



Research Methods in Health Science Education

Theory: Philosophical Worldviews

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Today

- Philosophical worldviews (Paradigms)
 - Creswell, Chapter 1

Theory is important but challenging

Key Points to Understand:

- How paradigms affect the questions you ask, data you collection, results you find.
- Some key paradigms and the differences between them.



Elements of research (p.5)

- Philosophical Worldview
(paradigm)
- Research Approach
(Qual, Quan, Mixed)
- Strategy of Inquiry
(methodology/design)
- Methods
(survey, experiment,
interview, focus
group)

TODAY



Note on terminology

- Creswell: “philosophical worldview”
- May also be called epistemological worldview, philosophical perspective, scientific paradigm.
- Thomas Kuhn (1962): A paradigm is the underlying assumptions and intellectual structure upon which research and development in a field of inquiry is based.

What is a paradigm?

A frame of reference and a puzzle within which to operate.

Impossible to disentangle “results” from the way that questions have been posed and the way researchers have been socialized to interpret data.



Paradigm is the way you see the world



Package of congruent ideas

Denzin & Lincoln (2001): a paradigm is an interpretive framework of beliefs and assumptions about the world.

3 categories of belief about the world:

- Ontology
- Epistemology
- Methodology



Ontology

- What is, what can be, what exists. What is real.
- What exists in society?
- What is worth looking for?



Epistemology

- What does it mean to “know” something? What is knowledge? What can be known?
- What kind of knowledge is valid and reliable?
- What are the limits of knowledge?
- What is the relationship between the knower (researcher) and the known?

