Smart Diaspora 2023

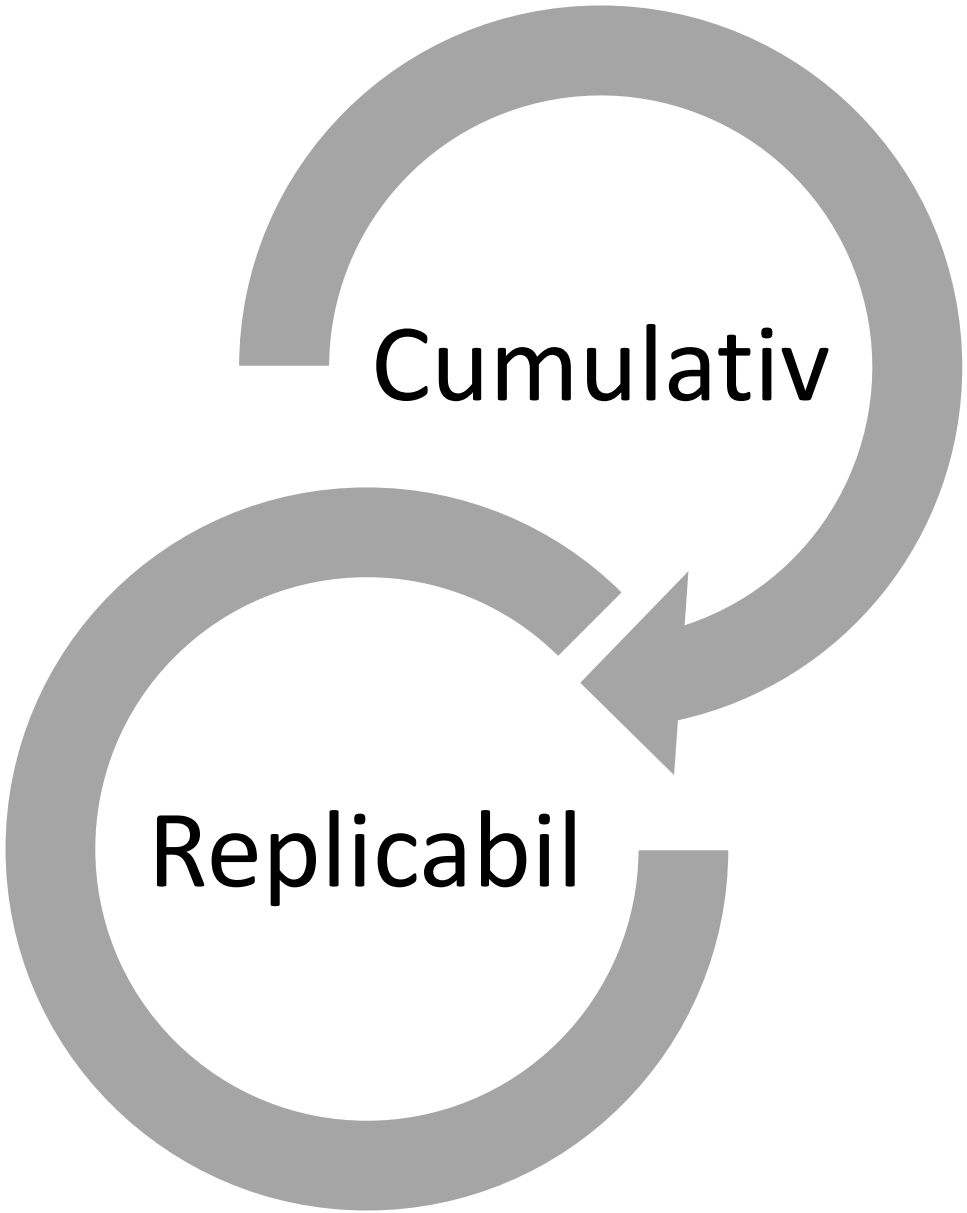
West University of Timișoara

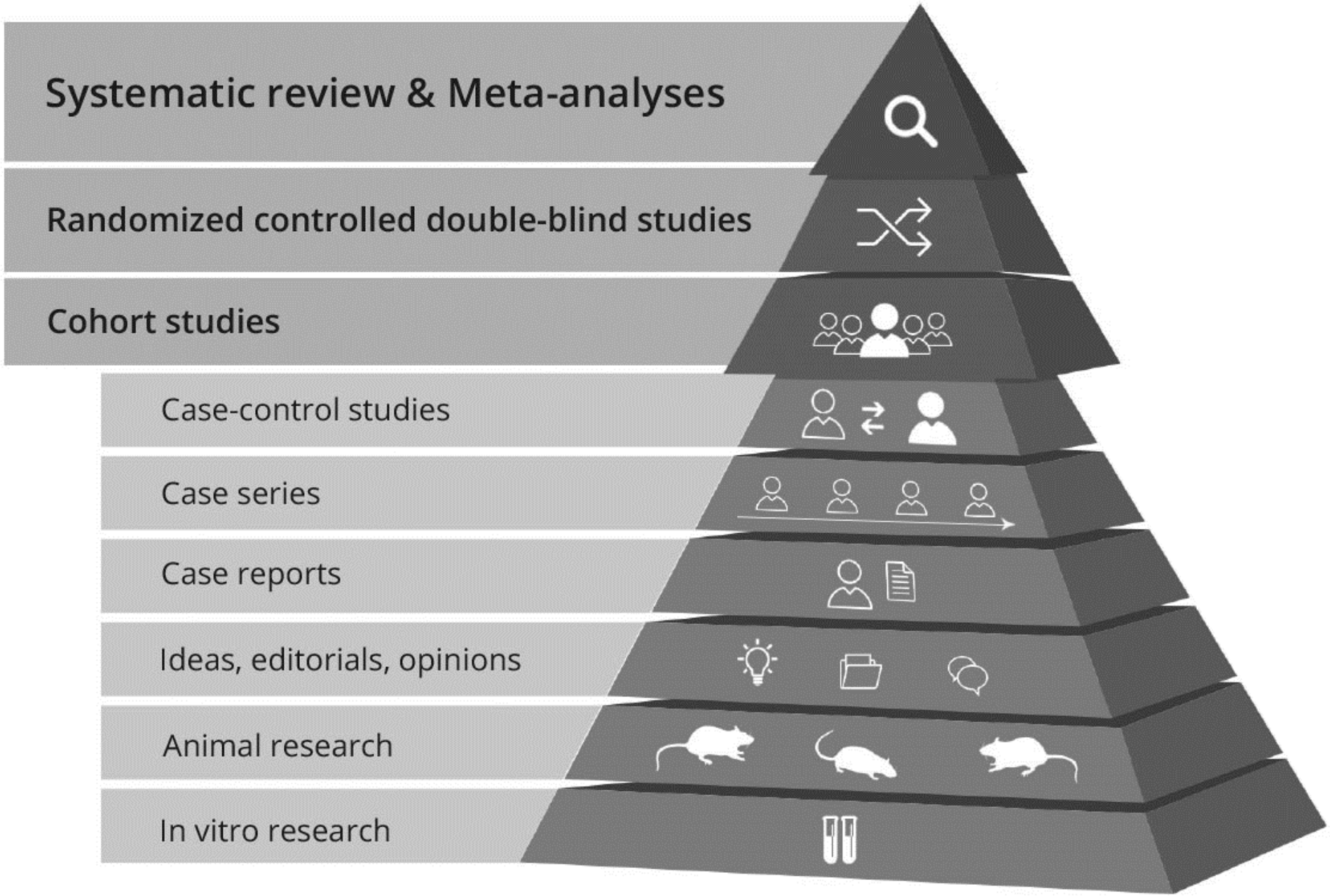
De la date deschise la date interoperabile și reutilizabile.
În ce măsură putem aplica în știința psihologiei abordări de standardizare a managementului datelor?

