Opinion

Occupational therapists are increasingly engaging in research. As this occurs, important and challenging questions are being asked about the most appropriate research approaches to use. Strongly held perspectives of what best constitutes evidence often conflict with influential hierarchies of research. The British Journal of Occupational Therapy has, in recent years, published a variety of papers and letters that have presented and defended effectively the differing perspectives of research approaches. Each of these has presented challenges to occupational therapy research. This opinion piece supports a combinist approach to research. It presents and defends such an approach from a subtle realist perspective.

Subtle Realism and Occupational Therapy: an Alternative Approach to Knowledge Generation and Evaluation

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Introduction

The nature of knowledge and what best constitutes evidence to support practice have been topical features within recent years in the British Journal of Occupational Therapy (Bannigan 2002, Copley 2002, Hyde 2002, 2004, Legg and Walker 2002, MacLean and Jones 2002, Bryant 2004, Eva and Paley 2004). Authors have expressed strong views about the nature of evidence and its potential use and misuse in guiding clinicians’ practice. Such debate is both inevitable and vital within a profession whose client-centred interventions have been recognised as complex (Creek 2003). This opinion piece develops the debate by exploring the potential relevance of a ‘subtle realist’ approach (Kirk Miller 1986, Hammersley 1992) to knowledge generation and evaluation. It is proposed that subtle realism offers a useful epistemology for occupational therapy research.

Paradigms of inquiry

A paradigm of inquiry essentially has three components (Hill Bailey 1997):

- The ontology (the nature of knowledge)
- The epistemology (the researcher's approach to the knowledge)
- The methodology (the chosen research strategy).

Two general research styles differentiate the theoretical basis and the methodological approach to a problem: qualitative research, which focuses on the process, qualities and meanings of events, and quantitative research, which emphasises the analysis of causal relationships between variables and measurement. Each of these research styles finds its roots in positivistic and post-positivistic paradigms. However, during the development of qualitative research, several anti-positivistic paradigms have also emerged (Denzin and Lincoln 2000).

Positivistic and post-positivistic paradigms

Positivism contends that there is an absolute reality, which can be measured, studied and understood. Traditionally, positivism is related to quantitative research. However, early qualitative research also emerged from a positivistic paradigm. Post-positivism states that an absolute reality can never be understood and may only be approximated (Denzin and Lincoln 2000).

Anti-positivistic paradigms

Not all theorists agree with the suppositions of positivistic and post-positivistic thinking. Many qualitative theorists view such structures as fundamentally restrictive and ignorant of alternative perspectives. This has led to the development of, amongst others, constructivist, interpretive and critical theory paradigms.

The fundamental bases of such approaches are that they propose multiple constructed realities, because different people are likely to experience the world in differing ways (Lincoln and Guba 2000). This, in turn, leads to radical scepticism regarding the possibilities for knowledge and a belief that research is only an interpretation of multiple realities (Henwood and Nicholson 1996). Such a belief may appear to support an occupational therapy approach
to intervention because it seems to validate the professional
values of individual worth and the uniqueness of each
moment and activity. However, it is unhelpful in a health
economic era, where resources are limited and monies
are allocated to interventions that can demonstrate their
worth.

**Quantitative or qualitative inquiry?**
Quantitative and qualitative inquiries have been viewed as
incompatible (Lincoln 1990). The paradigmatic differences
are unmistakable and researchers in each camp frequently
miss the work of the other as either too biased or too
superficial in understanding complex phenomena. However,
the presentation of each paradigm as conflicting has been
criticised by researchers engaged in health service research,
who emphasise that the complex attributes of health care
research require a variety of approaches and methodologies
to be employed (Silverman 1993, Murphy et al 1998,
Miller and Crabtree 2000).

**Research in health care**
Health care research has traditionally been viewed as a
positivist, biomedical domain, with little understanding of
the nature of qualitative research. However, health care has
much to benefit from the knowledge generation of
qualitative strategies (Pope and Mays 2000). The choice of
paradigm should, therefore, reflect the question and not the
predetermined beliefs of the researcher. Having agreed that the
research should guide the methodology and not vice versa,
it is also worth acknowledging that mixed methodologies are
frequently necessary in order to address the complex
multiple realities of a research question. However, the
differing methods need not hold equal weight in all studies.
Murphy et al (1998) illustrated how qualitative research
methods may take a series of positions on a continuum from
a junior to a senior research approach, depending on the
nature of the research.

**The combinist perspective**
In order to be able to carry out research within the health
care environment, Miller and Crabtree (2000) highlighted the
importance of:
… seeing with three eyes – the biomedical eye, the inward
searching eye of reflexivity, and a third eye that looks for the
multiple nested contexts that hold and shape the research
questions (p611).

