



Advancing to the Doctoral Research Stage More on Paradigms

Dr Caroline Jawad 2022

Please note

- This presentation will introduce you to some aspects of research methods – but it is NOT intended to replace key reading, such as Bryman, Crotty, Creswell, Maxwell, Denscombe, Denzin, Guba and Lincoln and Cohen.
- **SAUNDERS SHOULD NOT BE USED IN MY MODULES.**
- You must read key texts and beyond at doctoral level that cover the method and for this you may have to go beyond your modules reading list.
- Again some slides will not be focused on and you are expected at this doctoral level to be motivated, engaged and understand the areas you need to explore.



Important dates

Nvivo session

27 June 2022

Submission of brief outline of doctoral research topic

4 July 2022

Submission of full PG1

8 August 2022

What Do We Mean by Research Paradigm? Kivunda

- In *The Structure of Scientific Revolutions* American philosopher Thomas Kuhn (1962) first used the word paradigm to mean a philosophical way of thinking.
- Kivunda has conducted a literature review (here abridged) on this question.



In educational research the term paradigm is used to describe a researcher's 'worldview' (Mackenzie & Knipe, 2006). This worldview is the perspective, or thinking, or school of thought, or set of shared beliefs, that informs the meaning or interpretation of research data.



Lather (1986) explains, a research paradigm inherently reflects the researcher's beliefs about the world that s/he lives in and wants to live in. It constitutes the abstract beliefs and principles that shape how a researcher sees the world, and how s/he interprets and acts within that world.



Guba and Lincoln (1994) who are leaders in the field define a paradigm as a basic set of beliefs or worldview that guides research action or an investigation.



Denzin and Lincoln (2000), define paradigms as human constructions, which deal with first principles or ultimates indicating where the researcher is coming from so as to construct meaning embedded in data.



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- A paradigm constitutes the abstract beliefs and principles that shape how a researcher sees the world, and how s/he interprets and acts within that world.
 - The paradigm is the conceptual lens through which the researcher examines the methodological aspects of their research project to determine the research methods that will be used and how the data will be analysed.



Very importantly

- Paradigms are important because they provide beliefs and dictates, which, for scholars in a particular discipline, influence what should be studied, how it should be studied, and how the results of the study should be interpreted

PARADIGM WARS

Paradigm wars

For decades during the late 20th Century, 'paradigm wars' raged amongst supporters arguing fiercely for the superiority of their chosen paradigm.

Over time, this gave way to a 'paradigm dialogue' in which supporters came to accept their differences and realised that every research paradigm is of equal importance.

No research paradigm is superior, but each has a specific purpose in providing a distinct means of producing unique knowledge.



What Are the Essential Elements of a
Research Paradigm?

What Are the Essential Elements of a Research Paradigm?

- According to Lincoln and Guba (1985), a paradigm comprises four elements, namely, epistemology, ontology, methodology and axiology. It is important to have a firm understanding of these elements because they comprise the basic assumptions, beliefs, norms and values that each paradigm holds.
- Therefore, in locating your research proposal in a particular research paradigm, the understanding is that your research will uphold, and be guided by the assumptions, beliefs, norms and values of the chosen paradigm.
- It is therefore important that you demonstrate that you know what each of these elements mean.

A person is sitting on a grassy bank, fishing with a rod and reel. They are positioned under the shade of a large, leafy tree. The riverbank is covered in green grass and some small white flowers. The river water is calm, reflecting the surrounding greenery. In the background, a gravelly or sandy area is visible across the water.

Positivist fisherman

- A positivist fisherman standing on a river bank describes (without getting his/her feet wet) the social properties of a species of fish by observing the general tendency of their group behaviour as they swim around.



Post positive fisherman

- A post-positivist fisherman supplements his/her quantitative observations of the social properties of a species of fish by wearing a wet suit and conducting structured interviews of a random sample of fish to ascertain their reasons for swimming in accordance with the inferred social pattern.



