protective Services?

How can I use Evidence-Informed Practices in my work?

Literature Reviews

A literature review identifies and analyzes studies on a particular intervention or a group of interventions designed to achieve certain outcomes. "Systematic reviews" use rigorous methods to ensure all relevant literature is identified and reviewed on the same criteria.

Although the number of literature reviews that address APS interventions is not as extensive as we would like, a number of recently published reviews provide useful information for APS staff. The benefits of the information will vary. These include:

Baker, P. R. A., Francis, D. P., Hairi, N. N., Othman, S., & Choo, W. Y. (2016). Interventions for preventing abuse in the elderly. *Cochrane Library/Cochrane Public Health Group*.

> *A review of strategies useful to prevent or reduce abuse in people 60 years and over. The article contains a good discussion of the problem of scarce research on elder abuse interventions.*

Ernst, J. S., Ramsey-Klawsnik, H., Schillerstrom, J. E., Dayton, C., Mixson, P., & Counihan, M. (2014). Informing evidence-based practice: A review of research analyzing adult protective services data. *Journal of Elder Abuse & Neglect, 26*(5), 458-494. doi:10.1080/08946566.2013.832605.

> *A review of studies involving APS clients, data, or resources to test hypotheses about elder abuse.*

NAPSRC/NAPSA, Lessons Learned from Research and Practice: APS Technical Assistance Reports

> *A review of research literature published in 2015-16.*

Moore, C., & Browne, C. (2017). Emerging innovations, best practices, and evidence-based practices in elder abuse and neglect: A review of recent research in the field. *Journal of Family Violence, 32*, 383-397. doi:10.1007/s10896-016-9812-4

> *A review of "evidence-based", "best", and "emerging" practices in the field of elder abuse and neglect. The article aimed to capture a wide range of information that would be useful to professionals.*

Ayalon, L., Lev, S., Green, O., & Nevo, U. (2016). A systematic review and meta-analysis of interventions designed to prevent or stop elder maltreatment. *Age and Ageing, 45*, 216-227. doi:10.1093/ageing/afv193 https://academic.oup.com/ageing/article/45/2/216/2195310

> *This systematic review of the "entire field of elder maltreatment interventions" resulted in 24 studies published between 2000 and 2014 that met inclusion criteria.*

Yunus, R. M., Hairi, N. N., & Choo, W. Y. (2017) Consequences of elder abuse and neglect. *Trauma, Violence, & Abuse, 0*(0), 1524838017692798. doi:10.1177/1524838017692798 (epub ahead of print) http://journals.sagepub.com/doi/full/10.1177/1524838017692798

> *This systematic review of 19 studies meeting authors' inclusion criteria looked at the health consequences of EAN in terms of mortality, morbidity, and health-care utilization and assessed the strength of evidence of the outcomes.*

Jackson, S. L. (2017). Adult protective services and victim services: A review of the literature to increase understanding between these two fields. *Aggression and Violent Behavior, 34*, 214 - 227. doi:https://doi.org/10.1016/j.avb.2017.01.010 https://www.sciencedirect.com/science/article/pii/S1359178917300216

This article is a helpful examination of the similarities and differences between the field of APS and victim services because of the increasing need to understand each field as victim services expands to include elder abuse.

New studies and literature are being developed on an ongoing basis. Websites from certain agencies and organizations, literature search resources, and research journals can be used to find new information.

Those with access to a university library or their state's library system may want to use specialized library resources to locate peer-reviewed research literature on elder abuse and Adult Protective Services. Those not familiar with how to search peer-reviewed literature should consult a reference librarian or researcher.

A number of peer-reviewed academic journals regularly publish research articles on elder abuse. A good starting point is the Journal of Elder Abuse & Neglect (http://www.tandfonline.com/toc/wean20/current), which publishes five times a year. It focuses on research, policy, and practice issues related to the abuse and neglect of older adults. Those interested can sign up for alerts from the National Library of Medicine on almost any topic of interest.

The NAPSA/NCPEA Research Committee sponsors a journal club and a research listserv. Taking advantage of this free resource can provide a great opportunity to learn about peer-reviewed literature that may be relevant to one's work.

See also: Organization Websites
                 What is meant by "Evidence Based Practice" (EBP) in Adult Protective Services?
                 How can I use Evidence-Informed Practices in my work?

