DEVELOPMENT RESEARCH METHODS

Week 2, Lesson 1: Paradigms of Development Research

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What we will cover in today's lecture

1. What are research paradigms/philosophical worldviews?
2. Are the different research paradigms in conflict with each other?
3. Do research paradigm inform research methods, and if so, in what way?
4. Way forward from research paradigms

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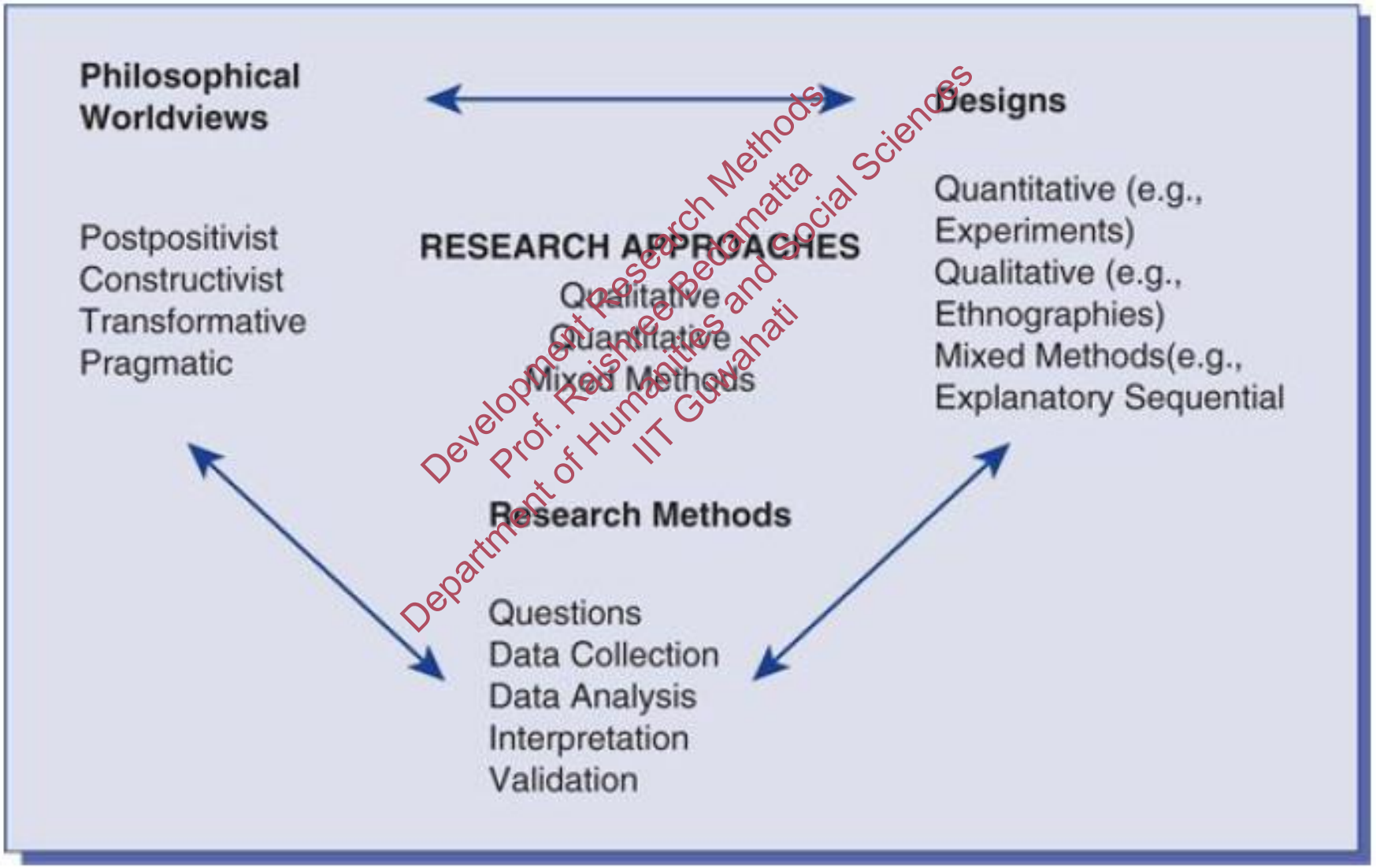
Philosophical Worldviews

- *World view* means “a basic set of beliefs that guide action”.
- Many terminologies: *paradigms, epistemologies and ontologies* or *broadly conceived research methodologies*.
- Worldviews as a general philosophical orientation about the world and the nature of research that a researcher brings to a study.
- Worldviews arise based on discipline orientations, students’ advisors/mentors inclinations, and past research experiences.
- The types of beliefs held by individual researchers based on these factors will often lead to embracing a qualitative, quantitative, or mixed methods approach in their research.
- Four philosophical world views that are widely discussed in the literature:

  - postpositivism,
  - constructivism,
  - transformative, and
  - pragmatism.