Interpretive fisherman

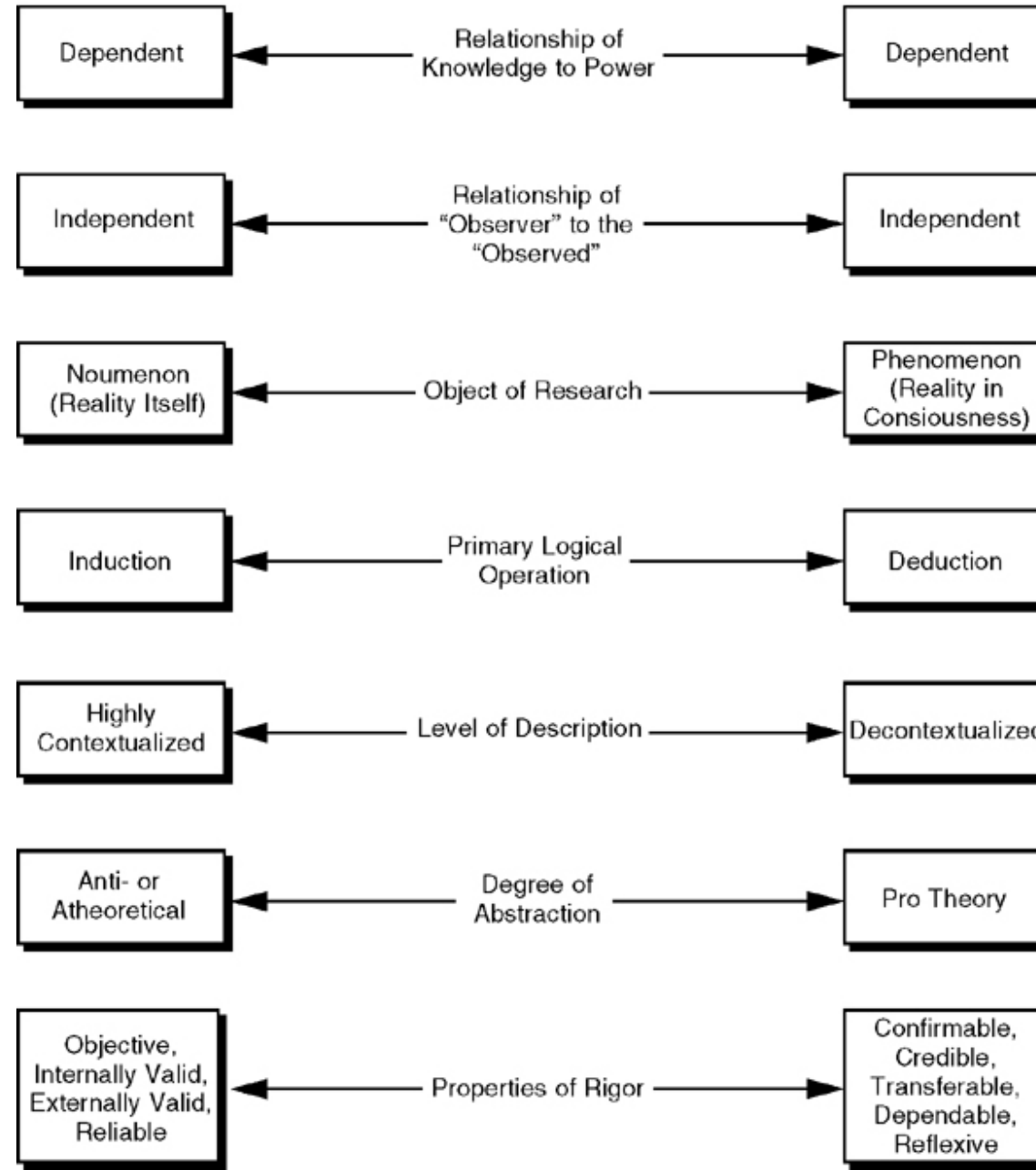
- The interpretive fisherman enters the water, establishes rapport with the fish, and swims with them, striving to understand their experience of being in the water



Critical fisherman

- The critical fisherman enables the fish to perceive the pollution in the water in which they live, to find its source, and to identify its harmful effect on their being in the water.