Organization Websites

Various public agencies and other organizations provide reports and other information on effective practices and programs that are useful to APS professionals. Several are listed below.

Administration for Community Living Elder Justice Programs

This agency provides a wide variety of resources and support to reduce elder abuse and neglect. [Links](#) to projects include information on Elder Abuse Prevention Intervention Demonstrations and Elder Justice Innovation Grants. The [Elder Justice Innovation](#) grants include projects that, when complete, will provide information on APS practice and/or client outcomes.

US Department of Justice Elder Justice Initiative

The [Elder Justice Initiative](#) offers information for older adults, family members, professionals, and researchers on many aspects of identifying and responding to elder abuse, including information for law enforcement and prosecutors. The [page for researchers](#) provides a searchable research database.

US Centers for Disease Control

The CDC's [Violence Prevention](#) efforts recognize the deleterious effects of violence across the life span. The CDC notes the interconnections and shared risk factors among the types and forms of family violence and that different forms of violence, including elder abuse, share common consequences such as mental, physical, and social problems that may contribute to chronic health conditions. The resources on elder abuse include definitions, data sources, risk and protective factors, consequences, and prevention strategies.

National Institute on Aging of the National Institutes of Health

[NIH Workshop: Multiple Approaches to Understanding and Preventing Elder Abuse](#): Report on a one day workshop that focused on lessons learned for elder abuse research and practice from examining contexts of family violence, including elder abuse, child abuse and intimate partner violence.

National Center on Elder Abuse

This federally funded resource, which is operated by the [University of Southern California Center for Elder Mistreatment](#), provides many [resources](#) related to elder abuse and neglect, including information on challenges in doing research in elder abuse and summaries of [research findings](#) related to risk factors and other topics.

See also: [Literature Reviews](#)
[What is meant by "Evidence Based Practice" (EBP) in Adult Protective Services?](#)
[How can I use Evidence-Informed Practices in my work?](#)

What is being done to build the "evidence base" in APS?

Participating in research

Research can inform and improve practice, and vice versa. The joint NAPSA-NCPEA Research Committee has developed a guidance statement intended to encourage APS researchers and APS staff to create research to support APS practice: [Guiding Principles for Research in Adult Protective Services](#)

One of the most powerful strategies in producing research useful to APS practice is direct collaboration between researchers and APS staff in conducting practice-relevant research. The NAPSA/NCPEA Research Committee has defined some specific guidelines, steps and considerations recommended when APS researchers and APS staff work together on research. This information is found in the joint statement by NAPSA and NCPEA called [Stages of Research Collaboration with APS Organizations](#).

Researchers can contribute to a knowledge base that will increase understanding of what practices are effective in research. APS staff who participate in research have an opportunity to strengthen programs in real time rather than wait for findings from other studies and to actively contribute to the evidence base. By being involved directly in research, APS staff bring to research their experience and knowledge of the complex situations that APS addresses every day. Every APS staff member can have a role in contributing to the knowledge base in APS.

Examples of Research/Practice Collaboration

We provide examples below of two articles that describe collaborations between APS staff and researchers.

Burnes, D., Connolly, M.-T., Hamilton, R., & Lachs, M. S. (2018). The feasibility of goal attainment scaling to measure case resolution in elder abuse and neglect adult protective services intervention. *Journal of Elder Abuse & Neglect, 30*(3), 209-222. doi:10.1080/08946566.2018.1454864

Goal attainment scaling (GAS) is a way of tracking individualized, client-specific and client-defined case outcomes that can be summarized and compared across cases using standardized summary scores. This article describes the pilot testing of GAS in APS in Maine. The authors' rationale for using GAS in APS is that it is a measurement strategy that can deal with the variety of clients and the assorted and varying nature of the interventions used to resolve APS cases. The article provides an example of APS staff/researcher collaboration where APS staff provided input into developing a menu of APS-specific "goal types" that included social support, service access, managing health and functioning, enhancing independence, and protective measures. Workers also implemented the procedures using a web-based app and provided data on the time needed for goal identification/discussion, goal scale creation, and goal scoring. The article suggests that the implementation is feasible even though more research and testing would be needed to determine the usefulness of the widespread use of GAS in the APS context.