Andrei Rusu

Departamentul de Psihologie, Universitatea de Vest din Timișoara

andrei.rusu@e-uvt.ro


Cumulativ
Replicabil


Systematic review & Meta-analyses
Randomized controlled double-blind studies
Cohort studies
Case-control studies
Case series
Case reports
Ideas, editorials, opinions
Animal research
In vitro research

Replicabil

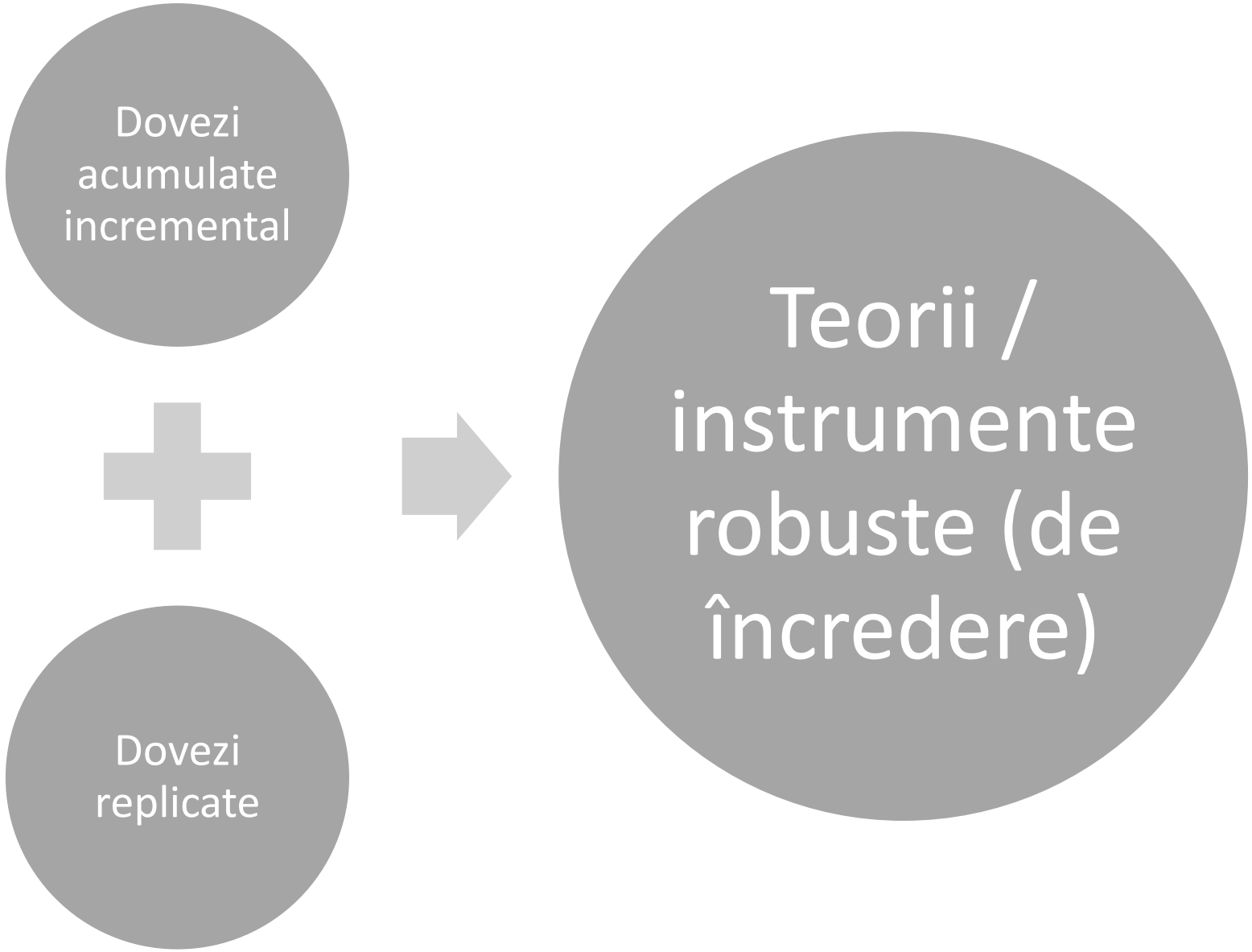
-

studii replică (conceptuale)

Reproductibil

–

peer-review al datelor/analizelor


Dovezi acumulate incremental
Dovezi replicate
Teorii / instrumente robuste (de încredere)

Cum putem accelera *acumularea* de dovezi *replicabile* și *replicate*?