Paradigm Balance:
Different Values,
Different Approaches



Epistemology of a paradigm

- Epistemology is used to describe how we come to know something; how we know the truth or reality; or as Cooksey and McDonald (2011) put it, what **counts as knowledge within the world**.
- It is concerned with the very bases of knowledge – its nature, and forms and how it can be acquired, and how it can be communicated to other human beings. It focuses on the nature of human knowledge and comprehension that you, as the researcher or knower, can possibly acquire so as to be able to extend, broaden and deepen understanding in your field of research.
- Schwandt (1997) defines it as the study of the nature of knowledge and justification.

You ask questions like:

- Is knowledge something which can be acquired on the one hand, or, is it something which has to be personally experienced?
- What is the nature of knowledge and the relationship between the knower and the would-be known? What is the relationship between me, as the inquirer, and what is known?
- These questions are important because they help the researcher to position themselves in the research context so that they can discover what else is new, given what is known.
- And so to understand the epistemological element of your paradigm, you should ask the very important question of how we know what we know?
- This question is the basis for investigating 'truth'. Whereas it might be debatable as to whether there is such a thing as 'truth' (Davidson, 2000), if we take factual evidence as truth, then epistemology helps you to ask factual questions, such as how do we know the truth? What counts as knowledge? These are particularly important questions because one of the criteria by which higher degree research is judged is its contribution to knowledge.

4 sources of knowledge 1. intuitive 2. authoritative
3. logical and 4. empirical (Slavin, 1984).

1. If you rely on forms of knowledge such as beliefs, faith, and intuition, then the epistemological basis of your research is intuitive knowledge.
 2. If you rely on data gathered from people in the know, books, leaders in organisations, then your epistemology is grounded on authoritative knowledge.
 3. If you put emphasis on reason as the surest path to knowing the truth, then this approach is called rationalist epistemology or logical knowledge.
 4. If you put emphasis on the understanding that knowledge is best derived from sense experiences, and demonstrable, objective facts, then your approach leans towards empirical epistemology.
- Epistemology is important because, it helps you to establish the faith you put in your data. It affects how you will go about uncovering knowledge in the social context that you will investigate

Ontology of a paradigm

- Ontology is a branch of philosophy concerned with the assumptions we make in order to believe that something makes sense or is real, or the very nature or essence of the social phenomenon we are investigating (Scotland, 2012). It is the philosophical study of the nature of existence or reality, of being or becoming, as well as the basic categories of things that exist and their relations. It examines your underlying belief system as the researcher, about the nature of being and existence. It is concerned with the assumptions we make in order to believe that something makes sense or is real, or the very nature or essence of the social phenomenon we are investigating. It helps you to conceptualise the form and nature of reality and what you believe can be known about that reality. Philosophical assumptions about the nature of reality are crucial to understanding how you make meaning of the data you gather. These assumptions, concepts or propositions help to orientate your thinking about the research problem, its significance, and how you might approach it so as to contribute to its solution. Ontology is so essential to a paradigm because it helps to provide an understanding of the things that constitute the world, as it is known (Scott & Usher, 2004). It seeks to determine the real nature, or the foundational concepts which constitute themes that we analyse to make sense of the meaning embedded in research data. It makes you ask questions such as: Is there reality out there in the social world or is it a construction, created by one's own mind? What is the nature of reality? In other words, Is reality of an objective nature, or the result of individual cognition? What is the nature of the situation being studied? Ontology enables you to examine your underlying belief system and philosophical assumptions as the researcher, about the nature of being, existence and reality. Philosophical assumptions about the nature of reality are crucial to understanding how you make meaning of the data you gather. These assumptions, concepts or propositions help to orientate your thinking about the research problem, its significance, and how you might approach it so as to answer your research question, understand the problem investigated and contribute to its solution.

