In Support of Single Subject Research Design for Evidence-Based Practice & AAC Research

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In the field of Alternative and Augmentative Communication (AAC) and Assistive Technology (AT), there is a pressing need for additional research which is of sufficient rigor and clarity that professionals can draw upon the literature with greater confidence (Edyburn & Gersten, 2007). One hopeful by-product of EBP is that, one day, groups of studies will become the foundation for meta-analysis and ultimately lead to a larger body of research on which to base professional decision-making.

Practitioners who endeavor to engage in Evidence Based Practice (EBP) will recognize that this process consists of a sequence of elements. Schlosser & Raghavendra (2004) have identified these steps: (1) articulating meaningful research questions, (2) consulting the research literature, including identifying appropriate components: (3) analyzing and integrating the data, (4) applying the conclusions to therapy, (5) assessing the results and (6) sharing the findings of the therapy intervention.

SUBJECT PROFILE

As professionals we collect a wealth of information about our clients. When the key elements of the consumer’s profile accompany EBP Research in which that consumer is a participant, there exists the potential that the study can be incorporated with other similar studies later to examine the broader implications.

Use this checklist to assist in the collection of personal and demographic data that may be useful in future meta-analysis.

SEARCHING FOR EVIDENCE

One important aspect of applying quality research to therapy or instruction involves the gathering of existing research literature having implications for the clients at hand and the question you seek to study.

Use this rubric when searching the research literature for evidence on which to base your research question, assumptions, and hypotheses.

RESEARCH QUESTION

One key step in effective research is the development of quality research questions. Skillfully crafted questions can be especially helpful in producing a methodological examination of available resources. This is no less significant for Evidence Based Practice. Schlosser, Koul, & Costello (2007) have provided a structure for shaping excellent research questions.

Use this rubric to help formulate quality research questions in your EBP.

RESEARCH DESIGN

Evidence Based Practice in AAC often involves only a single subject. There are research designs that are recognized as being effective methods when applied properly. The elements of effective Single Subject Research Design (SSRD) involve "repeated measurements of one or more dependent variables and systematically applying & sometimes withdrawing or varying the independent variable." (Miller, 2008)

Employ this rubric to help structure effective design for your intervention and analysis.

In Support of Single Subject Research Design for Evidence-Based Practice & AAC Research is available as a free download at http://www.prentrom.com/research/applications. References are included in the download.

MAINTAINING TREATMENT INTEGRITY

The term "Treatment Integrity" relates to how closely the intervention (independent variable) matches the intent of the research design. In other words, are we conducting the treatment phase of the research the way we think we are? Our research is strengthened when we can site measures (or steps we have taken) that demonstrate that the treatment was conducted as planned. This contributes to confidence in the results of our study.

Schlosser (2002) has discovered that those engaged in Evidence Based Practice (EBP) struggle to achieve Treatment Integrity. He has devised a checklist that can be helpful to researchers as they plan and evaluate their interventions.

Use this checklist in your planning and as you assess the integrity of your intervention. Apply these criteria when examining studies for possible adoption of treatment strategies.