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A Framework for Research—The Interconnection of Worldviews, Design, and Research Methods



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The Postpositivist Worldview

- The postpositivist assumptions have represented the traditional form of research, and these assumptions hold true more for quantitative research than qualitative research.
- Sometimes called the scientific method, or *doing science research*. Also called positivist/postpositivist research, empirical science, and postpositivism.
- Postpositivists hold a deterministic philosophy in which causes (probably) determine effects or outcomes.
- It is reductionistic in its approach.
- Based on careful observation and measurement of the objective reality that exists "out there" in the world.
- The accepted approach to research by postpositivists begins with a theory, collects data that either supports or refutes the theory, and then makes necessary revisions and conducts additional tests.

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Positivist/postpositivist assumptions

1. Knowledge is conjectural
2. Research is the process of making claims
3. Data, evidence and rational considerations shape knowledge
4. Research seeks to develop relevant, true statements
5. Being objective is an essential aspect of competent inquiry

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The Constructivist Worldview

- Often combined with interpretivisim. Typically seen as an approach to qualitative research.
- Individuals develop subjective meanings of their experiences—meanings directed toward certain objects or things.
- The goal of the research is to rely as much as possible on the participants' views of the situation being studied.
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- Focus on the specific contexts in which people live and work in order to understand the historical and cultural settings of the participants.
- The researcher's intent is to make sense of (or interpret) the meanings others have about the world.
- Rather than starting with a theory (as in postpositivism), inquirers generate or inductively develop a theory or pattern of meaning.

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Constructivist's assumptions

1. Human beings construct meanings as they engage with the world
2. Humans engage with their world and make sense of it based on their historical and social perspectives
3. The basic generation of meaning is always social, arising in and out of interaction with a human community

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The Transformative Worldview (also advocacy and participatory)

- Arose during the 1980s and 1990s against the idea that the postpositivist assumptions imposed structural laws and theories that did not fit marginalized individuals in our society.
- It holds that research inquiry needs to be intertwined with politics and a political change agenda to confront social oppression at whatever levels it occurs.
- Contains an action agenda for reform that may change lives of the participants, the institutions in which individuals work or live, and the researcher's life.
- Focuses on the needs of groups and individuals in our society that may be marginalized or disenfranchised.
- Theoretical perspectives may be integrated with the philosophical assumptions that construct a picture of the issues being examined.
- The research in the transformative worldview links political and social action to these inequities.

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So what does transformative paradigm focus on?

1. In studying these diverse groups, the research focuses on inequities based on gender, race, ethnicity, disability, sexual orientation, and socioeconomic class that result in asymmetric power relationships.

2. The research in the transformative worldview links political and social action to these inequities.

3. Transformative research uses a program theory of beliefs about how a program works and why the problems of oppression, domination, and power relationships exist.

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The Pragmatic Worldview

- Pragmatism as a worldview arises out of actions, situations, and consequences rather than antecedent conditions
- Instead of focusing on methods, researchers emphasize the research problem and use all approaches available to understand the problem.
- Its importance lies as it focuses attention on the research problem in social science research and then using pluralistic approaches to derive knowledge about the problem.
- Pragmatism provides a philosophical basis for research: Pragmatism is not committed to any one system of philosophy and reality.

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Pragmatism: A Philosophical Basis for Research and its Relevance

1. Pragmatism is not committed to any one system of philosophy and reality.
2. Individual researchers have a freedom of choice.
3. Pragmatists do not see the world as an absolute unity.
4. The pragmatist researchers look to the *what* and *how* to research based on the intended consequences—where they want to go with it.
5. Pragmatists agree that research always occurs in social, historical, political, and other contexts.
6. Pragmatists have believed in an external world independent of the mind as well as that lodged in the mind.

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Four Worldviews

Postpositivism	Constructivism
• Determination • Reductionism • Empirical observation and measurement • Theory verification	• Understanding • Multiple participant meanings • Social and historical construction • Theory generation
Transformative	**Pragmatism**
• Political • Power and justice oriented • Collaborative • Change-oriented	• Consequences of actions • Problem-centered • Pluralistic • Real-world practice oriented

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Language commonly associated with major research paradigms

Positivist/ Postpositivist	Interpretivist/ Constructivist	Transformative	Pragmatic
Experimental Quasi-experimental Correlational Reductionism Theory verification Causal Comparative Determination Normative	Naturalistic Phenomenological Hermeneutic Interpretivist Ethnographic Multiple participant meanings Social and historical construction Theory generation	Critical theory Neo-marxist Feminist Critical Race Theory Freirian Participatory Emancipatory Advocacy Grand Narrative Empowerment issue oriented Change-oriented Queer theory Race specific Political	Consequences of actions Problem-centered Pluralistic Real-world practice oriented Mixed models

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Paradigms, methods and tools