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Methodology

Axiology

- Axiology refers to the ethical issues that need to be considered when planning a research proposal. It considers the philosophical approach to making decisions of value or the right decisions (Finnis, 1980). It involves defining, evaluating and understanding concepts of right and wrong behaviour relating to the research. It considers what value we shall attribute to the different aspects of our research, the participants, the data and the audience to which we shall report the results of our research. Put simply, it addresses the question: What is the nature of ethics or ethical behaviour? In answer to this question, it is important to consider your regard for human values of everyone that will be involved with or participate in your research project. This consideration is facilitated by the following questions. What values will you live by or be guided by as you conduct your research? What ought to be done to respect all participants' rights? What are the moral issues and characteristics that need to be considered? Which cultural, intercultural and moral issues arise and how will I address them? How shall I secure the goodwill of participants? How shall I conduct the research in a socially just, respectful and peaceful manner? How shall I avoid or minimise risk or harm, whether it be physical, psychological, legal, social, economic or other? (ARC, 2015). Answers to these questions are best guided by four criteria of ethical conduct namely, teleology, deontology, morality and fairness (Mill, 1969). Technically, teleology is the theory of morality which postulates that doing what is intrinsically good or desirable, is a moral obligation that should be pursued in every human endeavour. And so, teleology refers to attempts made in research to make sure that the research results in a meaningful outcome that will satisfy as many people as possible. An application of this criterion is facilitated by questions such as, are the methods used in this research pragmatic and do they make common sense? Will the actions undertaken in the research produce more benefits than harm? Am I convinced that the actions that will be taken during the research will be the right ones? Have I considered all possible consequences of this research? Deontology is the understanding that every action that will be undertaken during the research will have its own consequence, intended to benefit participants, the researcher, the scholastic community or the public at large (Scheffler, 1982). It also allows for flexibility to deal with individual participants or observations. The morality criterion refers to the intrinsic moral values that will be upheld during the research. For example, that the researcher will be truthful in their interpretation of the data. Finally, the criterion of fairness draws the researcher's attention to the need to be fair to all research participants and to ensure that their rights are upheld. Implementation of this criterion is guided by questions such as, how fair will my research actions be? Will they treat all research participants in the same way? Will my actions show favouritism and/or discrimination towards any participants? And so in the section on ethical considerations for your higher degree research proposal, you should demonstrate best ethical conduct by showing an understanding of what is right or wrong behaviour as you conduct the research. This consideration is founded on the understanding that all humans have dignity which must be respected, and they have a fundamental human right to make choices which you as a researcher must respect. Implementation of ethical considerations focuses on four principles which you need to uphold when dealing with your participants and data. These principles have the acronym PAPA namely: Privacy, Accuracy, Property, and Accessibility, and are briefly unpacked below, following Sidgwick, (1907) and Slote, (1985).

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- What values will you live by or be guided by as you conduct your research? What ought to be done to respect all participants' rights? What are the moral issues and characteristics that need to be considered? Which cultural, intercultural and moral issues arise and how will I address them? How shall I secure the goodwill of participants? How shall I conduct the research in a socially just, respectful and peaceful manner? How shall I avoid or minimise risk or harm, whether it be physical, psychological, legal, social, economic or other? (ARC, 2015). Answers to these questions are best guided by four criteria of ethical conduct namely, teleology, deontology, morality and fairness (Mill, 1969).
- Privacy, Accuracy, Property, and Accessibility and are focused on in the Ethics form PG2.

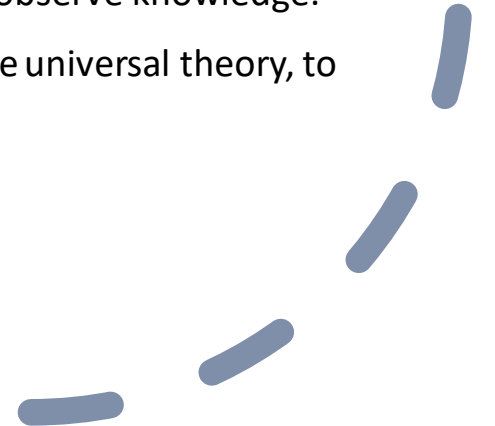
A photograph of a person sitting on a grassy bank, fishing with a rod and reel. The person is seen from behind, wearing a dark shirt and pants. They are positioned under the shade of a large, leafy tree. The riverbank is covered in green grass and small white flowers. The water is calm, reflecting the surrounding greenery. In the background, a gravelly area and more trees are visible.

