

Scientific Research Toolbox Instrument

Confirmation

Core Question: What types of evidentiary support are required for knowledge?

1. There are strict requirements for the validity of measurements.

<i>Disagree</i>				<i>Agree</i>		
1	2	3	4	5	I don't know	N/A
2. There are strict requirements for determining when empirical data confirm a tested hypothesis.

<i>Disagree</i>				<i>Agree</i>		
1	2	3	4	5	I don't know	N/A
3. Validation of evidence requires replication.

<i>Disagree</i>				<i>Agree</i>		
1	2	3	4	5	I don't know	N/A
4. Unreplicated results can be validated if confirmed by a combination of several different methods.

<i>Disagree</i>				<i>Agree</i>		
1	2	3	4	5	I don't know	N/A
5. Research interpretations must address uncertainty.

<i>Disagree</i>				<i>Agree</i>		
1	2	3	4	5	I don't know	N/A
6. The members of this team have similar views concerning the confirmation core question.

<i>Disagree</i>				<i>Agree</i>		
1	2	3	4	5	I don't know	N/A

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Reductionism

Core Question: Can the world under investigation be reduced to independent elements for study?

- 1. Differences in spatiotemporal scales impede useful synthesis in cross-disciplinary research.

<i>Disagree</i>					<i>Agree</i>		
1	2	3	4	5		I don't know	N/A

- 2. The world under investigation is fully explicable as the assembly of its constituent parts.

<i>Disagree</i>					<i>Agree</i>		
1	2	3	4	5		I don't know	N/A

- 3. The world under investigation must be explained in terms of the emergent properties arising from the interactions of its individual components.

<i>Disagree</i>					<i>Agree</i>		
1	2	3	4	5		I don't know	N/A

- 4. My research typically isolates the behavior of individual components of a system.

<i>Disagree</i>					<i>Agree</i>		
1	2	3	4	5		I don't know	N/A

- 5. Scientific research must include explicit consideration of the environment in which it is conducted

<i>Disagree</i>					<i>Agree</i>		
1	2	3	4	5		I don't know	N/A

- 6. The members of this team have similar views concerning the reductionism core question.

<i>Disagree</i>					<i>Agree</i>		
1	2	3	4	5		I don't know	N/A

Scientific Research Toolbox Instrument

Demographic Profile (ID# _____)	
1	Male _____ Female _____
2	Career phase: Early _____ (1-7 yrs) Mid _____ (8-20 yrs) Late _____ (20+ yrs)
3	# of years you have been participating in inter- or cross-disciplinary activities _____ yrs
4	What discipline(s) or profession(s) would you describe as your primary identity? 1. _____ 3. _____ 2. _____ 4. _____
5	Ethnicity: _____

Is there anything else that you would like to share with us?

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