Paradigm	Methods (primarily)	Data collection tools (examples)
Positivist/ Postpositivist	Quantitative. “Although qualitative methods can be used within this paradigm, quantitative methods tend to be predominant”	Experiments Quasi-experiments Tests Scales
Interpretivist/ Constructivist	Qualitative methods predominate although quantitative methods may also be utilized	Interviews Observations Document reviews Visual data analysis
Transformative	Qualitative methods with quantitative and mixed methods	Diverse range of tools – particular need to avoid discrimination. Eg. sexism, racism, and homophobia
Pragmatic	Qualitative and/or quantitative methods may be employed. Methods are matched to the specific questions and purpose of the research	May include tools from both positivist and interpretivist paradigms. Eg. interviews, observations and testing and experiments

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Paradigm Wars and Mixed Methodologies

- Paradigm wars emerged in social sciences and behavioral sciences.
- Models that are imitated within any given field, and that competing paradigms may exist simultaneously, especially within immature sciences.
- Debates about qualitative and quantitative research have roots in the mid 19th century and occurred in sociology in the 1920s and 1930s.
- Recent attention to the debate started with a revival of qualitative research methods in the 1960s in sociology and psychology.

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continued

- Sociology and psychology was dominated by quantitative methods (that is, survey or experiment) throughout the 1940s and 1950s.

- Positivist paradigm underlies quantitative methods, while the constructivist paradigm underlies qualitative methods. Also called qualitative-quantitative debate.

- Paradigm wars concern important conceptual issues, such as the “nature of reality” or “the possibility of causal linkages”.

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Purists on both sides: Quantitative and qualitative

Quantitative purists articulate assumptions consistent with ‘positivist philosophy’.

a) Social observations be treated as entities in much the same way as physical scientists treat physical phenomena.
b) Observer is separate from the entities that are subject to observation.
c) Social science inquiry should be objective.
d) In other words, time and context-free generalizations are desirable and possible.
e) Eliminate biases, remain emotionally detached and uninvolved with the objects of study
f) Test or empirically justify stated hypotheses
g) Rhetorical neutrality, involving a formal writing style using the impersonal passive voice and technical terminology, in which establishing and describing social laws is the major focus.

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Qualitative purists (also called *constructivists* and *interpretivists*) reject positivism.

a) Multiple-constructed realities abound
b) Time- and context-free generalizations are neither desirable nor possible
c) Research is value-bound
d) Impossible to differentiate fully causes and effects
e) Logic flows from specific to general (i.e. explanations are generated inductively from data)
f) Knower and known cannot be separated because the subjective knower is the only source of reality
g) Dislike for detached and passive style of writing, preferring instead, detailed, rich, and thick (empathic) description, written directly and somewhat informally.

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Strengths and weaknesses of quantitative research

Strengths
Testing and validating already constructed theories about how (and to a lesser degree, why) phenomena occur
Testing hypothesis that are constructed before the data are collected. Can generalize research findings when the data are based on random samples of sufficient size
Can generalize a research finding when it has been replicated on many different populations and sub-populations
The researcher may construct a situation that eliminates the confounding influence of many variables, allowing one to more credibly assess cause-and-effect relationships
Relatively quick data collection methods and one that can provide precise, numerical data; data analysis is relatively less time consuming
May have higher credibility with many people in power (e.g. administrators, politicians, people who fund programs etc.)
Weaknesses
The researcher's categories/theories that are used may not reflect local constituencies' understanding
The researcher may miss out on phenomena occurring because of the focus on theory or hypothesis testing rather than on theory or hypothesis generation (called the confirmation bias)
Knowledge produced may be too abstract and general for direct application to specific local situations, contexts, and individuals

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Strengths and weaknesses of qualitative research

Strengths
Data are based on participants' own categories of meaning.
It is useful for studying a limited number of cases in depth.
It is useful for describing complex phenomena.
Provides individual case information.
Provides understanding and description of people's personal experiences of phenomena (i.e. the "emic" or insider's viewpoint).
The researcher can study dynamic processes (i.e. documenting sequential patterns and change).
The researcher can use the primarily qualitative method of "grounded theory" to generate inductively a tentative but explanatory theory about a phenomenon.
Weaknesses
Lack of generalisation
May have lower credibility with some administrators and commissioners of programs
Data analysis is often time consuming

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The End of the Paradigm Wars and the Emergence of Mixed Methods

- "Pacifists" state that qualitative and quantitative methods are compatible.
- In education and evaluation research, authors have presented the compatibility thesis based on a different paradigm called *pragmatism*.
- Most researchers now use whatever method is appropriate for their studies.
- Pragmatically oriented theorists and researchers refer to "mixed methods" which contain elements of both the quantitative and qualitative approaches.
- Pragmatist orientation has superseded the paradigm wars.
- Usage of generic terms such as 'mixed methods' connote several different ways of conducting a study or a series of studies.
- Mixed-up models- derives from the "lack of a worldview, paradigm, or theory for mixed-model studies".

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A flow chart of how paradigms inform methods analysis

Research projects rarely ever follow a neat linear path, however, the steps and decisions made by the researcher may look something like this.

A RESEARCH JOURNEY

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References used for this lecture and for further information

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For a comprehensive literature on the topics covered in this lecture it is also suggested that students go through the reference list of the above cited papers.

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