Positivist fisherman

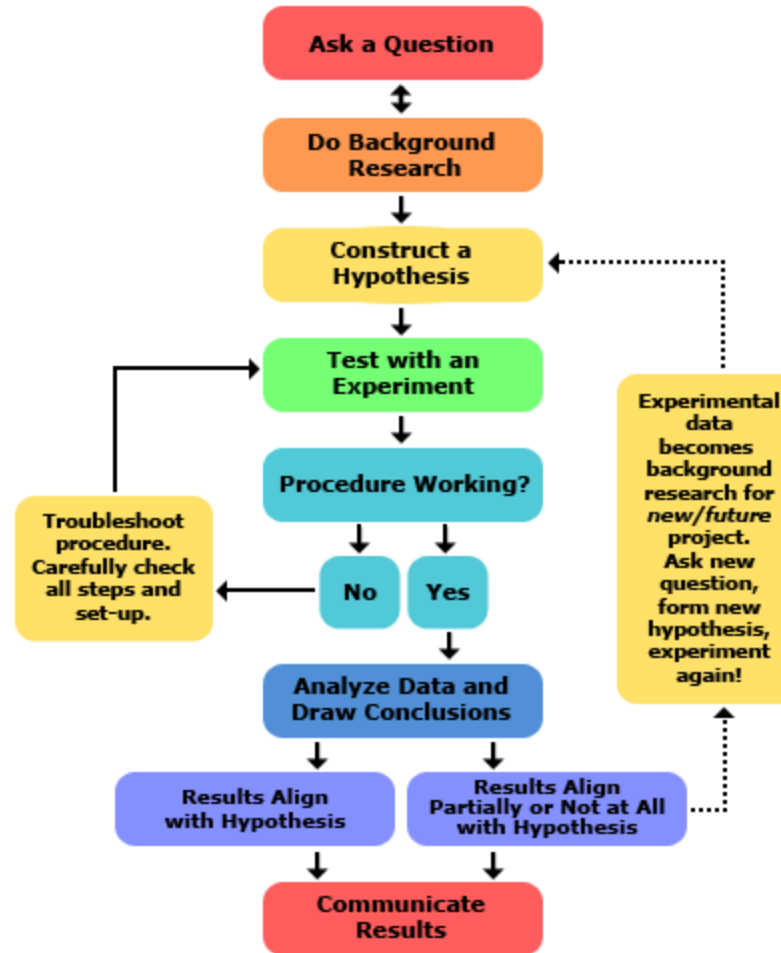
- A positivist fisherman standing on a river bank describes (without getting his/her feet wet) the social properties of a species of fish by observing the general tendency of their group behaviour as they swim around.

Characteristics of Research Located Within The Positivist Paradigm Neurath, 1973; Fadhel, 2002

- A belief that theory is universal and law-like generalisations can be made across contexts
- The assumption that context is not important
- The belief that truth or knowledge is 'out there to be discovered' by research
- The belief that cause and effect are distinguishable and analytically separable
- The belief that results of inquiry can be quantified
- The belief that theory can be used to predict and to control outcomes
- The belief that research should follow the Scientific Method of investigation
- Rests on formulation and testing of hypotheses
- Employs empirical or analytical approaches
- Pursues an objective search for facts or Believes in ability to observe knowledge.
- The researcher's ultimate aim is to establish a comprehensive universal theory, to account for human and social behaviour
- Application of the scientific method (Illustrated next)



Scientific Method



Research Methodologies Suited to the Positivist Paradigm

- Experimental methodology
- Quasi-experimental methodology
- Correlational methodology
- Causal comparative methodology
- Randomized control trials methodology
- Survey research methodology