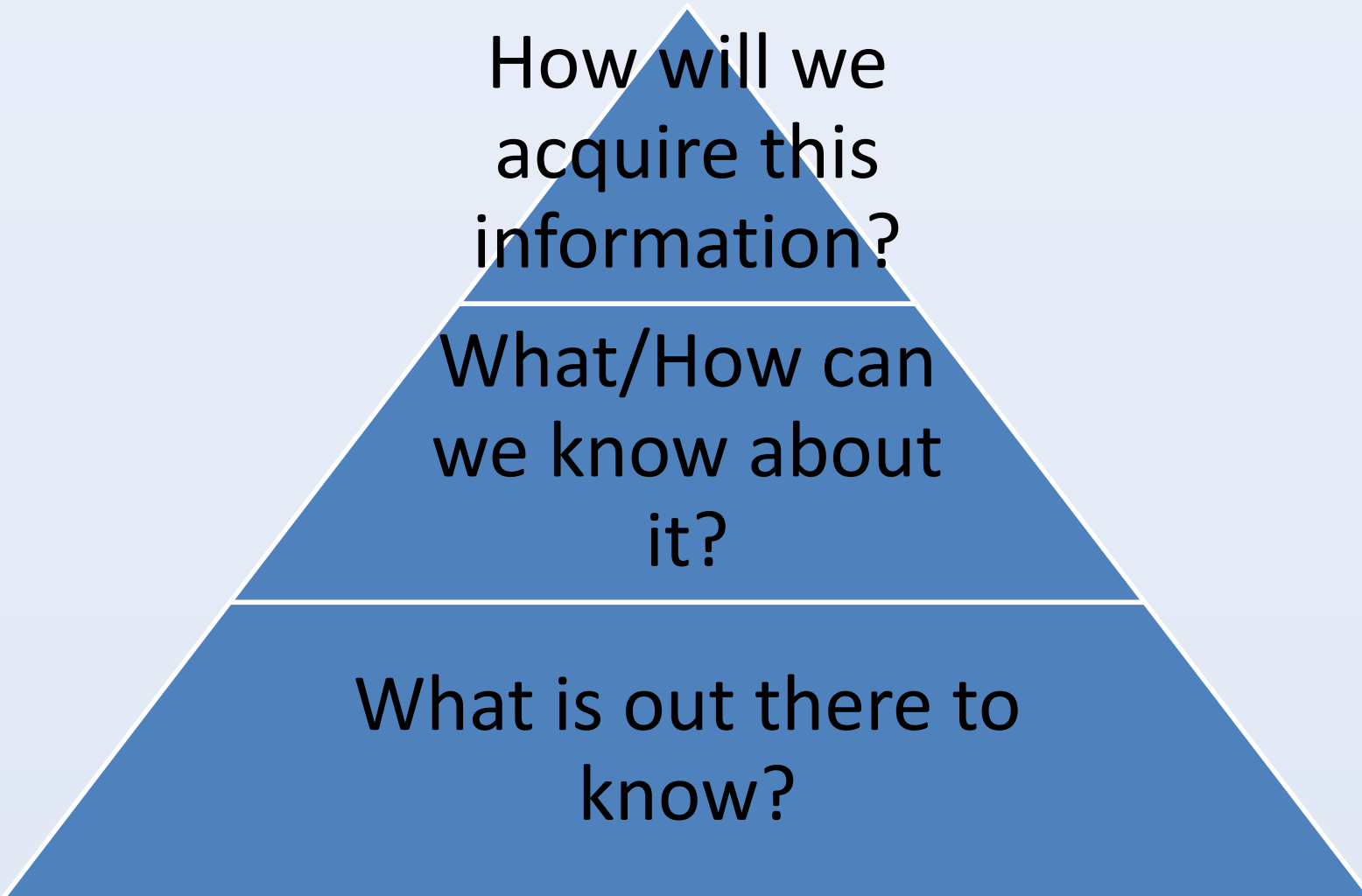


Methodology

- How can we obtain information?
- How do we know the world, and how do we gain this knowledge?
- Related to the tools and techniques of research.



Directional relationship



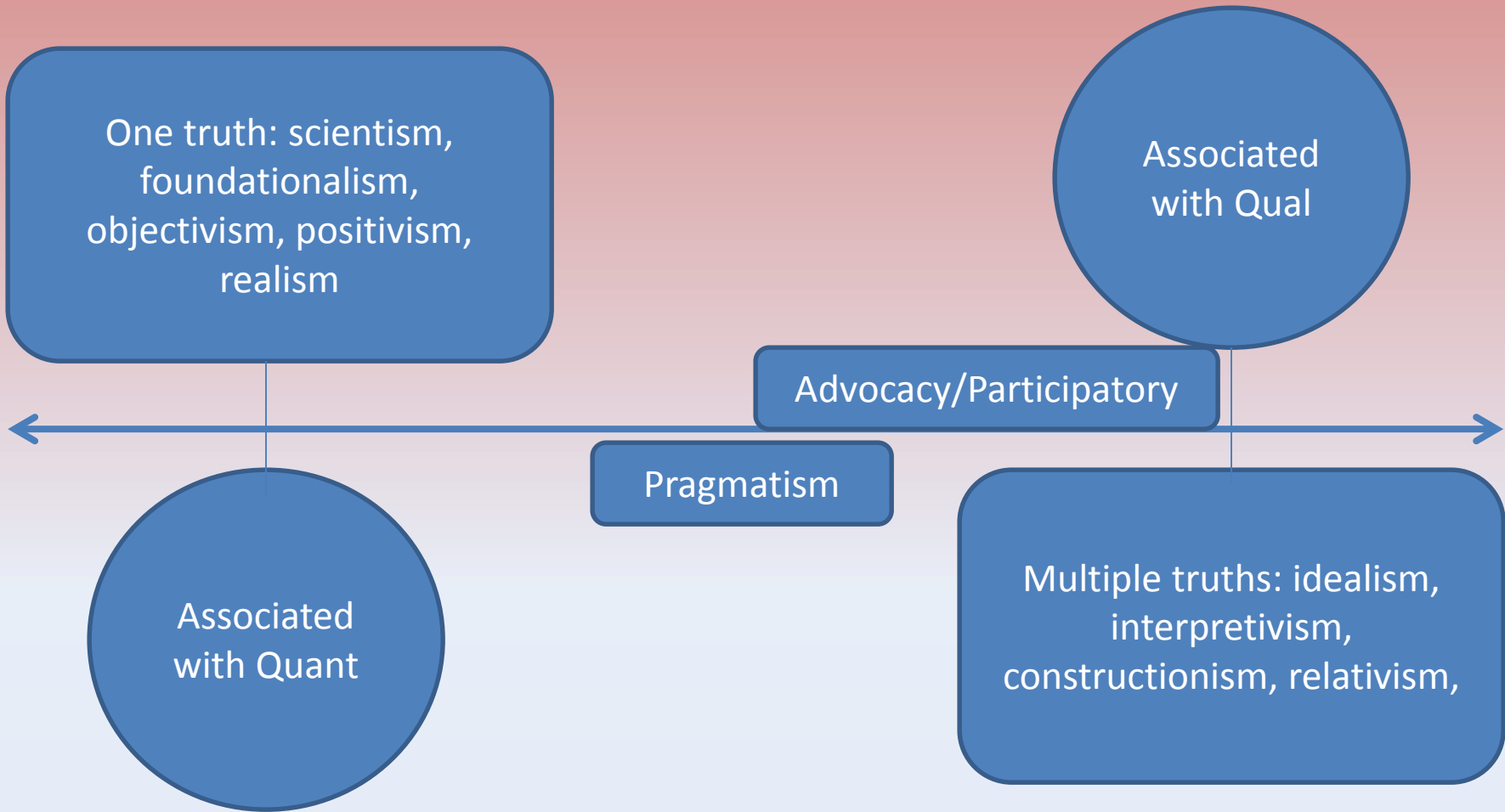
How will we
acquire this
information?

