

Entendiendo la Transparencia Científica y su Enseñanza

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Curso en: **T**ecnologías **R**eproducibles en la **E**nseñanza de la
Metodología y la **E**stadística



Objetivo del Curso

Comprender el concepto de Transparencia Científica y cómo puede enseñarse en cursos de metodología y estadística en psicología y otras ciencias sociales.



Agenda

- 1 Entendiendo la Transparencia Científica
 - 2 Beneficios de la Transparencia Científica
 - 3 Introducción a las Tecnologías Reproducibles
- Referencias



Entendiendo la Transparencia Científica

Por **Transparencia Científica** puede entenderse al conjunto de prácticas seguidas para maximizar la total comprensión de los procesos seguidos para el estudio de un fenómeno y divulgar este conocimiento en un artículo publicado en una revista científica.



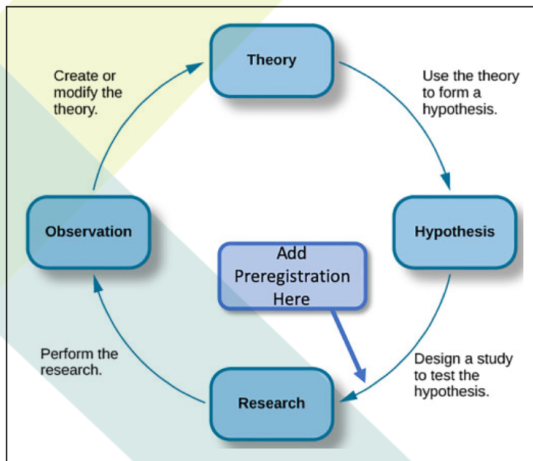
Entendiendo la Transparencia Científica

Entendiendo las mejores prácticas de investigación en comparación con prácticas de investigación cuestionables (Morling y Calin-Jageman, 2020).

- Prácticas cuestionables
 - P-hacking
 - Ocultar resultados
 - HARKing
- Mejores Prácticas
 - Materiales Abiertos
 - Datos Abiertos
 - Pre-registro
 - Reportar resultados de pre-registros



Entendiendo la Transparencia Científica



Beneficios de la Transparencia Científica

Para Docentes:

- Docencia de contenidos más actualizados
- Aprendizaje basado en la colaboración
- Aumento de oportunidades laborales
- Desarrollo profesional como investigador

Para Investigadores:

- Aumento de citas (Mayor visibilización)
- Aumento en la conexión con otros colaboradores
- Aumento en la obtención de financiamientos



POINT OF VIEW

How open science helps researchers succeed

Abstract Open access, open data, open source and other open scholarship practices are growing in popularity and necessity. However, widespread adoption of these practices has not yet been achieved. One reason is that researchers are uncertain about how sharing their work will affect their careers. We review literature demonstrating that open research is associated with increases in citations, media attention, potential collaborators, job opportunities and funding opportunities. These findings are evidence that open research practices bring significant benefits to researchers relative to more traditional closed practices.

DOI: [10.7554/eLife.16800.001](https://doi.org/10.7554/eLife.16800.001)

(McKiernan y cols., 2016)



Introducción a las Tecnologías Reproducibles

Por **Tecnologías Reproducibles** se entiende al conjunto de herramientas tecnológicas (fundamentalmente de software) que están disponibles para seguir prácticas de Transparencia Científica (Mair, 2016).

