

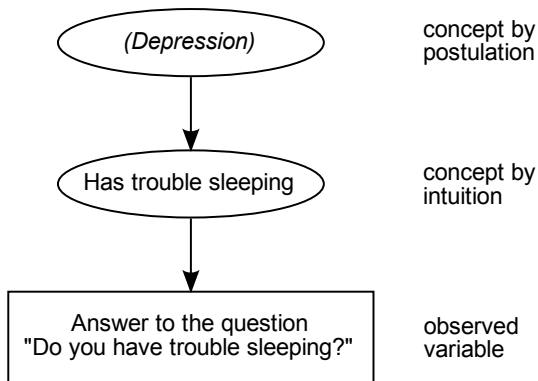
JRule for Mplus demonstration: an example using political trust in the ESS

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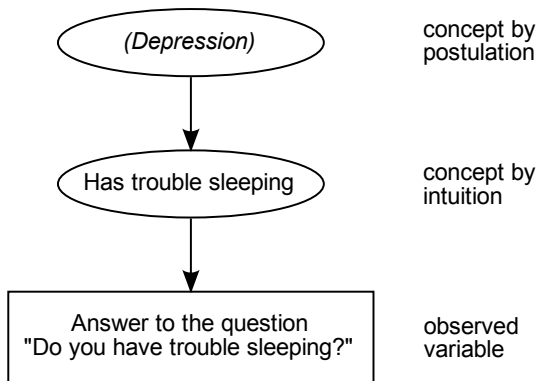


A way to measure something inside someone else's head



Such as depression,

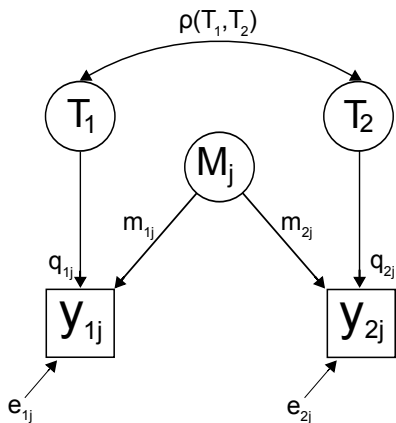
A way to measure something inside someone else's head



Such as depression, or political trust...

How people answer a question: the basic survey response model

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Correlation b/w variables of interest

Variables of interest (traits)

Systematic reaction to the method

Method effect of reaction

Quality coefficient for variable i

Observed response variables

ESS round 1



Trust measured with first method (main questionnaire)

CARD 8: Using this card, please tell me on a score of 0-10 how much you personally trust each of the institutions I read out. 0 means you do not trust an institution at all, and 10 means you have complete trust. Firstly...READ OUT...

		No trust at all										Complete (Don't trust know)	
B4	... [country]'s parliament?	00	01	02	03	04	05	06	07	08	09	10	88
B5	... the legal system?	00	01	02	03	04	05	06	07	08	09	10	88
B6	... the police?	00	01	02	03	04	05	06	07	08	09	10	88
B7	... politicians?	00	01	02	03	04	05	06	07	08	09	10	88

Trust measured with second method (repetition in supplementary questionnaire)

Please indicate on a score of 0 to 10 how much you personally trust each of the institutions below. 0 means you do not trust an institution at all, and 10 means you have complete trust³².

Please tick the box that is closest to your opinion.

		No trust at all										Complete trust
		0	1	2	3	4	5	6	7	8	9	10
HS13	[Country]'s parliament	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HS14	The legal system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HS15	The police	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Trust measured with third method (supplementary questionnaire)

HS31 Please say on a scale of 0 to 10 how much you trust [country]'s parliament. If you have no trust at all give a score of 0. If you have complete trust, give a score of 10. The more you trust the parliament, the higher the score should be⁴⁸.

Your score:

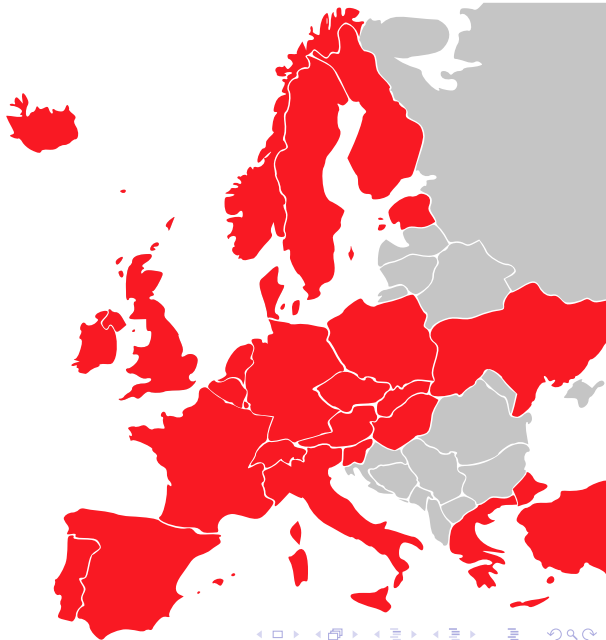
HS32 Please say on a scale of 0 to 10 how much you trust the legal system. If you have no trust at all give a score of 0. If you have complete trust, give a score of 10. The more you trust the legal system, the higher the score should be⁴⁹.

Your score:

HS33 Please say on a scale of 0 to 10 how much you trust the police. If you have no trust at all give a score of 0. If you have complete trust, give a score of 10. The more you trust the police, the higher the score should be⁵⁰.