What/How can
we know about
it?

What is out there to
know?

Philosophical Worldviews (Paradigms)

- (Post) Positivism
- Constructivism/Interpretivism
- Pragmatism
- Advocacy/Participatory



Positivism, post-positivism

- Ontology: there is an objective reality which can be accessed.
- Reality is independent of our experience of it, and is accessible through careful thinking, observing, recording of experience.
- Positivistic inquiry aims to explain, predict, or control reality.
- Strives towards measurability, objectivity, reduction of uncertainty. Uses standardized procedures that can be duplicated.

Constructivism

- Ontology: reality is socially constructed. There is no single truth, but rather, multiple truths.
- Reality is shaped by social factors (class, gender, race, ethnicity, culture, age).
- Reality is not rooted in a nature, but is a product of our own making.
- Research is a subjective process, due to the active involvement of the researcher in the construction and conduct of research.
- Explores the ways people interpret and make sense of their experiences.

interpretivism

- Researchers role is to grasp *meanings* of people's actions. Interpret world from point of view of participants.
- People act on the basis of meanings (their own and others')
- Interested in everyday lives in the social world.
- Aims for an empathetic understanding and interpretation of human behaviour.

Pragmatism

Reality does not exist only as natural and physical realities, but also as psychological and social realities, which include subjective experience and thought, language and culture.

Knowledge is *both* constructed and based on the reality of the world in which we live and experience.