OPEN DATA


OPEN MATERIALS


PREREGISTERED


OPEN DATA

Este suficient ca datele să fie *deschise* (când este și etic posibil)?

Cât de „deschise” sunt datele *deschise*?

- Încărcate pe un registru public stabil și identificabile (e.g., *OSF + DOI*)?
- Fișiere denumite intuitiv?
- Fișiere în formate accesibile (e.g., *.csv*)?
- Seturile de date însoțite de metadate clare (*codebooks*)?

Înainte de toate, datele ar trebui să fie (ușor) *utilizabile.*

- Disponibile / Accesibile
- Interoperabile
- Reutilizabile
- Agregabile

FINDABLE

Unique identifiers and metadata are used to allow data to be located quickly and efficiently

ACCESSIBLE

Data is open, free and universally available for research discovery efforts

INTER-OPERABLE

A common programming language is used to allow use in a broad range of applications

REUSABLE

All data is clearly described and outlines associated data-use standards

FAIR Principles

~ FIP mini-questionnaire ~
Build your FAIR Implementation Profile

Community description	
Name of Community	*e.g. ENVRI*
Description of Community	
Supporting Links	
Research Domain	*e.g. Environmental Sciences*
Data Steward	*e.g. ORCID #*
Date of FIP creation	

FAIR principle	Question	FAIR enabling resource types	Your answers
F1	What globally unique, persistent, resolvable identifiers do you use for metadata records?	Identifier type	*e.g. PURL, DOI*
F1	What globally unique, persistent, resolvable identifiers do you use for datasets?	Identifier type	
F2	Which metadata schemas do you use for findability?	Metadata schema	
F3	What is the technology that links the persistent identifiers of your data to the metadata description?	Metadata-Data linking mechanism	
F4	In which search engines are your metadata records indexed?	Search engines	
F4	In which search engines are your datasets indexed?	Search engines	
A1.1	Which standardized communication protocol do you use for metadata records?	Communication protocol	
A1.1	Which standardized communication protocol do you use for datasets?	Communication protocol	
A1.2	Which authentication & authorisation technique do you use for metadata records?	Authentication & authorisation technique	
A1.2	Which authentication & authorisation technique do you use for datasets?	Authentication & authorisation technique	
A2	Which metadata longevity plan do you use?	Metadata longevity	
I1	Which knowledge representation languages (allowing machine interoperation) do you use for metadata records?	Knowledge representation language	
I1	Which knowledge representation languages (allowing machine interoperation) do you use for datasets?	Knowledge representation language	
I2	Which structured vocabularies do you use to annotate your metadata records?	Structured vocabularies	
I2	Which structured vocabularies do you use to encode your datasets?	Structured vocabularies	
I3	Which models, schema(s) do you use for your metadata records?	Metadata schema	
I3	Which models, schema(s) do you use for your datasets?	Data schema	
R1.1	Which usage license do you use for your metadata records?	Data usage license	
R1.1	Which usage license do you use for your datasets?	Data usage license	
R1.2	Which metadata schemas do you use for describing the provenance of your metadata records?	Provenance model	
R1.2	Which metadata schemas do you use for describing the provenance of your datasets?	Provenance model	

FAIR ≠ OPEN

Putem face datele și *mai utilizabile* prin standardizarea lor.

Spre exemplu, în domeniul medical există *FDA's Data Standards Catalog*

SDTM (Study Data Tabulation Model) – "standard for organizing and formatting data to streamline processes in collection, management, analysis and reporting (…) data aggregation and warehousing; fosters mining and reuse; facilitates sharing and data review activities."

Making it easy for humans to make metadata for machines

Machine-actionable metadata are core to the FAIR Principles. GO FAIR and RDA members have launched the "Metadata for Machines" workshop series (M4M) to assess the state of metadata practices in data-related communities and stimulate the creation and re-use of FAIR metadata standards and machine-ready metadata templates (definitions of metadata categories).

Până unde putem merge cu datele din știința psihologie?