Groh, A., & Linden, R. (2011). Addressing elder abuse: The Waterloo restorative justice approach to elder abuse project. *Journal of Elder Abuse & Neglect, 23*(2), 127-146. doi:10.1080/08946566.2011.558780

This article provides an example of how a restorative justice (RJ) approach to elder abuse was implemented through the Community Care Access Center, a community-based agency in Waterloo, Ontario. It describes an

evaluation of the approach, processes used and project outcomes. The agency worked with community partners including police, elder care services, and healthcare professionals to address elder abuse.

Theoretically, the RJ approach is ideally suited to address elder abuse cases because of its emphasis on restitution for the victim and on all sides listening to each other to come up with a viable solution. However, in spite of great efforts in educating the community, there were few referrals to the program and even fewer cases that were carried through to the end of the entire RJ process. The article describes evaluations of the program that were conducted including an examination of the numbers and characteristics of clients and a study that attempted to ascertain program outcomes through interviews with people involved in in the RJ efforts. The evaluation research had limitations because the evaluator had a small number of cases to work with and was only able to talk to one participant per case.

However, the article describes how the agency was able to take this "failed" project and expand the efforts to develop a multidisciplinary response to elder abuse. The RJ model remained available but because the agency worked with its community partners and because the efforts to develop the RJ program involved so much community education and partnership development, it laid the groundwork for a much more comprehensive approach that the community is using today.

The Geriatric Bruising Study

Another interesting example of APS staff-research partnership is the Geriatric Bruising Study, conducted by the University of California–Irvine Program in Geriatrics (UCI), in collaboration with Orange County (California) Adult Protective Services. A case study was written to describe this study and how the findings were used to improve APS intake and field assessment skills, as well as partnerships between APS, law enforcement and medical staff.

To read the case study, see Case Study: The Geriatric Bruising Study.

Case Study: The Geriatric Bruising Study

A Case Study on Research/Practice Collaboration

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

Life Cycle of (Accidental) 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 (up to 6 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 bruises were predominately 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.

Source: Mosqueda L, Burnight K, Liao S: The Lifecycle of Bruises in Older Adults. *Journal of American Geriatrics Society, 2005; 53(8):1339-1343*.

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 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 (outer) and anterior (inner) arm surfaces, and the posterior torso.

Source: Aileen Wiglesworth, PhD, Raciela Austin, RN, Maria Corona, MA, Diana Schneider, MD, Solomon Liao, MD, Lisa Gibbs, MD, and Laura Mosqueda, MD. Journal of the American Geriatrics Society, 2009; 57(7): 1191 – 1196.

The APS Experience as a Partner in the Geriatric Bruising Study

Source: Report from Orange County, California, July 2009

Conducting the 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, California 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 see 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 recognizes 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 through the partnership with 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.
  - In addition, 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 is not a good indicator of the age of the bruise.
- It is critical to question explanations that don't 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 the bruises are significant because bruising on the face, inner and outer surface of the arm, or back are 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.

Glossary of Research Terms

This glossary provides some research terms APS staff are likely to encounter. There can be some variation in how researchers in different disciplines or with different training use these terms. The list is not exhaustive!

What is research?

Research: Investigating a topic using a systematic process of collecting and analyzing information in order to find answers to specific questions and create knowledge. ***Research methods*** are those systematic processes and techniques that are recognizable and accepted as appropriate or effective ways to research a topic.

Basic research and applied research: "Basic" research is a term that is sometimes used to refer to the use of research methods in order to develop a ***basic*** level of knowledge about the world. The term "applied" research refers to the use, i.e. ***application,*** of research methods to solve practical problems. For further explanation of how these terms apply to research in APS, see the discussion in ***Types of Research***.

Evaluation: A type of applied research in which research methods are used to investigate and assess social programs and policies. An evaluation study may employ a range of research methods, as appropriate to its purpose, including ***experimental***, ***quasi-experimental***, and ***non-experimental*** designs (see definitions of these under **Research Methods**, below).

Evidence-based and **evidence-informed:** APS programs that are ***based*** on high quality scientific evidence of effective interventions, or that are ***informed*** by available research on effective and promising practices. For further explanation of how these terms apply to research in APS, see the discussion in ***Evidence-Based vs. Evidence-Informed***.