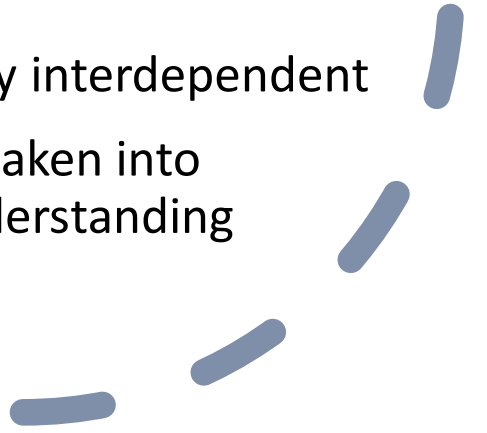


Interpretive fisherman

- The interpretive fisherman enters the water, establishes rapport with the fish, and swims with them, striving to understand their experience of being in the water

Characteristics of Research Located within the Interpretivist Paradigm

Lincoln and Guba 1985;
Morgan 2007

- The admission that the social world can be understood from the standpoint of an individual
 - The belief that realities are multiple and socially constructed
 - The acceptance that there is inevitable interaction between the researcher and his or her research participants
 - The acceptance that context is vital for knowledge and knowing.
 - The belief that knowledge is created by the findings, can be value laden and the values need to be made explicit
 - The need to understand the individual rather than universal laws
 - The belief that causes and effects are mutually interdependent
 - The belief that contextual factors need to be taken into consideration in any systematic pursuit of understanding
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Research Methodologies Suited to the Interpretivist Paradigm

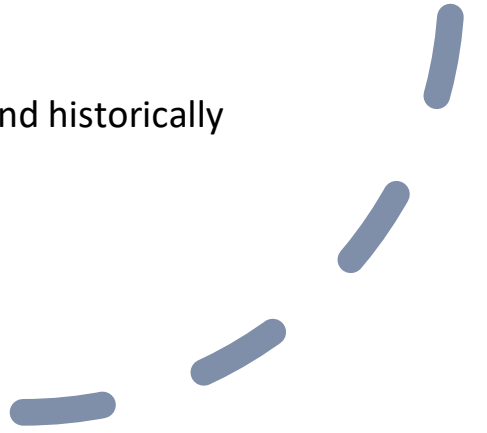
- Naturalist methodology
- Narrative inquiry methodology
- Case study methodology
- Grounded theory methodology
- Phenomenology methodology
- Hermeneutics methodology
- Ethnography methodology
- Phenomenography methodology
- Action research methodology
- Heuristic inquiry methodology



Critical fisherman

- The critical fisherman enables the fish to perceive the pollution in the water in which they live, to find its source, and to identify its harmful effect on their being in the water.

Characteristics of Research Located within the Critical Paradigm Following Guba and Lincoln, 1988; Martens, 2015

- The concern with power relationships set up within social structures
 - The conscious recognition of the consequences of privileging versions of reality
 - The respect for cultural norms
 - An examination of conditions and individuals in a situation, based on social positioning
 - The treatment of research as an act of construction rather than discovery
 - A central focus of the research effort on uncovering agency, which is hidden by social practices, leading to liberation and emancipation
 - And endeavour to expose conjunctions of politics, morality, and ethics
 - The deliberate efforts of the researcher to promote human rights, and increase social justice, and reciprocity
 - The deliberate efforts of the researcher to address issues of power, oppression and trust among research participants
 - A high reliance on praxis
 - The use of ethnomethodology, situating knowledge socially and historically
 - An application of action research
 - The utilisation of participatory research.
- 

Research Methodologies Suited for Use in the Critical Paradigm (Inequality in the status quo)

- Neo-Marxist methodology
- Feminist theories o Cultural studies
- Critical race theory
- Freirean studies
- Participatory emancipation
- Postcolonial/indigenous methodology
- Queer theory
- Disability theories
- Action research