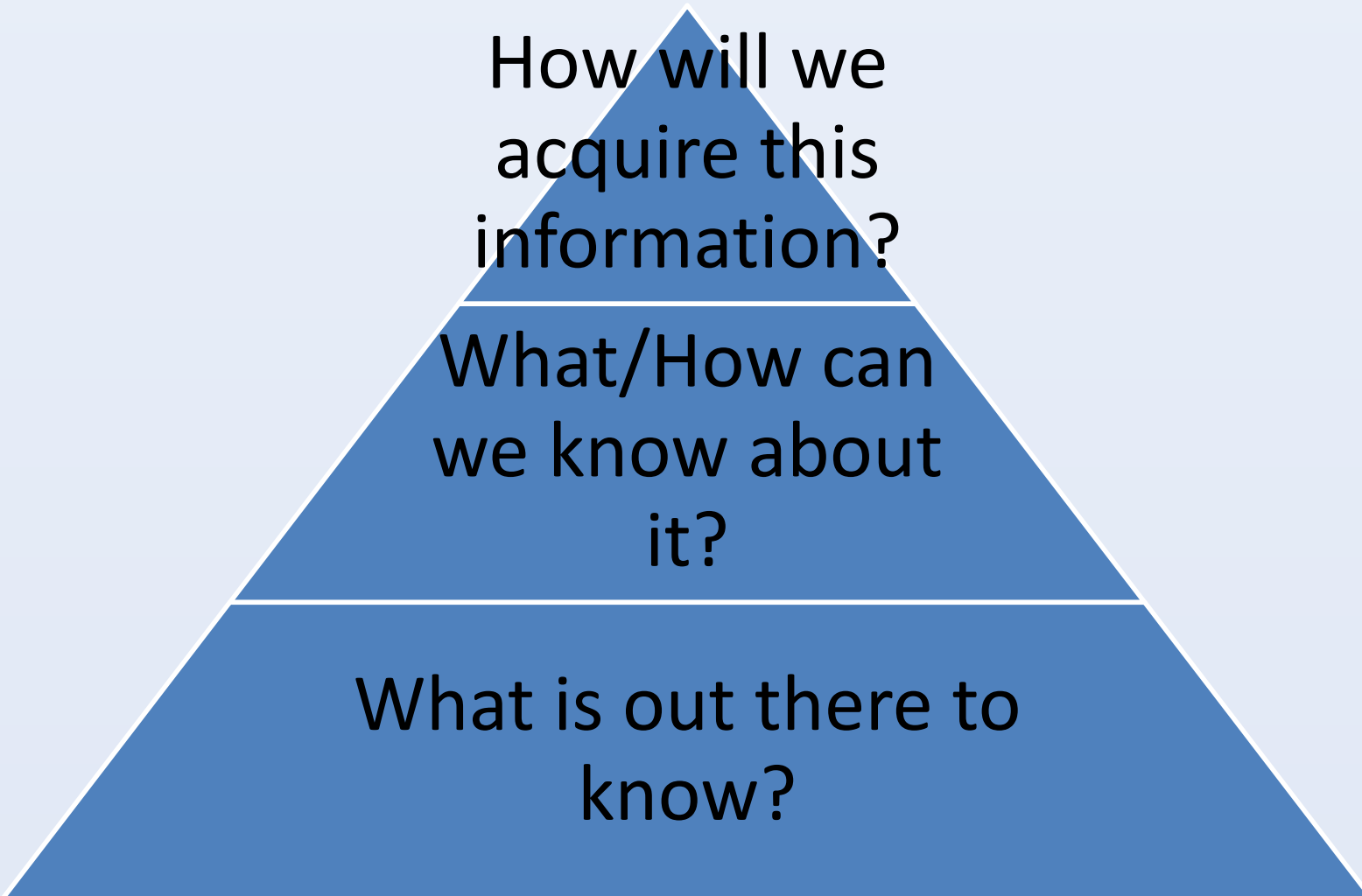
Advocacy/participatory

- Research needs to be entwined with a political agenda that may change the lives of participants, institutions, and the researcher's life.
- Focuses on groups/individuals that may be marginalized or disenfranchised. Often uses feminist, racialized discourses, queer, disability theories and perspectives.
- Address issues of empowerment, inequality, oppression, domination, suppression, alientation.
- Inquiry is collaborative, so as not to further marginalize participants.
- Provides a voice for participants, raising consciousness and advancing an agenda for change to improve their lives.

How paradigm shapes research



Directional relationship



How will we
acquire this
information?

What/How can
we know about
it?

What is out there to
know?

Realism/scientism/objectivism/positivism



Quantitative approaches

By measuring, counting, and comparing empirical, data

There is one objective truth

Idealism/construction/ivism



Qualitative
approaches

By interpreting
understandings

Multiple truths which
depend on perspective

CHOOSING A PARADIGM

1. Examine your beliefs about what you are proposing to study.
 - What is it, really?
 - Why does it exist? How did it come to be?
 - How does it relate to similar phenomena, actors?
 - How can it be changed or altered?
2. What are the implications for what kind of knowledge you will be able to obtain by studying it?
 - Understanding?
 - Change?
 - Awareness?
 - Acknowledgement?
 - Explanation?
3. If this is your purpose, what kind of information do you need to acquire?

Tip:

- Many research methodologies originated within particular philosophical worldviews -> this can guide your choice.
- Quantitative research is generally post-positivist.
- Qualitative methodologies relate to different philosophical worldviews.
 - Sometimes, different scholars use the same methodology in different worldviews: the research looks very different!
 - E.g. Objectivist and Constructivist grounded theory.

E Learning Resource

http://www.erm.ecs.soton.ac.uk/theme2/what_is_your_paradigm.html

If you would like to spend some more time with these complex concepts, try the University of Southampton's "What is Your Paradigm" E-Learning Resource.

Points to Ponder ...

What do **you** think is the nature of reality? How will that affect the choices you make when doing research?

Can two different paradigms ever be combined? For instance, can a positivist and a constructivist work together on a mixed methods research project? What challenges might they face?

References

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