

## **Paradigm Considerations and Mixed Methods in Social Science Research: The Worldview Matrix**

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Researchers in the social sciences have seen a strong shift known as Mixed Methods. Despite the widespread utilization of Mixed Methods across disciplines, the field is evolving both as a methodology, and the methods used. Mixed Methods advocates including Creswell, Greene, Johnson, Onwuegbuzie, Mertens, Morse, Tashakkori, Teddlie, and interpretive research proponents including Denzin, Flick, and Morgan have all cited Pragmatism as the dominant paradigm in Mixed Methods research. Christ, Maxwell, and Lipscomb recently indicated that alternative paradigms are also viable and available. Considering how paradigms are used in the field of Mixed Methods helps the field continue to grow. This paper addresses current discussions about alternatives to Pragmatism including Critical Realism, and then, presents a tool called the worldview matrix that is designed to assist researchers, methodology teachers, and students to clarify and organize their Mixed Methods research design.

Worldview	Post-Positivism	Constructivism	Pragmatism	Critical Realism	Transformative Action
Ontology: (Reality is what "exists" and ways in which it can be represented)	Etic-Outsider Singular Reality Exists although imperfectly represented in terms of probabilities	Emic- Co- construction of meaning. Each persons' reality is different. No absolute truths	Multiple forms of reality. Follows a Deweyan "What works" action oriented view of reality	Different levels of reality exist ranging from the objective that is independent of human understanding to subjective truths that we understand and grasp in the process of meaning making	Inequalities exist. Exposing power structures and bring voice of the oppressed to light can lead to social change
Epistemology: (Theory of knowledge constructed using various sources of data. Analysis depends on research question, data source and purpose of the study	Researcher distances self from 'subjects' to gain an 'accurate' 'valid' and 'reliable' representation	Co-construction of knowledge about events occurs as a result of closeness: Researcher & participants work together to create knowledge.	Etic & Emic perceptions can co- exist in a single study. Each strand forms knowledge that can be compared and combined increasing the credibility of the studies findings.	There are levels of objective truths that can be discerned, but finding absolute truths about social phenomenon is impossible	Exposing inequalities and representing the voice of the oppressed to the masses broadens social awareness. Participants are collaborators
Axiology: (Values in research) How the role of values influences the way research is conducted	Researcher attempts to be unbiased and not introduce own values/prior experiences about when conducting and analyzing data	Researcher and participants recognize bias and negotiate their shared interpretations and their views about the value the research process	Multiple stances: Values brought to the forefront and recognized as influencing the research process.	Researchers worldview influences how knowledge is produced, differentiated, stratified, and changed into meanings and representative realities inferred from multiple sources of data	Oppression exists in the world and the role of research should be to work towards increasing social justice.
Methodology: How the processes of research are used	Deductive approach: Test and verify A- priori theories. Determine significant difference between groups or strength in relationships between variables.	Inductive approach: Researcher uses constructivist grounded data analysis approaches to building patterns, themes, and general concepts	Mixed Approach: Various forms of qualitative and quantitative data are blended to create a representative model	Construction and interpretation of "subjective" and "objective" data, processes are called "abduction" and "retroduction" that are used to formulate "conceptualizations".	Participatory and action oriented research is designed to enhance individual, social, and societal wellbeing