Pragmatic fisherman



Characteristics of Research Located within the Pragmatic Paradigm

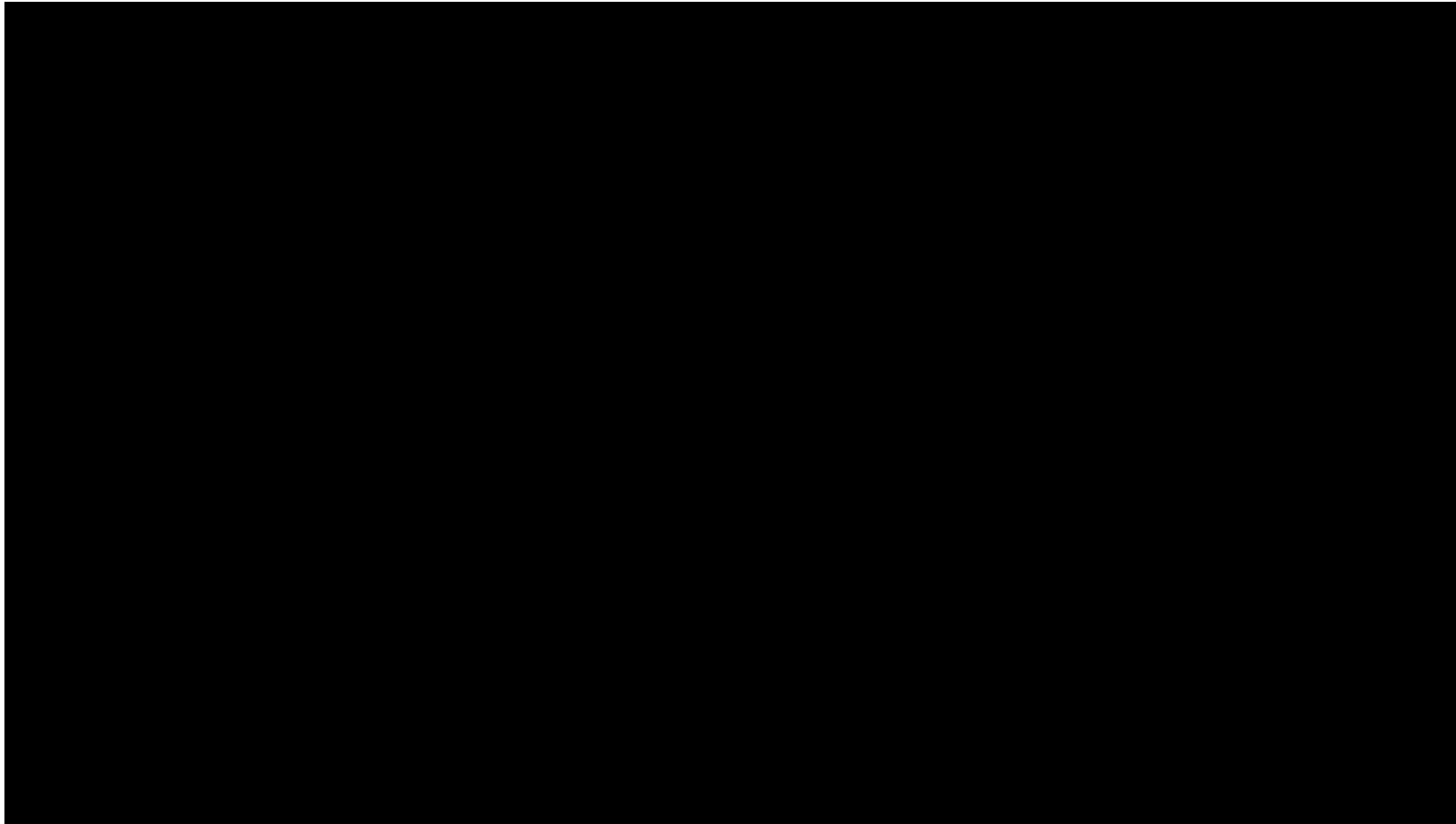
- In a sense, this paradigm was developed in an effort to put an end to the two diametrically opposed positions of the Positivist (and postpositivist) on one side and the Interpretivists on the other, and thus end what were referred to as 'Paradigm Wars' (Gage, 1989)
- A rejection of the positivist notion that social science inquiry can uncover the 'truth' about the real world
- An emphasis of 'workability' in research
- The use of 'what works' so as to allow the researcher to address the questions being investigated without worrying as to whether the questions are wholly quantitative or qualitative in nature
- Adoption of a worldview that allows for a research design and methodologies that are best suited to the purpose of the study
- Utilising lines of action that are best suited to studying the phenomenon being investigated.
- A rejection of the need to locate your study either in a Positivist (postpositivist) paradigm or an Interpretivist (constructivist) paradigm
- Seeking to utilise the best approaches to gaining knowledge using every methodology that helps that knowledge discovery
- Choice of research methods depending on the purpose of the research
- A search for useful points of connection within the research project that facilitate understanding of the situation