With the above premise, Miller and Crabtree (2000)
proposed a new ‘gold standard’ (p613) of clinical research,
one in which multiple methods of inquiry (both quantitative
and qualitative) were employed. Such a proposal was not the
‘tool’s gold’ offering ‘false riches’ (Hyde 2004, p90), but a
realistic approach to address the complexity of health care
research, including occupational therapy. It was conceptualised
as a double helix of DNA: on one strand the quantitative
methodologies and on the other the qualitative methodologies,
with both strands connected by the same research questions
(Miller and Crabtree 2000).

The combination of methods is a strongly contested
arena and has been described as the separatist vs the
combinist debate (Duffy 1987). However, this debate is
relatively recent because, prior to the rise of positivism in
the 1940s, qualitative and quantitative methods were
already used in a collaborative manner (Hammersley and
Atkinson 1995). Supporters of the combinist perspective
argue that the primary choice of approach, when addressing
a research subject, should be based on purely instrumental
or pragmatic grounds, with the decision being made on
which method would address the question best.

The justification for including qualitative strategies in
health care research is further enhanced by an examination
of health care policy. The Scottish Consumer Council (1994)
recognised the value of qualitative methods when
conducting health care research. Furthermore, the Scottish
Executive Health Department (2000) clearly endorsed the
policy of giving the users of health care services a stronger
voice in service development.

**Idealism or realism?**
Although the combination of both paradigms is supported
by the above theorists on a pragmatic basis, such a position
has also been criticised as being unsustainable because each
perspective holds a differing view of reality. Hill Bailey
(1997) rejected the possibility of combining research
approaches as an ontological impossibility because
quantitative research was based on ‘scientific realism’
while qualitative research was based on ‘scientific idealistic’
assumptions. These positions find their roots in philosophy
and can be summarised as follows:

- **Scientific realism** is ‘the belief that our world has an
  existence independent of our perception of it’ (Williams
  and May 1996, p81)
- **Scientific idealism** is formed from the belief that the
  external world consists of symbols that are constructed in
  the mind (Williams and May 1996, Pope and Mays 2000).

Lincoln and Guba (1985) dismissed scientific realism
as a ‘naïve realism’ (p84), describing this as the belief that there
was a single unequivocal entity which was completely
independent of the researcher or the research process.
Instead, Lincoln and Guba (1985) proposed that truth
was most clearly understood as the best informed and most
sophisticated construction on which there was a consensus.
Within this construction, the researcher and participants
were an integral process. Other qualitative researchers,
known as extreme relativists, reject such a proposal and
hold that all research perspectives are unique and equally
valid. Extreme relativism is generally viewed as untenable in
health care, where research is required to be applied to a
setting and which results in action in order to enhance care
(Pope and Mays 2000).
Subtle realism

A further perspective on the philosophical underpinnings of research, known as ‘subtle realism’, has also been offered (Kirk and Miller 1986, Hammersley 1992). Subtle realists state that all research involves subjective perceptions and observations and concede that different methods will produce different pictures of the participant(s) being studied. Such a stance, however, is not taken to the extent of the extreme relativists (Pope and Mays 2000). Hammersley (1992) and Kirk and Miller (1986) proposed that subjective perceptions and observations did not preclude the existence of independent phenomena and that objects, relationships and experiences could be studied. Therefore, Hammersley’s (1992) subtle realist position is compatible with the perspective of combining the research methodologies.

The subtle realist understands that there is no manner in which the researcher can claim to have absolute certainty regarding the findings of his or her research. Rather:

…the objective should be the search for knowledge about which we can be reasonably confident. Such confidence will be based upon judgements about the credibility and plausibility of knowledge claims (Murphy et al 1998, p69).

This concept has, however, been criticised as having no true ontological basis (Seale 1999). Others (Smith and Heshusius 1986) have argued that subtle realism is a post-positivistic/realist approach, which requires to be defined as such in order to shape the methodological analysis of data coming from a study. Despite such criticisms, the subtle realist approach is increasingly being embraced as a useful research construct in health care (Murphy et al 1998). In their comprehensive review of qualitative research methods, Murphy et al (1998) supported Hammersley’s (1992) perspective of subtle realism as a valuable approach to health care research.

Conclusion

Occupational therapy, as a client-centred and complex intervention, poses significant research challenges. These challenges reach to the ontological and epistemological roots of knowledge. Recent publications have brought these dilemmas to light and various views have been offered as to the best approach to research within the profession.

This opinion piece has argued that it is necessary to use combined research methods in all occupational therapy research and supports the use of the revised gold standard of Miller and Crabtree (2000). Subtle realism has been described and is presented as an important epistemological perspective that is gaining ground within health care research and that offers a useful alternative perspective on the nature of knowledge for research within the profession.

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