Research Skills and Competences in Theory and Practice

SRC Resource 5

The Language of Science & Research as Skills and Competences in Theory and Practice

This is a list of practical research skills and competences, especially relevant for people who are going on to start doing some basic research:

Theory

- To be able to explain the significance of and differences between reductionism, hermeneutics and phenomenology
- To be able explain the difference between experimental and naturalistic research design
- To understand what is meant by validity and reliability and different ways of reaching validity and reliability in quantitative and qualitative research
- To know about and understand the difference between deductive and inductive ways of gaining new knowledge
- To gain some intermediate level of knowledge about forms of qualitative research – questionnaires, semi-structured interviews, grounded theory, case study, controlled case study, etc
- To gain some intermediate level of knowledge about forms of quantitative research – control groups, test groups, hypothesis, randomised controlled trial (RCT)
- To gain some intermediate level of knowledge in statistics – independent and dependent variable, mean value, median value, standard deviation, level of significance

Practice

- To be able to search and find desired information in relevant databases
- To be able to read and basically understand scientific articles
- To be acquainted with ethical considerations and standards when doing research
- To know about and choose appropriate and validated instruments of measurement, assessment scales and questionnaires relevant to Body Psychotherapy research
- To design a simple research project relevant to Body Psychotherapy
- To be able to make an A-B-A single-subject design

Qualitative Research Skills

These are the strengths that allow someone doing research to produce insight and knowledge from information that doesn't use numbers. These can include:

- An aptitude for listening with intention – being a good listener and listening beyond what a person is saying to figure out where they are coming from and what they are really meaning
- Ability to establish rapport quickly – especially in a one-on-one setting
- Developing intuitiveness – about how people think, what they feel and how things work
- Framing – knowing how to ask the right questions in the right way
- Iterate in the moment – when appropriate, feedback to clients, what they have just said, but possibly in a different way or a different style
- Think and articulate in different ways – the ability to internalise the big picture, as well as the small details, and to think quickly and adapt in real time
- Articulate the findings – summarize key findings and make recommendations that are accurate and user-centred
- The ability to represent the consumer democratically

(Ref: Ludwig: here)

Different Types of Qualitative Research

- The **phenomenological** model – seeks to identify how research subjects (participants) feel about certain events, occurrences or activities. Researchers are interested in their unique – subjective – perspectives and experiences before, during and after an event
- In an **ethnographic** study, researchers immerse themselves within a particular culture to study the patterns, behaviours, rules and communication among the group. They may also take part themselves so as to experience first-hand.
- The **historical model** attempts to predict future results by studying and interpreting historical data. Studies begin with a hypothesis or research question that is needed to be tested. Once this has been established, it can then be decided what sources to use for the research. Researchers try to analyse previous trends and results in order to create current strategies.
- The **narrative** model tracks a few participants from a single point in time through to the end point of the study, relying on in-depth interviews over weeks, months or years in order to collect data about the subjects' feelings and reactions. Researchers monitor, discuss and record how subjects navigate their lives. The results of narrative studies do not necessarily need to be in chronological order, as they may want to "tell the subject's story" by using themes and challenges that may offer opportunities for growth and development.
- The **grounded theory** model uses a systematic review of existing data, generally in large quantities, so as to develop theories about why events transpired in a certain way or what outcomes caused a certain result. Data analysis helps to identify the trends and commonalities that provide insights into questions of "why" and "how".
- The **case study** model follows a single subject and collect in-depth data to draw more general conclusions. Case studies can often be longer than other types of research so as to measure changes or results over time.

(See also Resource 4)

Qualitative Research Methodologies

- **Classic sources:** interviews, focus groups, participant observation, documentary research
- **New media** – visual images, internet research – pros and cons
- **Research design** – formulating research questions – selecting & evaluating documents – participant observation – qualitative interviewing – focus groups
- **Thematic Analysis** – which entails searching a data set to identify, analyse and report repeated patterns**,** describing the data, and involves interpretation in the processes of selecting codes and constructing themes
- **Discourse Analysis** – which entails studying written or spoken language in relation to itse social context, aiming to understand how language is used in real life situations. It focusses on: the purposes and effects of different types of language; cultural rules and conventions in communication; how values, beliefs and assumptions are communicated; and how language use relates to its social, political and historical context
- **Quality Indicators** – are standardized, evidence-based measures of quality that can be used with readily available data to measure and track performance and outcomes. These include: natural environment, researcher as a key instrument, multiple sources of data, participants' meaning, emergent research design, research tools, ethics, writing up, dissemination