Research Methodologies Suited for Use in the Pragmatic Paradigm

- Naturalist methodology
- Narrative inquiry
- Case study
- Phenomenology
- Ethnography
- Action Research
- Experimental methodology
- Quasi-experimental methodology
- Causal comparative methodology



Video: Young adults with disabilities and their sense of agency via social media



Researcher
asked
participants to
describe the
impact of
people &
institutions on
their lives

- Consider the ontological and epistemological frame the research is positioned within and respond to the following questions.
- What does the researcher think about reality (ontological position)?
- Make a note of what the researcher says about how she intends to investigate her topic.
- What does this suggest about the researcher's epistemological position?

Audio 1

- Extract of an interview with Gill Adams, an academic at Sheffield Hallam University. In the interview she is asked to reflect on her doctoral research studying Maths' teachers and describes the approach she took.



Audio ontology.mp3

Tasks

- Make a note of what Gill says in relation to what she wanted to find out.
- What does this suggest about the ontological position behind her research?
- Do Video 1 and Audio 1 make your personal theoretical views about the relationship between theory and practice clearer?

Discussion

- These researchers explain how they have developed methods to collect data as ways of coming to know the world (their epistemological view). Both hold views that the world is social and that the human experience is personal, likely to be unique and related to their complex histories and experiences.
- In Video 1, Alice wanted to come to know how young people with disabilities used social media and needed to find ways for them to express their experiences, taking into account their disabilities.
- In Audio 1, Gill wanted to find ways to support her participants reflect on their experiences to date and explore how it was informing their present.
- Both worked with their participants to create spaces to reveal new insights, new both to the participants and to the researchers. These are subjective realisations, which mean that what the participants said or reported will have depended on what they were asked, how they were asked and how safe they felt when they were asked. They might also have been influenced by what was said or done prior to the data collection. If these factors had been different, they might have offered different insights. This view of the world is in contrast to objective views of the world as stable and measurable in repeatable ways.

Professional contexts

Why is it essential for management research to be seen as (socially) valuable and what might that mean in the complex world in which we live?

What does research mean in your career of a researcher when compared with the work and career of organisational employees?

Why would it be important to distinguish professional from other environments?

How are different forms of inquiry viewed and supported by different institutions?

What is relevant when it comes to evaluation of your research?

Epistemological contexts

What are some of the major paradigms, orientations, and systems that guide your research?

What kinds of knowledge do different forms of research generate?

Why is it important to be aware of the interdisciplinary nature of research?

What counts as knowledge?

How trustworthy is such knowledge?

Theoretical and methodological contexts

What are the general purposes and processes that guide your research?

What are some differences between paradigms, theories, concepts, and constructs?

In your field, what constitutes a theory and how do researchers support such things?

What is the difference between methods and methodology?

Where does design fall in this set of distinctions?

Political and ethical contexts

What problems of right and wrong arise when one's quest for knowledge involves human beings as research participants?

What are some of the responsibilities of you as a researcher and how does that differ from those of managers in an organisation?

What are some of the differences between the political and ethical stances taken in your field?

What procedures are involved in defining a strong research question?