Research Methods

Experimental: Research, a research design, or a research study that seeks to test the impact of something by taking a group of cases and manipulating exposure to that thing by ***randomly assigning*** some to be exposed and others not. The two groups are measured before and after the exposure in order to look at whether there have been changes that could indicate an impact from the exposure. For example, a study that seeks to measure the impact of an APS intervention or service would randomly assign some clients to receive that intervention and other clients to not receive it -- typically they would receive usual service. A study that employs a purely random assignment process and effectively ***controls*** for any other factors that could influence the outcome between the times that measurements are taken before and after intervention is frequently called a ***Randomized Controlled Trial*** (***RCT***). A "true experiment" *not only* uses random assignment and effective control procedures *but also* randomly selects cases from a broader population.

Quasi-experimental: Research, a research design, or a study that, like experimental design, is focused on studying impacts or outcomes, but not all requirements of experimental design are met. For example, a

common problem in the social sciences, particularly applied studies like intervention and evaluation studies is that assignment of cases to groups that receive or do not receive the intervention cannot be random, for practical or ethical reasons. In this situation the group that does not receive the intervention is called a "*comparison*" group (not a "*control*" group). With these designs, because there is no random assignment, steps are taken to make the group that gets the intervention is as similar as possible. There are many types of quasi-experimental designs with different strengths, weaknesses and value for different situations.

Non-experimental: A term sometimes used to refer to any research, research design, or study that does not manipulate exposures to certain factors or interventions.

Observational study: A study in which the subjects of research are studied by "*observation*" rather than by *experimentation*. That is, there is no manipulation of the study situation or exposures to some factor, such as by giving an intervention to some and not to others. Observational studies look at the occurrences of things and differences between groups. Some of these differences could reflect a possible impact relationship, such as the impact of an intervention on a client outcome, but an observational study does not provide evidence of impact. For example, a statistical analysis of APS client data may study whether those who received a particular service had a different outcome than those who did not receive the service. Some common observational study types include:

- A *cross-sectional study* examines data on a population or representative sample of a population, at one point in time. Differences between groups are studied as they naturally occur.
- A *longitudinal study* examines data collected repeatedly over time, usually *prospectively* (into the future). Differences between groups and time frames are studied to look for changes over time. A *cohort study* is a longitudinal study that follows one particular group of cases over time.
- A *case-control study* looks at groups of cases that are selected for study because the groups are different, typically as regards to an outcome of interest. The study looks for other differences which may explain the difference in outcomes. Typically a case control study is *retrospective* (looking back in time) to see what interventions and risk factors each group was exposed to.

Case study: An in-depth study of one case or several cases. A case could be an APS case or a policy, process, decision, event, or organizational unit. Cases are selected because they fit particular criteria, particularly case characteristics or contexts that need to be understood in depth. Case studies tend to take a holistic view of the case, following its development and progression from beginning to end, from multiple perspectives. The researcher may approach the analysis with some issues in mind, but for the most part, the researcher seeks to discover issues and factors that emerge from the cases, then works to learn as much as possible about them.

Meta-analysis: A research approach or a study which compiles and analyzes the same types of data from several studies. The primary purpose of meta-analysis to increase sample size and the potential for detecting *statistically significant* results. This can help increase the strength of evidence when various studies have sample sizes too small to provide strong statistical significance on their own. In addition, since

the multiple studies may not all look at the same exact set of outcomes, the combined set of results provides a more diverse set of findings on a topic. The studies selected for the meta-analysis may or may not have been selected through a **systematic review**.

Systematic review: A research approach or a study which analyzes other studies that address same or similar topics and research questions, in order to identify conclusions that can be drawn from the group of studies. Systematic reviews use a highly structured set of criteria and procedures to (1) identify studies to be included in the analysis, (2) assess the methods and quality of evidence produced by each study, and then (3) draw conclusions on to what extent there is evidence from the literature as a whole to answer certain questions.

Methods of Data Collection

Survey: A method in which information is gathered about many individuals at a time, generally using a questionnaire that the individuals must complete. Surveys may collect information from an entire population (sometimes called a *census*) or a sample from the population (a *sample survey*). A survey in which participants are *randomly selected* from the population is intended to provide results that are "*generalizable*" to the population at large because the cases selected can be assumed to be *representative* of the population as a whole. Even with a random sample, various sampling and statistical procedures may be necessary to ensure representativeness.