Thou Shalt Be Reproducible! A Technology Perspective

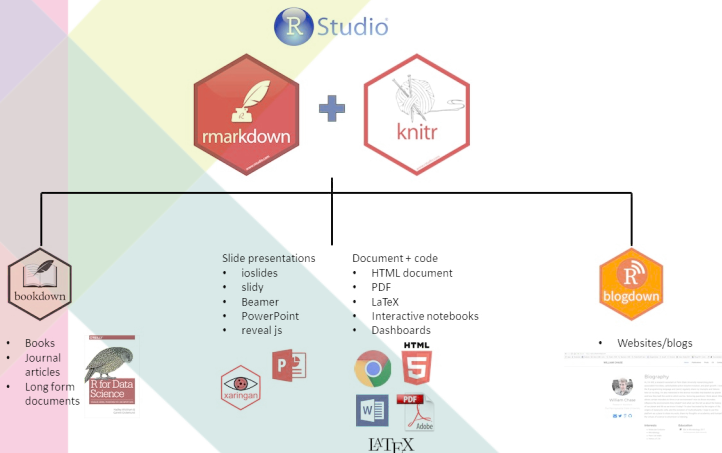
*Patrick Mair **

Department of Psychology, Harvard University, Cambridge, MA, USA

This article elaborates on reproducibility in psychology from a technological viewpoint. Modern open source computational environments are shown and explained that foster reproducibility throughout the whole research life cycle, and to which emerging psychology researchers should be sensitized, are shown and explained. First, data archiving platforms that make datasets publicly available are presented. Second, R is advocated as the data-analytic *lingua franca* in psychology for achieving reproducible statistical analysis. Third, dynamic report generation environments for writing reproducible manuscripts that integrate text, data analysis, and statistical outputs such as figures and tables in a single document are described. Supplementary materials are provided in order to get the reader started with these technologies.



Introducción a las Tecnologías Reproducibles



Introducción a las Tecnologías Reproducibles

The screenshot displays the OSF Preprints website interface. At the top, a dark navigation bar contains the OSF Preprints logo and a dropdown menu, followed by links for 'Add a Preprint', 'Search', 'Support', 'Donate', 'Sign Up', and 'Sign In'. Below this, the 'Preprint Services' section is titled, with a subtitle stating: 'Leading preprint service providers use this open source infrastructure to support their communities.' The main content area features a grid of logos for various preprint services, including:

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- Frenxiv
- INA-Rxiv
- indiarxiv
- LawArXiv
- LIS Scholarship Archive
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- MindRxiv
- NutriXiv
- paleoRxiv
- PsyArXiv
- SOC ARXIV
- SportRxiv
- THESIS COMMONS



Introducción a las Tecnologías Reproducibles

Acá se tiene un ejemplo de un recurso en línea que promueve la enseñanza de la teoría de respuesta al ítem a través de un artículo disponible en PsyArXiv Preprints.

The screenshot shows the PsyArXiv Preprints website interface. At the top, there is a teal header with the site logo (a red square with a white Greek letter psi and the letters 'A' and 'X') and the text 'PsyArXiv Preprints'. To the right of the header are links for 'Submit a Preprint', 'Search', 'Donate', 'Sign Up', and 'Sign In'. The main content area has a dark background with the title 'Measuring Everyday Creativity: A Rasch Model Analysis of the Biographical Inventory of Creative Behaviors (BICB) Scale' in white. Below the title, it lists the authors: 'Paul Silvia, Rebekah Rodriguez, Roger Beaty, Emily Frith, James Kaufman, Paul Loprinzi, Roni Reiter-Palmon'. Underneath the authors, it says 'AUTHOR ASSERTIONS' followed by three items: 'Conflict of Interest: No', 'Public Data: Available', and 'Preregistration: No'. At the bottom of the article preview, it says 'BICB Rasch Model, Preprint.pdf', 'Download previous versions', 'Version: 2', 'Download preprint', and 'Downloads: 355'. It also includes the creation and editing dates: 'Created: November 09, 2020 | Last edited: February 02, 2021'.

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Measuring Everyday Creativity: A Rasch Model Analysis of the Biographical Inventory of Creative Behaviors (BICB) Scale

AUTHORS
Paul Silvia, Rebekah Rodriguez, Roger Beaty, Emily Frith, James Kaufman, Paul Loprinzi, Roni Reiter-Palmon

AUTHOR ASSERTIONS
Conflict of Interest: No Public Data: Available Preregistration: No

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