Your score:

ESS round 2



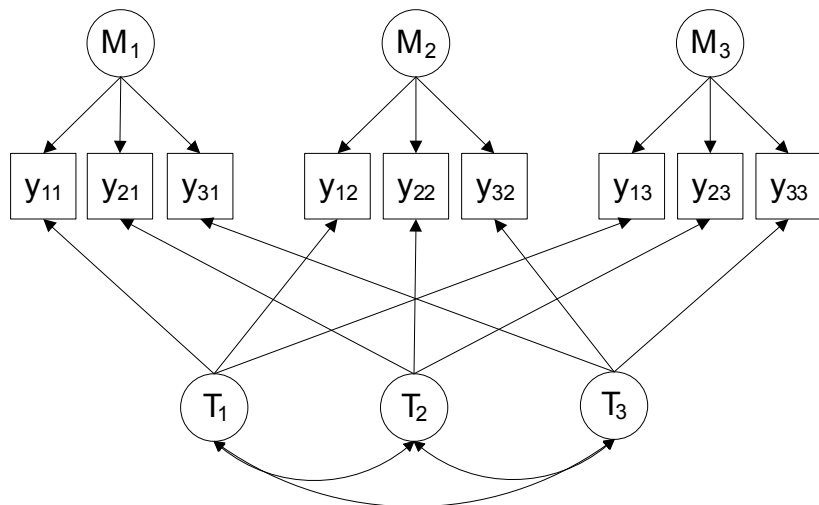
In the second round the experiment is only a repetition, using politicians instead of police

Please indicate on a scale of 0 to 10 how much you personally trust each of the institutions below. 0 means you do not trust an institution at all, and 10 means you have complete trust.

Please tick the box that is closest to your opinion.

		No trust at all										Complete trust
		0	1	2	3	4	5	6	7	8	9	10
iS25 ⁶⁰	[Country]'s parliament	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iS26 ⁶¹	The legal system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iS27 ⁶²	politicians	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Multitrait-multimethod model used to analyse the data



Concepts by postulation: authorities and institutions?

- Easton (1965) suggested that there should be a distinction between trust in the authorities and trust in the political system and its institutions
- We wish to test whether these concepts can be measured by the items at hand
- If so, we would like to compare the countries on only these two (latent) variables.

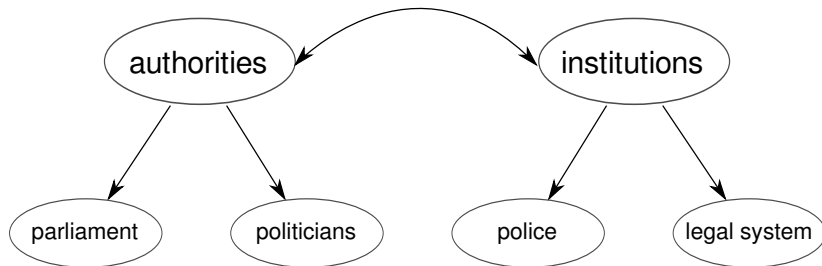
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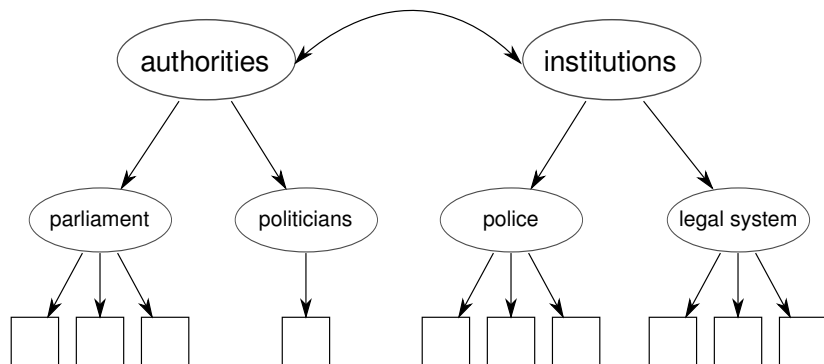
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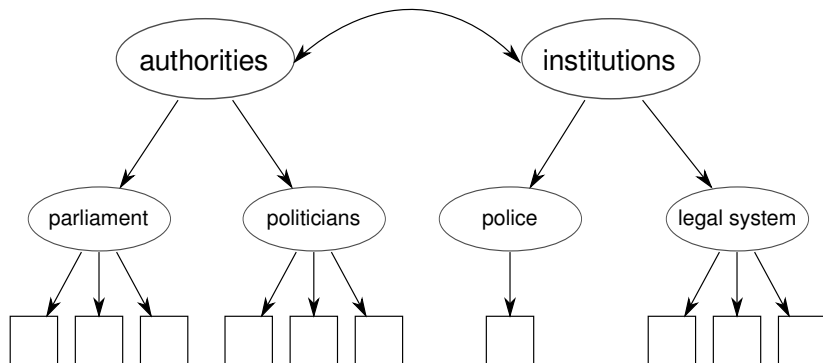
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Concepts by postulation: round 1



Concepts by postulation: round 2



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- Under the null hypothesis, each MI (as the sample size increases) has a **chi-square distribution** with one degree of freedom.
- The **Expected Parameter Change (EPC)** is the corresponding increase in the parameter.

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- (Not only sample size but also sizes of other parameters influence the power.)
- Both would lead to an **unsatisfactory model**.
- So we have to consider the probability that the MI test's hypothesis of no effect will be rejected, given that it is false.
- This probability is called the **power of the test**.

Demonstration



Fresh bread demo

Testing individual parameters while taking the power into account

	Power	
Modification Index	Low	High
Significant	Misspecified	Check EPC
Not significant	Inconclusive	Not misspecified

That's it for now. Moltes gràcies per la seva atenció!

References

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