Interview: Gathering data through interaction with individuals or groups of individuals, as opposed to a non-interactive questionnaire, like a self-administered survey. As with surveys, sampling for interviews must consider representativeness. Sampling may be done by any or all of the following approaches:
- randomly selecting from a population or important subgroups
- identifying whomever is available and appropriate to be interviewed (convenience sampling)
- identifying certain individuals or groups that need to be included due to special status, knowledge or insight (strategic sampling)

Focus group: a type of group interview that employs certain processes to facilitate discussion, focus issues, and develop new insights that would not be possible with one-on-one interviews alone.

Observation/observational data collection: Gathering data by observing subjects and situations under study, rather than through communication, such as through surveys or interviews. Observational data collection should not be confused with two other terms which each have different meanings. One is "an *observation*" which in research can refer to an instance of measurement; repeated measurements are successive observations during a study.   The other term is "*Observational study*" (see definition provided earlier).

Secondary data analysis: Examining existing information, such as that which may be retrieved out of databases, other electronic records, documents, or data from previous studies. The term can be used to specifically mean a reassessment of a previous investigation or analysis, either by re-analyzing the same data or by re-interpreting the results.

<u>**Types of Data**</u>

Quantitative data: Data that are in numerical form, such as a numerical count, date, or percentage. For an explanation of some examples of quantitative data encountered in APS, see the discussion in ***Types of Data***.

Qualitative data: Data that are not expressed in numerical form. For an explanation of some common examples of qualitative data encountered in APS, see the discussion of ***Types of Data***.

<u>**Measurement Problems in Research**</u>

Validity: The soundness or accuracy of measurement. In research, various terms are used to describe issues concerning validity. Some particularly important terms/concepts are:

> **"Internal validity"** refers to the soundness and accuracy of measurement. It is most often used to describe studies that look at cause-and-effect relationships, where it refers to how well a study measured the impact of a causal variable on the outcome of interest, in particular how well that impact was distinguished from the influence of other factors that could also have influenced the outcome.

> **"External validity"** refers to the extent to which results of a study can be assumed to apply to people other than the ones in the study, often a client group from which study participants were drawn. A synonym for external validity is "**generalizability**", which refers to whether the results can be generalized to the population from which study participants were sampled.

> "**Threats to validity**" refers to issues in a study that may reduce its overall validity; researchers planning a study do their best to incorporate strategies into their research designs that will reduce these threats, so that in the end there is a good case to conclude that the results of the study are valid.

Reliability: Consistency of measurement. In research, the term "reliability" refers to the extent to which a measurement tool will give the same result in similar circumstances. There are various kinds of reliability. Two of the most important are **test-retest reliability**, which means that a tool provides the same result when it is used to assess a particular subject in successive measurements, and **inter-rater reliability**, which means that the same result is achieved when different individuals administer the same measurement.

Statistical Significance: This term is extremely important in interpreting quantitative results of research. In many studies, including *experimental*, *quasi-experimental*, and *observational* studies, the data analysis focuses on looking for differences between groups of data, in order to study the impact of certain factors on outcomes, the characteristics of people or their environment which may affect outcomes, and/or changes in outcomes over time. In order to examine any of these things, it is necessary to determine through data analysis whether there is a ***statistically significant difference*** between groups of data. Certain statistical tests are conducted in order to determine whether such a difference exists. A quantitative result, like a percentage for example, may appear to be higher for one group than another; however, if the difference is not statistically significant, then there isn't really a difference at all between the groups. One also can say that the

two groups are "significantly different". Best practice in research is to use the word "significant" _**only**_ when referring the statistical significance of quantitative analysis results. Many researchers are also very careful in how they use words such as "difference", "higher", or "lower" in order to be clear about when results are actually significantly different in a statistical sense, and when they are not.

Error: In research, "error" refers to results of measurement that are different from what is really true. It usually refers to the numerical amount of difference between the result of a quantitative measure and the amount that actually is true. **Systematic error** is error which happens consistently across the instances of measurement. If this amount of error is known, it may be possible to adjust the results of measurement by this known error in order to calculate an overall result that is closer to reality. Random error is error which is due to chance and not due to some systematic cause of error. The potential for both kinds of error can be affected by aspects of a study's research design and the context of where the study is being done. Sample sizes and sampling methods are chosen with the goal of reducing the potential for random error.

Bias: In research, an identifiable factor that can cause the result of a measurement to be incorrect. There are various types of bias that may be discussed in relation to a particular study.